

**RE- ESTABLISHING THE HISTORIC SIGNIFICANCE OF  
KARAIKAL TOWN, PONDICHERRY**

**MASTER OF ARCHITECTURE  
(CONSERVATION)**

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**MAY 2023**

## **Declaration**

I **Priyanga**, Scholar No. **2021MCO012** hereby declare that the thesis entitled, “*Re-establishing the historic significance of Karaikal Town, Pondicherry*”, submitted by me in partial fulfillment for the award of Master of Architecture (Conservation), in School of Planning and Architecture Bhopal, India, is a record of Bonafide Work carried out by me. The matter embodied in this thesis has not been submitted to any other University or Institute for the award of any degree or diploma.

25.05.2023

Priyanga

## **Certificate**

This is to certify that the declaration of **Priyanga** is true to the best of my knowledge and that the student has worked for one semester in preparing this thesis.

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Thesis Coordinator

HOD (Conservation)

# RE-ESTABLISHING THE HISTORIC SIGNIFICANCE OF KARAIKAL TOWN, PONDICHERRY

A DESIGN THESIS

*Submitted*

*In partial fulfillment of the requirements for the award of the degree of*

**MASTER OF ARCHITECTURE  
(CONSERVATION)**

By

**Priyanga**

2021MCO012

Under the Guidance of

**Dr.Vishakha Kawathekar**



**SCHOOL OF PLANNING AND ARCHITECTURE, BHOPAL**

**NEELBAD ROAD , BHAURI, BHOPAL – 462030**

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## Abstract

The ancient French precinct- Karaikal was well known for its religious and cultural heritage for centuries. Even though Karaikal doesn't have a lot of monumental buildings or historic structures, its still seen peculiar because of its vernacular style of architecture. The architectural character here is a result of varied cultural influences throughout history. If this heritage has to be protected then every old house counts. These architectural heritage are the major identity of the town. The town is perceived as unique because of its architectural setting which is an outcome of a synthesis between French and local Tamil vernacular.

The distinct character of the town is due to the influence of varied invasions that occurred in Karaikal over the last centuries. The historic buildings have a complex fabric of every invader in different elements present in a building. Due to the growing urbanisation, the necessities have compelled the people to alter the buildings according to their needs. The practices done to extend space, add or destruct due to pressures of growing economy has disturbed the architectural value of the structure. These practices have highly endangered the existing historic fabric and built heritage of the town.

Karaikal doesn't have a specific set of guidelines for preservation, conservation and restoration of heritage according to their character, which makes the built heritage even more vulnerable when they are reconstructed.

Hence, the thesis investigates, and understands the historic fabric and urban identity of the town to re-establish its historic significance to protect it as a heritage town. It also studies the cultural pluralism present in the precinct to understand the coexistence of different cultures and their significant relation with the town.

Through documentation, the architectural, cultural and spatial aspects of the town are analysed and the heritages were listed. Conservation strategies and guidelines for the delineated core zone are proposed to preserve the built heritage of Karaikal.

There is an effective need for conservation of these heritage along with its cultural identity to maintain its authenticity and integrity. These site specific recommendations will help both public and private to design, alter or restore historic buildings in an heritage environment.

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## Chapter 1: INTRODUCTION TO THESIS

### 1.1.Introduction

India is a land of vast and diverse heritage. Our heritage provides clues to our past and how our society has evolved. It helps us examine our history and traditions and enables us to develop an awareness about ourselves. The rapid growth and urbanization have overshadowed the importance of heritage and their significance. It is always the monuments and heritage of a place that tells its story and history. For years, these heritage sites have been sources of economy for the majority of places in India. With very few buildings that are being conserved, the majority of them are left behind due to lack of awareness.

Karaikal does not have a large number of monumental buildings but is seen unique because for its vernacular architecture. The architectural character here is a result of hundreds of French and Tamil houses that create the 'milieu' or 'ensemble'. If this heritage has to be protected then every old house counts. These architectural heritage are the major identity of the town. Gradual depletion of them is affecting the economic status of the town indirectly.

Approaches like protection, preservation, rehabilitation, and reconstruction must be used in order to guarantee that the cultural values pertaining to the authenticity and integrity of a constructed form are preserved for future generations. The word "conservation" serves as a main concept for these methods. Conservation of built and cultural heritage has always been a challenge in the case of Karaikal.



*Fig.1. Built heritage of Karaikal*

*Source: Karaikal Online*

For years, many town development plans and proposals have been given to the town, however the rapid growth and ever changing trend of town, these plans have never sustained. Hence, the thesis intends to propose urban conservation strategies to preserve the historic fabric of the town through conservation of built and cultural heritage buildings of Karaikal.

## 1.2. Background Study

The ancient French precinct- Karaikal was well known for its religious and cultural heritage for centuries. It is a port-town which has been flourishing for ages due to the imports and exports since the chola period. However, the French essence still persists in terms of heritage and culture in the peaceful land of Karaikal. This region is fed by river Cauvery and its tributaries and the cultivated lands situated in and around Karaikal region are mainly dependent on Cauvery waters. From Times immemorial, Karaikal has been known for its rich religious heritage due to Ammaiyar temple and its festival of Mangani.



*Fig.2. Residential Zone during French Reign*

*Source: Alamy*

The town is perceived as unique because of its architectural setting which is an outcome of a synthesis between French and local Tamil vernacular. However, due to the recent developments on the historic structures done by people on their own has altered the harmony of the structures in a larger scale and affects the existing historic character of the town. Practices such as alteration, addition and destruction of old structures can be observed in the vicinity of the historic core. These practices have highly endangered the existing historic fabric and built heritage of the town.

The study primarily focuses on the historic core of the town which comprises administrative buildings, old mansions, vernacular residences and temples. Since most of the cultural and economic activities take place at this core, the study intends to analyse the core area in detail for further understanding.

### **1.3.Thesis Concern**

For decades, the historic French district of Karaikal was renowned for its rich religious and cultural past. Although Karaikal doesn't have many monumental structures, its vernacular architecture is unique and is perceived to be one of a kind. The architectural style at this place is the product of several historical cultural influences. Every residence present in the core area is a product of continuous evolution throughout the years. So, every residence matters if this legacy is to be preserved.

The town's main characteristic is its architectural legacy. The town is seen to be distinctive due to its architectural environment, which is the result of the fusion of French and the local Tamil vernacular. However, due to development efforts, destruction of historic structures, a lack of knowledge about heritage values, rights on property, restorations on existing structure without proper consultations, construction of new additions, and a lack of appreciation, the town has been rapidly losing its essence and distinctive French and tamil vernacular character in recent years. The town's architectural history and existing historic structure are now under grave risk as a result of these practises.

Karaikal doesn't have a specific set of guidelines for preservation, conservation and restoration of heritage according to their character, which makes the built heritage even more vulnerable when they are reconstructed. Hence, the thesis investigates, and understands the historic fabric and urban identity of the town to re-establish its historic significance to protect it as a heritage town. It also studies the cultural pluralism present in the precinct to understand the co-existence of different cultures and their significant relation with the town.

Through documentation, the architectural, cultural and spatial aspects of the town are analysed and inventories were made for the listed heritages. Conservation strategies and guidelines for the delineated core zone are proposed to preserve the built heritage of Karaikal. There is a effective need for conservation of these heritage along with its cultural identity to maintain its authenticity and integrity. These site specific recommendations will help both public and private to design, alter or restore historic buildings in an heritage environment.

### **1.4.Aim**

To re-establish the historic significance of Karaikal by investigating the cultural co-existence, socio-spatial manifestation and architecture of the heritage in order to protect it as a Heritage town.

### **1.5.Objectives**

The major objectives of the study is :

- To study, analyze and understand the existing historic fabric of the town;
- To study the urban historic identity of the town with respect to people, place, time and activity;
- To list the heritage of the town through inventories;
- To study the co-existence of different cultural heritage that existed throughout history;
- To understand the various challenges faced in preservation and management of the heritage and formulate urban conservation strategies to conserve and manage the heritage and historic fabric and
- To establish the historic significance of the town of Karaikal through the architectural and cultural heritage.

### **1.6.Scope**

The scope of the study is :

- To study the heritage in terms of architectural fabric, socio-cultural aspects, spatial pattern and economic activities involved to understand the character, authenticity, identity and functionality of the town.
- It also aims to study the cultural pluralism present in the precinct to understand the coexistence of different cultures and their significance and their relation with the town.
- It would also look into previous initiatives and their consecutive failure in revival of heritage over the years to analyze the core challenges of conservation of the town.
- Even though the town is part of the Pondicherry Union territory, it isn't well known for its colonial and vernacular heritage but religious heritage. Hence, this study would provide detailed organised data regarding the heritage, spatial aspect and architecture of the town.
- Listing of the heritage will help in serving as a resource for future references.

### **1.7.Limitations**

- The study is constricted along the municipal boundaries of the town, i.e., the historic core as the whole town is of 161 sq.kms. and extends along Thirunallar, Kottucherry, Nedungadu, and T.R.Pattinam.
- The demarcation of the historic town will mostly be along the historic core, so the inventories will be done for the historic core alone and conservation strategies will be made for the historic core due to its major significance in town.



•The town also will be analysed only in terms of architecture, space and culture to understand the co-existence of the culture.

### 1.8.Methodology

• The study is carried out initially through the approach of understanding the cultural pluralism and its significance in shaping the town in terms of architecture and culture. Primary and secondary study has to be done to carry the study further.

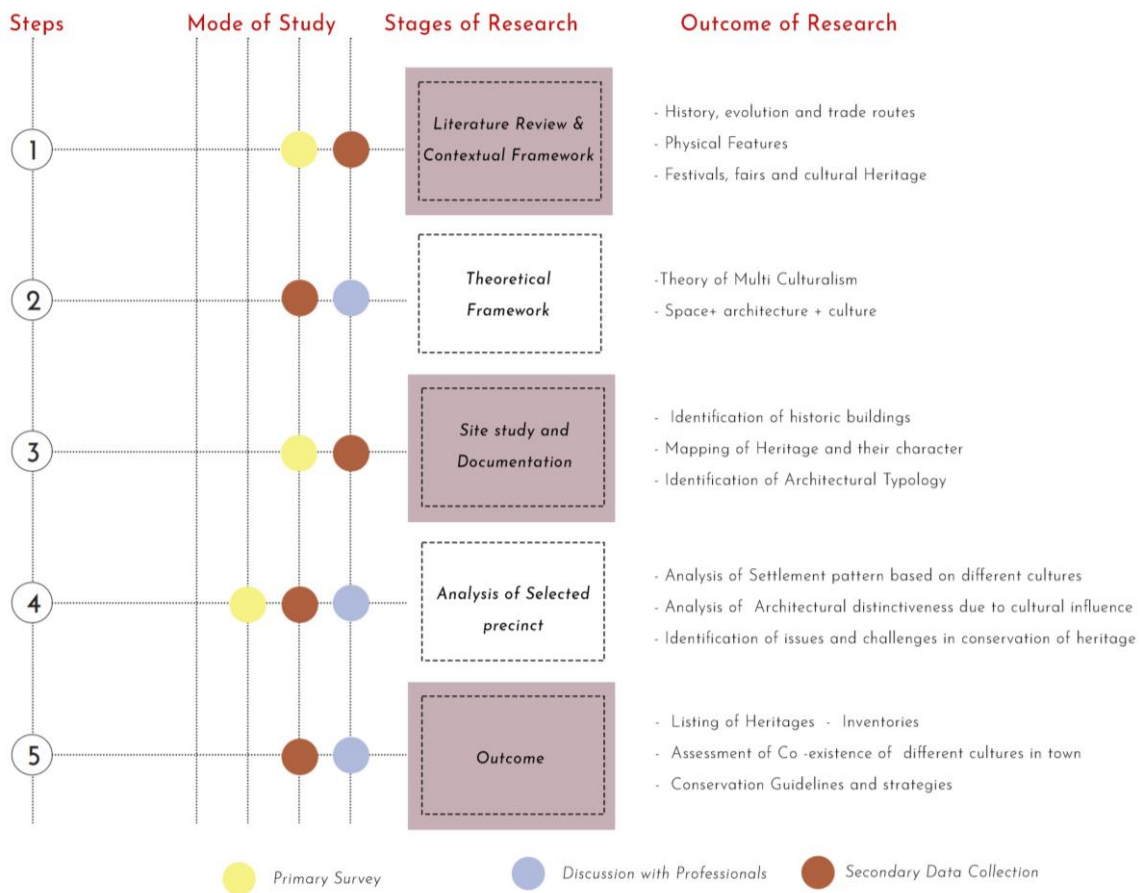


Fig.3. Methodology of thesis

Source:Author

• Primary survey has to be done to determine the location of heritages, linkage and connectivity between them to acquire information on the functionality, settlement pattern and circulation pattern of the town. The site has to be segregated according to the evolutionary time period, for better understanding of the context.

• Identifying potential buildings, listing and grading of them will help in a systematic organization of the buildings according to their condition, age and materials.

- Through secondary data such as gazetteers, research papers, books, articles and archives, the history, evolution and traditional knowledge system and practices of the town will be understood.
- For comparison, case studies of Pondicherry and Goa in terms of heritage conservation and Thanjavur in case of religious heritage have to be reviewed.
- Through analysis of these primary and secondary data, conservation strategies has to be provided to the building typologies. This also helps in analyzing the present conditions and difficulties faced in conservation and management of heritages. Also, adaptive suggestions have to be proposed abandoned heritages.

### **1.8.1.Data Requirements**

#### *Primary Data*

The primary data to be collected are the list of religious structures, heritage structures ( more than 100 years) and annual cultural events occurring at the place. Major mapping of the activity of stakeholders, linkage to nearby cities, connectivity between the town, location of major landmarks and heritages in the heritage precincts were done. The circulation patterns and the settlement pattern of the historic core were evaluated with respect to the literature collected to understand the settlement.

Interviews were conducted with the locals, government officials, priests, residents of the town to understand the culture and history of the place.

#### *Secondary Data*

Books, articles, journals, research papers, Gazetteers, Archival photography, and manuscripts where collected in accordance to the theory approached and the respective site. Development plan and legal instruments such as regulations, list of acts and policies about Karaikal and its heritages were collected from the government bodies such as Karaikal Planning Authority.

Existing list of inventories and archival maps were also collected from the Planning authority to assess the evolution of the town. Existing floor plans of old mansions and religious heritages were collected from residents.

Case studies were conducted with relative sites such as Pondicherry and Thanjavur to understand the similarities and differences between the places in terms of culture , architecture and space.

### *Maps*

Archival maps of Karaikal, Geographical and geological maps, district boundary maps and ward maps were collected from the Karaikal Planning Authority for further understanding of the context.

#### **1.8.2.Methods of Data Collection**

-Documentation of built heritage using maps, survey forms, inventories, archival data and other literature.

-Collection of official dossiers from government offices regarding tourism development, town planning and heritage conservation.

-Listing of heritage through inventories for historic streets, old residences, administrative buildings and religious heritage.

-Mapping of location, age and conditions of built heritage.

-Documentation of The Mangani Festival through survey forms, notes and manuscripts, photographs, Video Recordings, transcription of interviews of local people and tourists.

#### **1.9.Expected Outcomes**

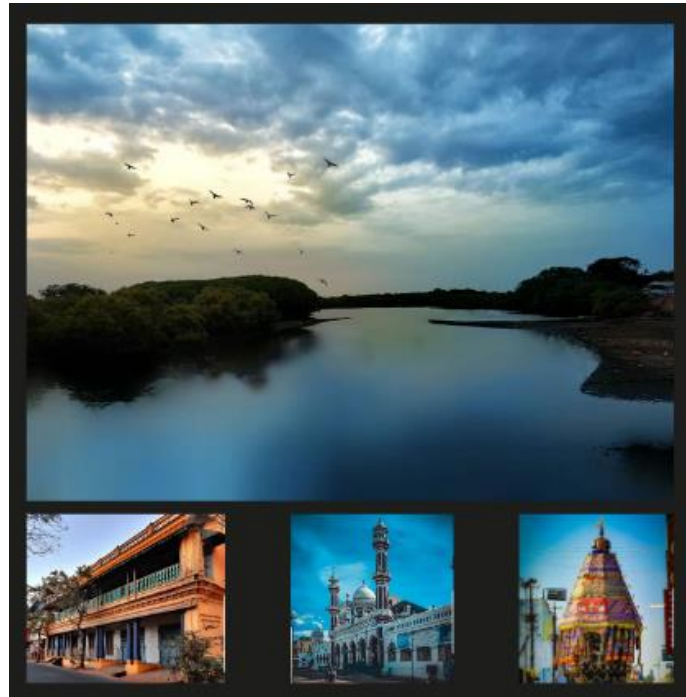
•Understanding the co-existence of different cultures of Karaikal.

•Mapping the urban historic fabric of Karaikal and listing of Existing built heritage of the historic town.

•Urban Conservation Strategies and guidelines for Heritage of the town.

## Chapter 2: LITERATURE STUDY

### 2.1.Introduction to Karaikal



*Fig.4. Karaikal and its Cultural Identity*

*Source: Karaikal Online*

Karaikal, being a part of Puducherry Union Territory of India, has a very prolonged historical heritage. It is a famous ancient port city. Its rich and ancient past reminds at least one-thousand-year old history. The ancient French precinct- Karaikal was well known for its religious and cultural heritage for centuries. It is a port-town which has been flourishing for ages due to the imports and exports since the chola period. However, the French flavour still persists in terms of heritage and culture in the peaceful land of Karaikal. The town is perceived as unique because of its architectural setting which is an outcome of a synthesis between French and local Tamil vernacular architecture.

#### 2.1.1.Etymology

Many explanations have been given for the Naming of Karaikal. One may be due to the combination of two words viz., ‘Karai’ and ‘Kal’, which means a canal of lime mixture. However, there is no evidence for the existence of the so - called canal. Karaikal town was called Karagiri in Sanskrit. The name Karaikal was in vogue for a very long time.

Poet Sekkizhar (992-1042 A.D.) in his Periyapuranam hails the town as “Vangamalirkadar Karaikal”. Sekkizhar in Periyapuranam adds that, Karaikal was a flourishing sea-port, in which "Borne by the billowing waves, the curved 'chanks' travelled far inland up the creek".

The name Karaikal was mentioned in a Copper plate preserved in Leyden University, Holland which gives the details of privileges granted to the Buddhist Monastery at Nagapattinam. The name Karaikal may be an obverse of Karaikadu which means the Forest of weeds. The Imperial Gazetteer refers to it as “Fish pass” also. It is also called as Karaka, Karaivanam and Sakambaripuram in Honour of Sakambari Devi. It is also said that the name Karaikal is a corrupt form of the ancient name Karai kayal. The word ‘Kayal’ refers to Salt fields and ‘Karai’ refers to a sea shore plant ‘Karai’.

### 2.1.2.Regional Setting

The Kodamurutti, Arasalar, Virasolanar, and Vikramanar are the principal branches of the Kaveri River below Grand Anicut. The waters of Kodamurutti and Virasolanar also supply the region with the irrigation needs it requires, despite Arasalar and its branches spreading throughout Karaikal.

The Karaikal District has a total size of 157 square kilometres, or around 61 square miles. The regional capital is Karaikal Town, which is located 12 kilometres south of Tharangambadi and 16 kilometres north of Nagapattinam.. Rather than community-based settlement, occupation based settlements started emerging around public buildings that are predominantly in mixed community manner. This mixed settlement was highly developed on almost all the new streets.

Karaikal is an old city with a large number of aged buildings, many out of which are undergoing renovation. This promoted the new contemporary architectural style neglecting the traditional style, which had climate responsive elements and heritage values.



Fig.5. French Map showing Karaikal  
Source:Mapia.com

### 2.1.3.History

It appears that Karaikal was a valued asset of Thanjavur's succeeding kings, including the Pallavas, Pandyas, Cholas, Rayas, Nayaks, and Marathas. Later, for the same reason, the British followed by the French established themselves here. However, colonial exploitation of foreign rulers on the one hand and modernization of navigation infrastructure and mechanised sea

transport displacing traditional ships on the other slithered this town into a crippled and sluggish condition. French colonists acquired Karaikal in 1760. Similar to Pondicherry, it was controlled between the British and the French. In 1761 and again after that, the French surrendered the town to the British.

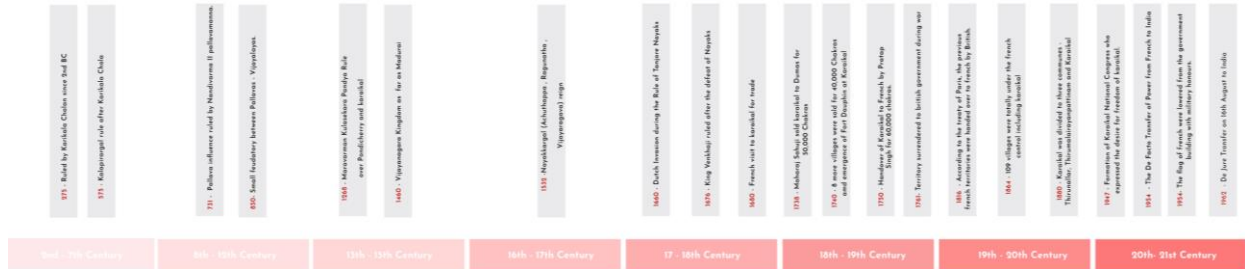


Fig.6. Historic Timeline of Karaikal

Source; Author

From Sangam period to Maratha Confederacy of Tanjore, Karaikal was under the hegemony of Tanjore kingdom, being ruled by different dynasties. After the advent of Europeans at the Coromandel Coast, the region came under the rule of French colonialism, in the middle of 18th century. The alien rule continued for another 215 years. Hence Christianity spread in the region. Buddhism also flourished here which has been emphasised by archaeological sources. The Muslim traders who settled in Coromandel Coast brought Islam into the territory.

### 2.1.4. Geography

Two districts, Karaikal and Puducherry, make up the Union Territory of Puducherry and are geographically separated from one another. Puducherry District includes the areas of Yanam, Mahe, and Puducherry. The Karaikal District is wedged between Nagapattinam District of Tamil Nadu, which is 130 km south of Puducherry. It is between latitudes 0o49' and 11o01' N and longitudes 79o43' and 79o52'. The Karaikal region is just made up of the Municipality of Karaikal, and Communes of Neravy, Tirumalairajanpattinam, Thirunallar, Nedungadu and Kottucherry.

Karaikal, located in the deltaic area of the Cauvery on India's east coast, has a tropical maritime climate with minimal daily temperature change and moderate rainfall. The area is flat with a slight slope towards the Bay of Bengal in the east and is totally covered by a thick mantle of alluvium of varying thickness.

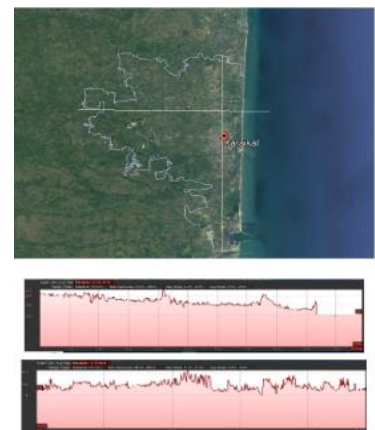
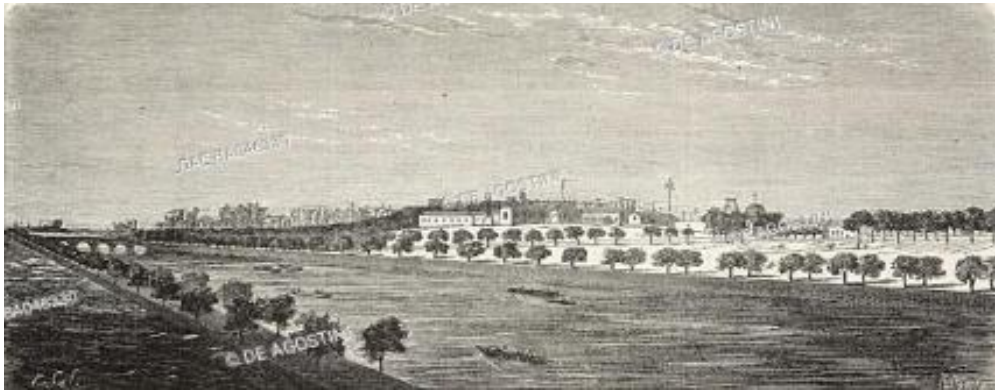


Fig.7. Site sections of Karaikal District

Source: Google earth

### 2.1.5. Maritime trade



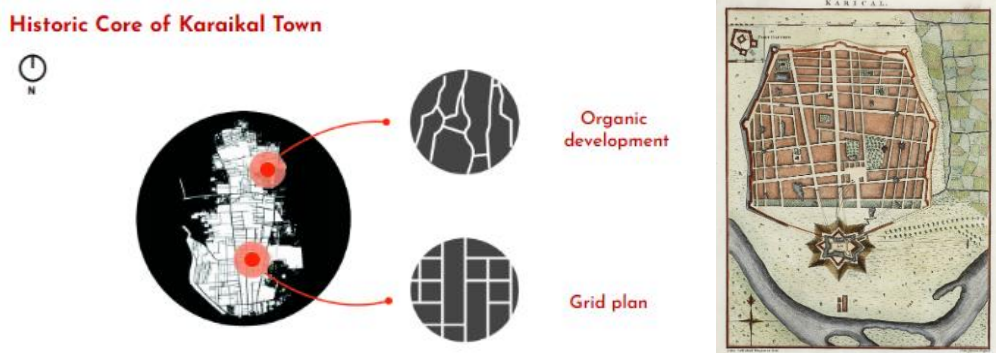
*Fig.8. Karaikal Shore during French reign*

*Source: De agostini*

Karaikal was one of the rich port towns that had various imports and exports activity happening before and during French rule. It flourished a lot in sea trade in general. The maritime trade at Karaikal was connected to nearby port towns such as Nagapattinam and Tharangambadi which were under the chola and British rule. The port of Tharangambadi went through varied influence of Dutch, Portuguese, French, British and Germans. Hence, Karaikal being its closed port town was heavily influenced by Tharangambadi giving it a multicultural identity.

### 2.1.6. Spatial Planning

A fort named Fort Daphne was said to be built during the 17th century around the organised grid patterns of the core area. The old organically developed town was corrected by Porschay in 1778 and was made into grid patterns. The streets of the French were all grid while the later developments grew organically.



*Fig.9& 10. Map showing Settlement pattern and Fort Daphne at Karaikal*

*Source: Author & Alarmy*



One of the most notable aspects of Karaikal Town's street layout is the inclusion of a walkway with a 5 foot width on both sides; this route is termed in French as a "trottoir." The "Trottoir" allows a guy to continue moving forward without any obstacles. As a result, it is known as "Alodi" in Tamil. The term "Anjadi" was created due to the breadth of five feet. The settlement of Karaikal is quasi- rectangular in form and has a tiny protrusion on its south-western edge. Arasalar River defines its southern border, and the Cauvery River tributary "Karaikal Vaikkal" serves as its northern limit. The rising colonies that are dispersed on the eastern and western sides have now partially covered the paddy. The streets of Karaikal lie in the two directions North- South & East-West.

### 2.1.7. Architecture

The buildings in the French town are constructed in a traditional European style similar to the Parisian homes of the "hotel particulier" (urban upper middle class in France), but the Tamil town's constructions are heavily influenced by the local Tamil Nadu vernacular. The two opposing styles have impacted one another, eventually creating a distinctive fusion of Tamil and European architectural patterns that reflects the cross-cultural influence and gives the built form a particular character. The Karaikal town in general has two architectural styles namely, the French architectural style and tamil architectural style.

#### i. French Architecture Features

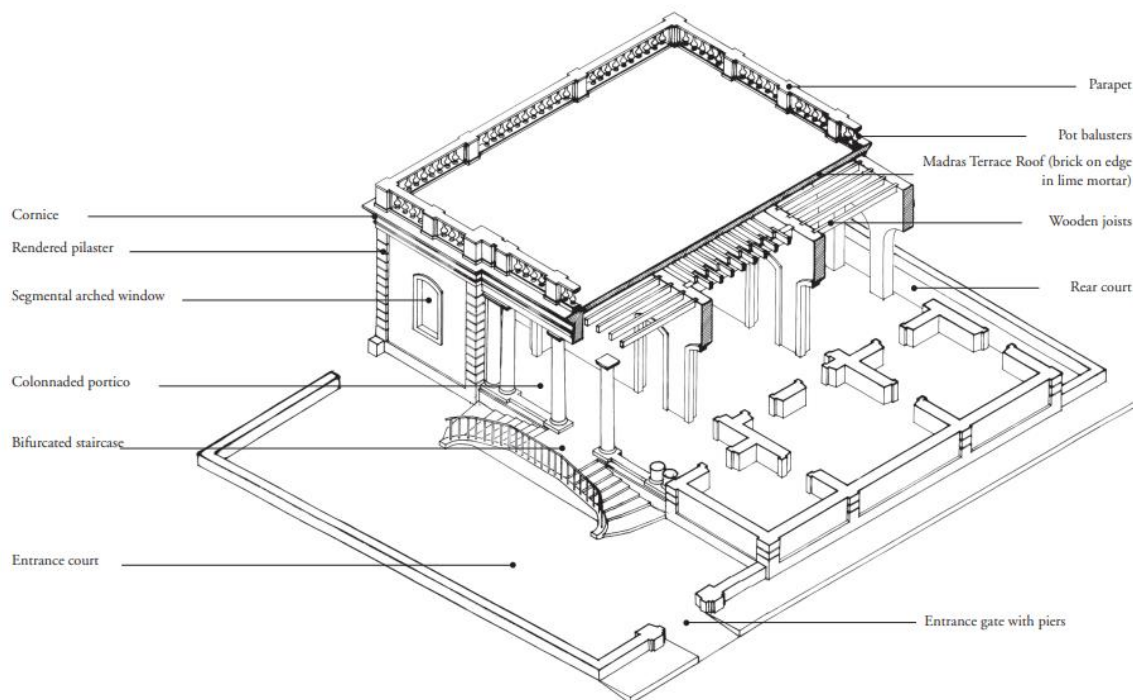


Fig.11. Typical French House

Source: INTACH



**Streetscape and Architectural Features:** The streets are often distinguished by continuous wall-to-wall construction, complete or partial street frontage, high garden walls, extravagant entrances and solid walls that are broken into smaller panels by the use of verticals (pilasters) and horizontals (cornices). These street facades are often simple and austere, which emphasises how the town's grid pattern is straight and vertical.

The flat or segmental arched windows on the external wall panels have bands, as do the louvred wooden shutters. Wooden balconies supported by wrought iron brackets are prominent of two-story structures. A continuous parapet, typically embellished with loopholes or terra-cotta pot balusters, or curved, completes the structure of the building. Important structures frequently include ornamental elements and end embellishments.

**Structural Systems:** The structures have load-bearing walls, which are typically 14 feet tall and two feet broad. Mud and brickbats make up the infill of these brick walls. Walls on the first level are narrower than those on the ground floor. Brick-on-edge masonry in lime mortar covering closely spaced timber joists is used to construct columns and arches that support massive timber or steel beams in madras terrace roofing.

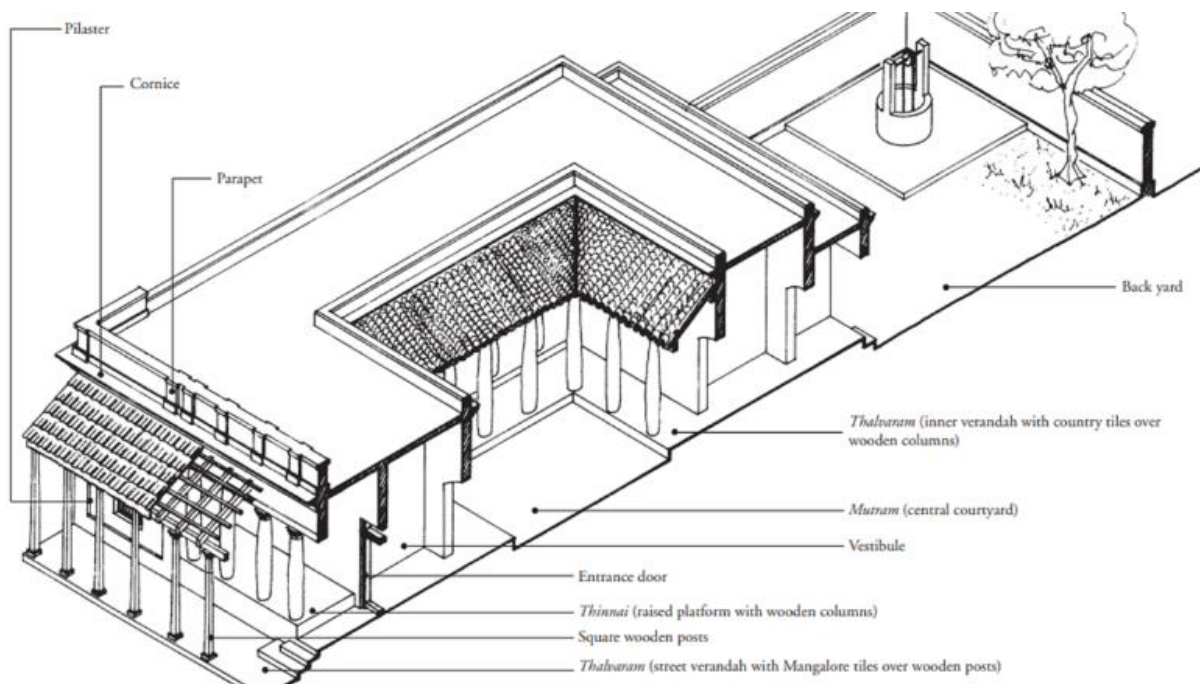
Waterproofing was done in the local lime terracing technique. Balconies are linear (usually four feet deep) and rest on wooden joists over an edge beam held in place by wrought iron brackets. Occasionally the balconies rest on cornice platforms. Mangalore tiled lean-to roofs (mostly on the first floors) with wooden rafters and edge beams that rested on capitals over square columns. In certain instances, iron brackets are used to support the lean-to roof. For cornices, copings, and ornamental bands, brick corbelling is utilised.

**Construction Details :** The primary building material for all masonry works was burned bricks in lime mortar. Lime was produced by igniting limestone extracted from Madhagadi or seashells collected from the nearby coast. Sand and lime were combined in a wet mortar mill to create the mortar. The same premium lime was used for both the inside and exterior plastering.

Typically, Burmese teak was utilised for construction. Lime plaster features were shaped and then put to brick masonry as part of the architectural decorative operations. Some components, like the fire pots and pot balusters, were constructed by potters using the original stone designs. Lime stucco was used for the exterior façades of several buildings.

## ii. Tamil Architecture Features

**Streetscape and Architectural Features:** The thalvaram (street verandah with platform and lean-to roof over wooden pillars), a social extension of the home, and the thinnai (semi-public verandah space with stone benches for guests), are the two key features that define Tamil streets. These so-called "talking streets," which are also found in Kumbakonam, Tanjore, Chidambaram, Srirangam, and Mylapore, are typical of the vernacular Tamil architecture. The entire street stretch is homogenous due to the use of connecting elements like lean-to roofs, cornices (horizontally), pilasters or engaged columns (vertically), and ornamental parapets. These Tamil structures often have an amalgam of flat and pitched roofs.



*Fig.12. Typical Tamil House*

*Source: INTACH*

**Structural System:** Buildings have simple load-bearing walls. Rubble-filled foundations feature one or two steppings. Flat brick walls range in thickness from 45 to 60 cm and are filled with mud and brickbats. Walls on the first floor are thinner than those on the ground floor. For flat roofs, Madras terrace roofing is utilised (brick-on-edge masonry in lime mortar over tightly

spaced timber joists), while for slope roofs, Mangalore tiles or half-round country tiles are used (placed on battens over wooden rafters).

Wooden constructions are found in thinnai, thalvarams, and mutrams. Balconies are supported by wrought iron brackets and cantilevered hardwood joists. In certain instances, iron or wooden brackets are used to support the lean-to roof. Brick corbelling is used for ornate cornices, copings, and bands.

**Construction Materials:** Burnt bricks, lime, terracotta tiles, and wood were among of the environmentally beneficial and locally accessible materials used to construct Tamil and French homes. Teak was used for the major structural wooden components, such as columns and beams, while other indigenous woods, such as palm, were used for the smaller components, such as rafters and posts. Traditional Tamil homes required expertise in plaster work, woodworking, tile laying, and bricklaying.

### **2.1.8. Materials**

According to the historical evidence, Karaikal in its own name is said to be known as “ a canal made of lime mixture’. However, today there are no evident traces of such a canal to prove its existence. But the abundant amount of lime used for plastering in both French and tamil buildings proves that the availability of lime was high in this area.

Usage of Burmese teak showcases the imports of wood from Burma to India during the past centuries. Wood is used for *thalvarams*, thinnai and the balconies. They are also seen used as railings or balustrades in old houses. The rafters and window frames are made of wooden battens of teakwood.

### **2.1.9. Architectural Guidelines for typical Houses**

According to INTACH, there are certain architectural guidelines that are proposed to conserve and preserve the existing French and tamil architecture of Karaikal.

#### ***i. French Houses***

One can observe that many of the new buildings that have sprung up in the old town under the banner of "French Style" are just misapplied examples of or local interpretations of "European baroque" elements. These characteristics, which are mostly aesthetic, include concrete arches, pediments, ornate cornices, fluted columns beginning over cantilevered brackets, and synthetic façade cladding materials.

The embellishments of the Karaikal "French style" are sparse and primarily restricted to the gates, parapets, copings, and horizontal cornices. Aside from it, the façade's fenestration is relatively straightforward, with symmetrically positioned windows and doors inside wall panels that are separated by vertical pilasters and horizontal cornices.

Windows have bands surrounding them and are of uniform size, while balconies are made of Madras terrace slabs supported by wrought iron supports. Wooden shutters are used on doors and windows. All of this is visible if one examines the town's existing structures. A plain simplicity may be seen in the overall shape, size, proportion, and fenestration. Therefore, one may use these fundamental principles when constructing new projects in the Precincts to make the structures blend in with their historic surroundings. Here, it's important to keep in mind that the coping and cornice projections serve as rain protection for the wall surfaces.

#### *ii. Tamil houses*

As the majority of the recently built structures in the town seem to demonstrate a preference for the outdated and too ornate classical European design. Even though the building is in a Tamil town, there is a propensity for individuals to use French design. Old residences had common walls, and the primary lighting and ventilation came from courtyards and street fronts. As a result, there was less space wasted and a continuous construction line was maintained. The open areas were effectively incorporated into the home and formed part of the living area.

This is improbable in the case of the British-developed setback mechanism for new settlements. Because setbacks are not required in the ancient town, one should avoid them when constructing new structures and instead retain the continuity of the building line.

*Thalvarams, thinnais*, wooden columns, pilasters, cornices, and openings with conventional dimensions are only a few examples of the 'Tamil style' that can be seen throughout Karaikal. When developing new projects in the Tamil precinct, the main principles of form, continuity, scale, proportion, and fenestration may still be used to ensure that the structures blend in with their historic surroundings. Here, it's important to keep in mind that the coping and cornice projections serve as rain protection for the wall surfaces.

## **2.2.The concept of Cultural Identity**

The sensation of belonging to a culture is referred to as cultural identity. A shared set of connections, ideals, or values may serve to reinforce this sense of belonging. In essence, it means having the culture in its whole, with all of its ethnic, linguistic, religious, and gender divisions. Additionally, when someone adopts a culture as their own, they accept all of the traditions that have been preserved over time. The cultural identity reveals one's roots and facilitates interaction with those who have similar beliefs or practises.

### **Functionalism on culture and identity**

According to the functionalist viewpoint, society can only operate as a whole. In this sense, culture is essential to the proper operation of society. Functionalists contend that cultural norms and values act as a "social glue" that ties individuals together by fostering similar goals and ideals. Everyone adopts society standards and principles. These standards and principles form a part of the identity of the individual. A consensus is produced through shared norms and values. This is what Émile Durkheim referred to as society's collective awareness. According to Durkheim, it is this communal awareness that socialises individuals into behaving in a "proper" manner and keeps society from degenerating into anarchy or "anomie."

### **Marxism on culture and identity**

According to the Marxist viewpoint, social class conflicts are an intrinsic part of society. Marxists think that the bourgeoisie (upper capitalist class) and proletariat (working class) power dynamics and structural inequalities are reinforced by culture, which also maintains the capitalist agenda. Cultural institutions are used by capitalism to preserve culture and prevent workers from developing class consciousness. Therefore, the proletariat won't rise up in revolt. Marxists contend that popular culture diverts the proletariat's attention away from its issues while cultural ideals and aspirations inspire the working class with false optimism and drive them to put in long hours. Neo-Marxists contend that cultural practises and goods 'bind' people together so they feel like they have something in common, especially the working class. The proletariat so uses popular culture to represent its identity. Additionally, the division between 'elite' and popular culture aids socioeconomic classes in creating identities based on their cultural encounters.

**Postmodernism on culture and identity:** Postmodernists argue with the notion that culture can bring people together and assert that it is varied. Postmodernists contend that fractured identities result from cultural diversity. People can build their identities from a variety of distinct cultures. Layers of identity include things like nationality, gender, race, religion, and political views.

### 2.3.Identity of Town

The notion of a town's identity develops over time and incorporates the physical, environmental, historical, and socio-cultural features of a certain town. Understanding and valuing the local identity therefore becomes crucial in preserving the distinctive characteristics of every town.

#### 2.3.1.Cultural Identity of Town

The fundamental building blocks that enable social constructs and interactions to function and have an impact on one another are identity and culture. Over time, it takes a certain amount of contact and personal perspective to develop an identity. As a foundational component of civilization, culture also needs a historical context, symbolic exchange, and material development. Culture is passed down from generation to generation. The socio-cultural framework is developing in this manner.

Each person makes an intentional, unintentional, and positive contribution to their culture, which strengthens the sense of identification and belonging. Culture and personal identity are merged, developed, and enhanced when individual contribution and societal reaction are in harmony.

#### 2.3.2.Singular concept to multiple concept

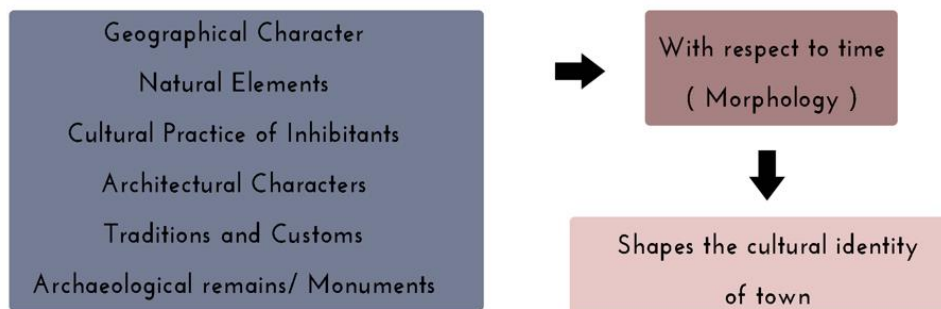


Fig.13. Cultural Identity of Town

Source: Author

Culture can be either singular or plural in nature. In consideration of Karaikal, the town has various cultures such as French, tamil, Telegu, German and many more. Throughout history

various influences have affected the cultural identity of the town. They are an amalgamation of the various cultures that have evolved through history.

With respect to time, the following factors help in shaping the cultural identity of the town.

- i. Natural Elements – such as flora and fauna found in the region.
- ii. Cultural Practice of Inhabitants – traditional practices and knowledge system followed.
- ii. Architectural Characters – architectural elements, spatial pattern and place identity.
- iv. Traditions and Customs – customs and believed followed by the people.
- v. Archaeological remains/ Monuments – places of archaeological importance.
- vi. Geographical Character – the soil characteristics, water bodies, topography and climate.

### **2.3.3. Determinants of Traditional concept of single culture**

In order for a specific culture to prioritise and be defined, the traditional approach of single culture helps in defining them.

#### ***i. Ethnic Foundation***

Culture was to be seen as a specific culture of a certain people only, but not as a common one for people in general.

#### ***ii. Social Homogenization***

Every culture was supposed to mould the whole life of the people concerned, making every act and object an unmistakable instance of precisely their particular culture.

#### ***iii. Intercultural Delimitation***

Delimitation towards the outside ensued: every culture was, as the culture of one folk to be distinguished and to remain separated from other folk's culture.

### **2.3.4. Threats to Cultural Identity**

Identity of Place is one that becomes casualty due to emerging cityscape and globalisation. The cultural identity of the town faces threats due to cultural dominance or improper interpretation of the culture.

- i. Derogation
- ii. Identity exit
- iii. Change in significance
- iv. Change in intent
- v. Positive Distinctiveness
- vi. Concealment

## **2.4. Multi culturalism**

It is the assumption that society allows cultural expressions that do not conflict with our society's core principles. Ethnic, linguistic, and patriotic considerations are used to understand multiculturalism. The hierarchy in society is thought to help explain heterogeneity and the degree of interculturalism in society with regard to the local setting.

Multiculturalism has several geographical meanings. Initially, it is viewed as a method of describing the very condition of diversity that is discernible through various spatial patterns. The word "multiculturalism" especially refers to the existence of diversity and differences in power among people in terms of racial, ethnic, religious, regional discrepancies, and other cultural markers that deviate from the dominant, usually prejudiced, "norms."

Through discourses and policies that respect the rights and needs of marginalised groups in the public sphere while also dictating the conditions of such integration, multiculturalism is the acceptance of diversity as well as the formal recognition and inclusion of those who are defined by those differences. Recently, there has been a shift in discourse and policy away from multiculturalism and towards different forms of cultural assimilation in many nation-states, especially those in the Global North. This is true even when the situation is complex and unequal due to individual backgrounds. This shift has raised questions about the boundaries of multicultural acceptance in neoliberal globalisation and post-colonial contexts, how specific types of diversity should be managed or can be managed, how this management may relate to social justice and anti-racism, and the relationship between individual and group-based rights. As a result, geographers have only lately begun to view multiculturalism as a phenomena that transcends formal efforts to describe and accommodate difference. By emphasising the ways in which the borders of intersecting identities are confronted, reinforced, but also renegotiated via daily life, they achieve this.

A project or strategy that promotes such a society is referred to as multicultural, as is a society or a world that contains a range of distinct ethnic and cultural groups that are considered politically relevant. Political philosophers work to fairly handle multiculturalism's problems, although there is much disagreement on what this involves. Multiculturalism may include the recognition of rights—individual or collective—based on the value that different cultures place on particular individuals or even society as a whole. In order to ensure that everyone benefits equally from cultural involvement and avoid unfairly gratifying dominant groups, a multicultural state may be one in which different levels of recognition are given to cultural



groups. On the other side, it may be argued that, precisely because of the great social and cultural diversity, the state should uphold its neutral stance towards groups and ensure that core libertarian rights are fairly and consistently enforced across different cultures. The safety and wellbeing of individuals may be put at danger if groups are recognised since doing so carries the risk of "politicising" aspects of cultural identity that should be excluded from conversations about how to allocate resources and goods. These viewpoints reflect significant disagreements about what equality and freedom truly entail, in addition to varying ideas about the connection between culture and one's own well-being.

#### **2.4.1.Theory of Multiculturalism**

Multiculturalism has two major theories, they are :The melting pot theory and Salad bowl theory.

##### ***i.Salad Bowl theory***

It is a metaphor for how a multicultural society may include other cultures while retaining their own identities. In the salad bowl paradigm, several cultures are combined—like salad ingredients—but they do not amalgamate into a single, homogenous culture; rather, each culture retains its own characteristics. Since the latter hypothesis implies that ethnic groups would not be able to retain their legacy, this theory indicates a society with many distinct cultures. This theory was proposed by Carl Degler in 1959.

##### ***ii.Melting Pot Theory***

The idea is that a diverse society may become more heterogeneous as its many components "melt together" to form a cohesive whole with a shared culture. Israel Zangerwill put out this hypothesis in 1908.The melting pot concept has drawn criticism for decreasing variety, erasing cultural customs, and requiring state intervention to be implemented. Therefore, advocates of multiculturalism have dismissed the merits of assimilation and the melting pot concept.

#### **2.4.2.Issues with Multiculturalism**

- i. Permeability of a culture is cosmetically seen, the co-existence is not just mixing of culture which denotes culture as a closed sphere.
- ii.This revolves around issues of co-existence of multiculturalism, but the broader aspect of entanglement between cultures is concealed by homogeneity and separation ideas.

### 2.4.3. Indian Multiculturalism

Various religions, cultures, faiths, languages and social milieu of India reflect a very fine aspect of Multiculturalism. The following factors help in differentiating different cultures that are multi-layered in local context. They are origin, lifestyle, ethics, tradition, and beliefs.

India has developed into a multi-ethnic society. It is a collection of many different civilizations and a synthesis of diverse social and cultural components.

The inhabitants of this area were a vast synthesis of cultures, faiths, and languages. Although there are significant economic and social disparities, the nation's integrity and unity have been preserved. This fusion has transformed India into a singular cultural patchwork. In actuality, India is a panorama of unique varieties with no equivalent on other continents. Our ethos and public discourse have been deeply imprinted with the desire for unity in diversity.

Here, we can see quite clearly how individuals from various religions, creeds, castes, dialects, cultures, ways of dressing, levels of belief in God, rituals of worship, etc. coexist peacefully on the same Indian continent. It is the largest and most populous country in the world, and it is home to people of many different religions, including Hinduism, Buddhism, Islam, Sikhism, Jainism, Christianity, and Parsees. However, everyone there shares the belief that due to historical progression, all of these people are meant to coexist. Cultural pluralism helps preserve the unique traditions, identities and languages of the many cultures within one society.

### 2.5. Co existence of Architecture

The co-existence of architecture is about the capacity of architecture to connect people on the human scale, to bridge ostensibly opposing worldviews in the service of co-creation. It stimulates and responds to the cultural and spiritual expectations of different cultures. The architectural elements in a building are major factors that reflect the culture, its differences and boundaries. Factors determining the culture inculcated in a building and its spatial planning are space, material, light, colour, and symbol.

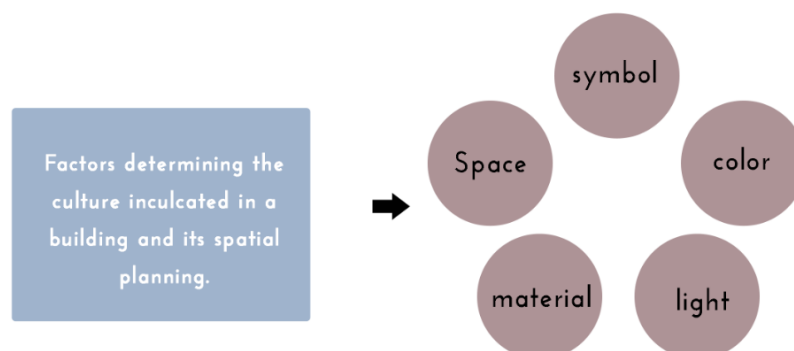


Fig.14. Factors determining the culture inculcated in a building and its spatial planning

Source: Author

**2.5.1.A multi layered society-** Instead of embracing an essentialist idea of culture with clearly defined and internally homogeneous boundaries, here we embrace the notion of transcultural aesthetics to talk about identities as multi-layered and fluid in nature.

In order to understand the different aspects in which multiple cultures inculcated in architecture co-exist, the architectural style is evolved through a few methodological approaches. They are

***i.Divergence***

This focuses more on the politics of memory or timeline of a locality. It examines how architecture operates as a means to create an identity -ethnic, religious and / or national by anchoring cultural memory to a specific territory. It points out that co-existence can be destroyed through destruction of architecture.

***ii.Dissonance***

This focuses on architecture's capacity to support democracy and facilitate the inclusion of minority groups in public architecture. It enhances the importance of inclusive spaces of all groups. It concentrates much on collecting the scattered and gathering the dispersed.

***iii.Convergence***

The transcultural aesthetics combine local traditions with cultural dimension in a new formal language that speaks to both the local population and represents the different communities in the region through cultural symbols, material and craft. It attempts more to create a heterogeneous society in contrast to ideas of national homogeneity.

**2.6.Transculturality of Architecture**

i.Transcultural design and architecture can enhance our understanding of the present transcultural condition and they make us experience the potential richness and beauty of the condition.

ii.To understand this, the cultural patterns must be combined in one or the same work to understand the interculturality.

iii.There are two methods to determine this,

-The patterns of different cultures should be placed side by side in a work like a patch in a building to understand its co-existence.

-The patterns can be interlinked so that the two cultures can be imposed on one another for co-existence.

iv.Hence this helps different cultures to penetrate and fertilise each other to coexist in a multicultural society.

### **2.7. Research gap identified: Spatial Manifestation in Pluralistic Culture**

Openness to collaborating with one and another cross- disciplinary and cultural borders- fosters cross- cultural dialogue and crystalized organisational structures. Diversity, hybridity and dynamic nature of culture and its interpretation and practices are constantly evolving with local context. The broader political, social and cultural layers shape the co-existence of civilization through architecture.

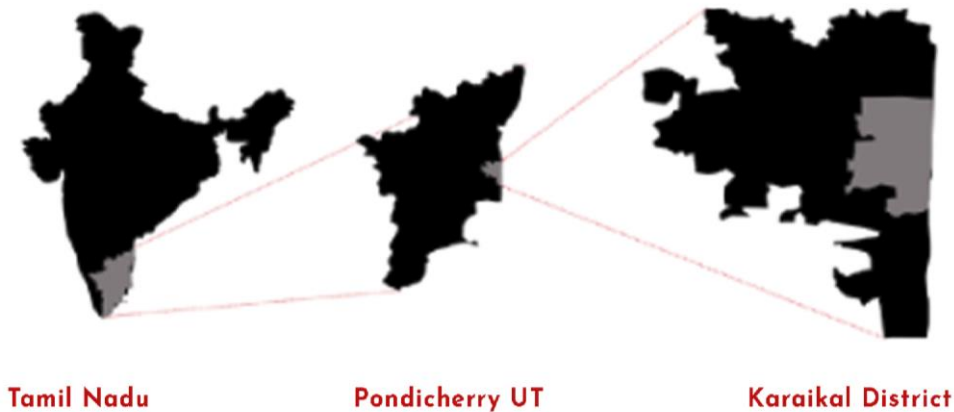
The present information regarding Karaikal through local authors speaks about the different cultures of Karaikal throughout history. Whereas the architectural style of Karaikal is explained in terms of French planning. However the major concept of spatial manifestation in this multicultural town isn't briefed in socio-spatial terms.

Hence , the thesis intends to examine the notions of cultural identity currently attached to existing spaces by challenging the latent socio-spatial assumptions made in architecture , in order to reveal alternate possibilities for evolution of architecture. The present identified through the literature study is to brief about conceptualisation of space and how it shaped the built environment. This will be approached by the contemporary cultures attached to the architectural style of Karaikal through historical analysis.

## Chapter 3: CONTEXTUAL FRAMEWORK

### 3.1.Karaikal and its History

#### 3.1.1.Introduction to Karaikal



*Fig.15. Maps showing location of Karaikal on Indian and Pondicherry UT.*

*Source: Author*

For decades, the historic French district of Karaikal was renowned for its rich religious and cultural past. It is a port town that has prospered for aeons as a result of imports and exports ever since the Chola era. However, the serene province of Karaikal still has a French experience in terms of tradition and culture. The town's distinctive architectural setting, which is the result of a synthesis between French and indigenous Tamil vernacular architecture, is what people initially recognise about it.

#### 3.1.2.Mythological Connection

It is clear from the extant literature and local folklore that Karaikal has been a hub of activity since before the Vedic era. The town's physically advantageous location at the confluence of the Arasalar River, a tributary of the river Cauvery, and the Bay of Bengal is the source of one of the stories related to it.



*Fig.16.Lord Rama worshipping and doing Abhisheka for Lord Shiva*

*Source: Kadavulthinai*

According to the Sthalavaralaru of Karaikal, the river Cauvery obediently flowed at Tejneervanam when Lord Mahavishnu (God, The Protector) performed Abishega for Lord Shiva (God, The Destroyer). Then Mahavishnu referred to her as Hari Nadi, or Arinadhi in Tamil, the river of Hari. This river's name, Harisollar, subsequently became Arasalar since it was created in response to Hari. According to hymns on Karaikal Ammaiyar, the Karaisthalam was renowned for its maritime trade according to Periyapuram as well.



Figure 17. Statue of Ammaiyar  
Source: Wikipedia

### 3.1.3. Etymology

The phrases "Ka: Rai: and "Ka: L" are believed to have originated the name Karaikal. According to legend, it is a corruption of Ka: Rai: Ka: du, which refers to a forest (Kadu) that is rich in a certain weed (Ka: rail). Sthalavaralaru, which makes reference to Karaivanam (Vanam-'-forest), supports this. The visitor calls the location "fish pass," although Ka-rai has multiple interpretations, with "Masonry" being the one that is thought to fit this location the best. In homage of Sakambari Devi, for whom a temple was constructed close to Karaikal, the later Brahmandapuram in Sanskrit refers to the location as Sakamnaripuram.



Fig.18. Evolution of Name of Karaikal  
Source: Author

### 3.1.4. History of Karaikal

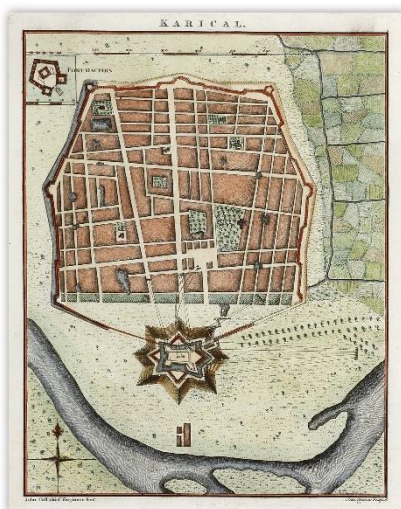


Fig 19. Fort Dauphin Built during 18th CE

Source: Alamy

#### *i. Historic Timeline*

- 731** - Thanjavur division , Pallava influence ruled by Nandivarma II pallava mannan.
- 850**- Small feudatory between Pallavas - Vijayalayas.
- 1268** - Maravarman Kulasekara Pandya Rule over Pondicherry and Karaikal
- 1460**- Vijayanagara Kingdom as far as madurai.
- 1532** -Nayakkargal (Achuthappa , Rangunatha , Vijayaragava) reign
- 1660** - Danish Invasion during the Rule of Tanjore Nayaks

- 1676** - King Venkhoji ruled after the defeat of Nayaks
- 1680** - French visit to Karaikal for trade
- 1738** - Maharaj Sahuji sold Karaikal to Dumas for 50,000 Chakras
- 1740** - 8 more villages were sold for 40,000 Chakras and emergence of Fort Dauphin at Karaikal
- 1750** - Handover of Karaikal to French by Pratap Singh for 60,000 chakras.
- 1761**- Territory surrendered to British government during war

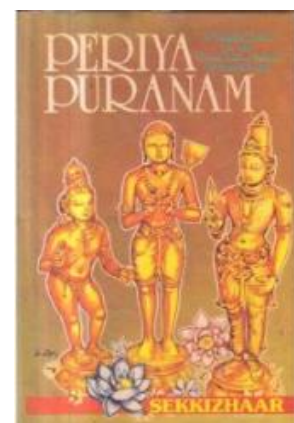


*Fig.20.Territory of Karaikal linedated during 18th century  
Source: Wikipedia*

- 1816** - According to the treaty of Paris, the previous French territories were handed over to the French by the British.
- 1864** - 109 villages were totally under the French control including Karaikal
- 1880** - Karaikal was divided to three communes - Thirunallar, Thirumalairayanpattinam and Karaikal
- 1947** - Formation of Karaikal National Congress who expressed the desire for freedom of Karaikal.
- 1954**- The flag of French was lowered from the government building with military honours.
- 1954** - The De Facto Transfer of Power from French to India
- 1962** - De Jure Transfer on 16th August to India

**ii.Early History:**

Except for what may be inferred from the tale of Karaikal Ammaiyar, who is believed to have lived in the fifth century AD and in whose honour a temple was constructed in the town, there is little historical information about Karaikal's early history. Today, many pilgrims arrive from faraway locations to visit this shrine.



*Fig.21.Periyapuranam Written by Sekkizhar (Ancient Literature of Tamil)  
Source: Saibhakthi*

The town of Karaikal Ammaiyar is described by Sekkizhar in his Periyapuranam on Karaikal Ammaiyar, written in the 12th century AD, as having numerous vessels of commerce on the

coast and excellent accommodations for the boat trade. He continues, "Borne by the billowing waves, the curved 'chanks' travelled far inland up the creek" at the thriving seaport of Karaikal. Additionally, he mentions the "molluscs and wild vegetation, abounding the coastline, adding to Karaikal's richness; the living there, of merchant citizens who were righteous and who swerved not a while from truthfulness; the existence of palatial castles and buildings," or, to put it another way, the prosperity of Karaikal in those days. Above important, the fact that he called Punithavathiar "Karaikal Ammaiyyar" after the town shows how prominent Karaikal was already. According to a reference provided by the French historian Pey, Karaikal Ammaiyyar's pictures may be seen in East Asian nations. This fact ties in with the Ammaiyyar Puranam tale of her husband travelling to distant places for commerce, indicating the significant position Karaikal has held since the dawn of the Christian period.

### *iii. Medieval History:*

In 1738, Dumas, a skillful calculated, wise, and proponent of peace who was above all eager to increase French control over territory in India by peaceful means, bargained with Sahuji of Thanjavur for control of Karaikal, the Karakalcheri citadel, and five villages in exchange for 40000 chakras. On February 14, 1739, the French seized control of Karaikal Town, the Karakalcheri Fort, and 8 Dependent Villages. The price for the town of Karaikal and the fort of Karakalcheri was increased by the King of Thanjavur to 50000 chakras.

In addition, he sought 4000 pagodas in yearly rent for 5 villages and a loan of 150000 chakras without interest that was to be repaid in 3 years in exchange for the hypothecation of Mayavaram holdings. All of the stipulations were accepted by the French, with the exception of the payment of 150000 chakras, which was changed to 10000 chakras and the yearly rental, which was changed to two or three thousand chakras. Kilaiyur, Melaiyur, Puduthurai, Kovilpathu, and Tirumalairajan Pattinam were the villages that were so received.

Two settlements were subsequently given to the French. Following his accession to the throne, Pratap Singh renewed his request for a 100000 chakra loan, and after receiving the first installment of 4000 chakras, he gave the French control of 8 more villages: Codague (Kondagai), Vanjiyur, Arimullimangalam, Niravi, Dharmapuram, Uzhiapathu, Mattakudi (likely Mathalangudi), and Polagam. Then, on December 2, 1740, he sold these villages for 60000 chakras, which he had just been given for 40000 chakras the year before.



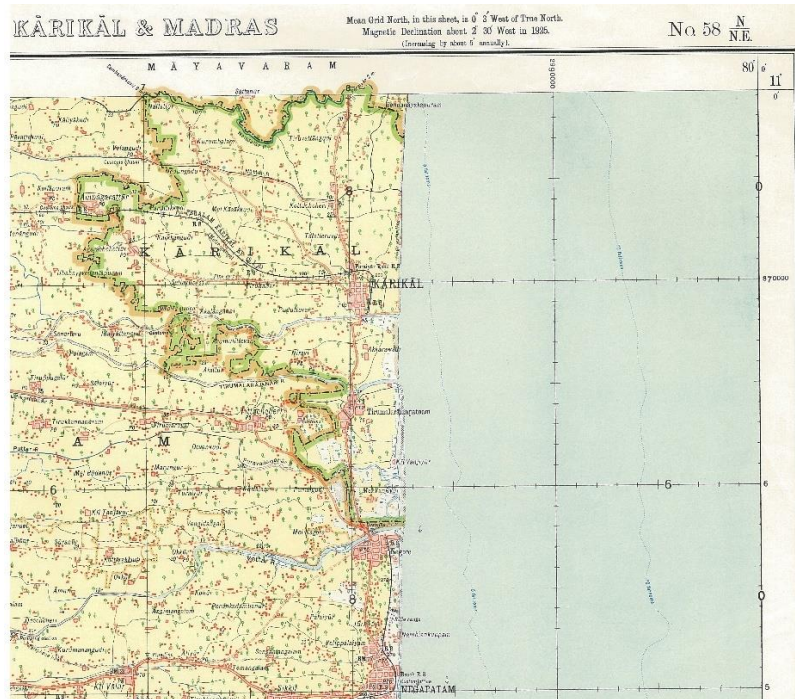


Fig.22.1925 Map showing the Territory of Karaikal and Nagapattinam

Source: Old maps of india

He promised Thirunallar Mahanam 55350 chakras in the same year and another 33 villages 60000 chakras. However, in a contract signed on 12.1.1750, Pratap Singh relinquished to the French 81 villages near Karaikal and revoked the communities' need to pay an annual rent of 2000 pagodas.

The entire area the French controlled surrounding Thanjavur at the time they gave themselves over to the British in 1761. Following two periods of British rule, the land was eventually ceded to France in 1816–1817 as part of the Treaty of Paris, 1814.

**iv.Modern History:**

The first overt manifestation of Karaikal's people's yearning for independence from French control was symbolised by the establishment of the Karaikal National Congress on June 13, 1947, and the Students Congress on January 31, 1947. Before an extensive gathering of officials and non-officials, the French flag flying atop the government building at Karaikal was respectfully lowered on October 31, 1954, the last day the French controlled this region. Thus, the actual transfer of power occurred on 1 November 1954, while the de facto transfer occurred on 16 August 1962.

### 3.1.5.Trade Routes:

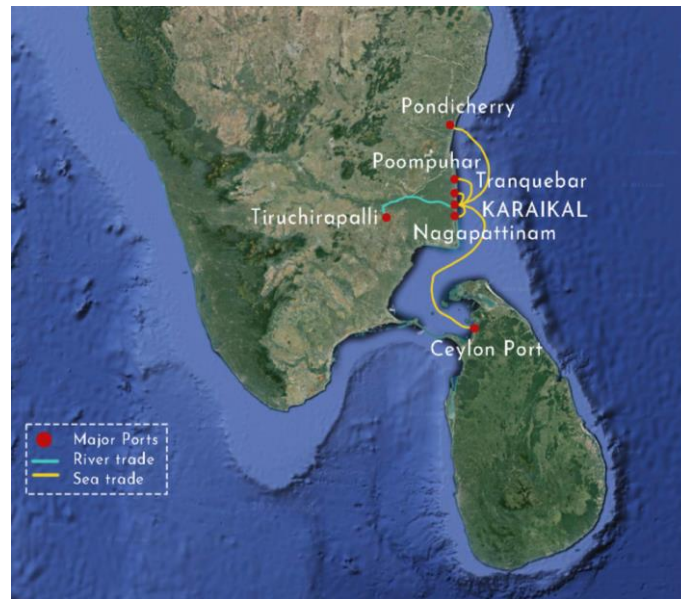


Fig.23.Map showing the interconnection between other sea ports to Karaikal town during the French reign.

Source: Google Earth

The Cauvery river connected to the sea directly at the Puhar Town, which is known as Poompuhar in Modern day. This town was much similar to Karaikal due to its cultural ties through maritime trade. The port town of Karaikal had flourished in Maritime trade since the 3rd century according to literary evidence.

The town of Karaikal connects a tributary of Cauvery known as Arasalar to the sea which made the land fertile in nature. This had enhanced the economy of the town greatly during the cholas. Since then, the resources of Karaikal was one of the main reason for the multiple invasions and capturing of Karaikal town throughout History. Modernization of navigation facilities and mechanized sea transport replacing the traditional ships on one hand and colonial exploitation of foreign rulers on the other, however slithered this town to a debilitated and stagnant state.

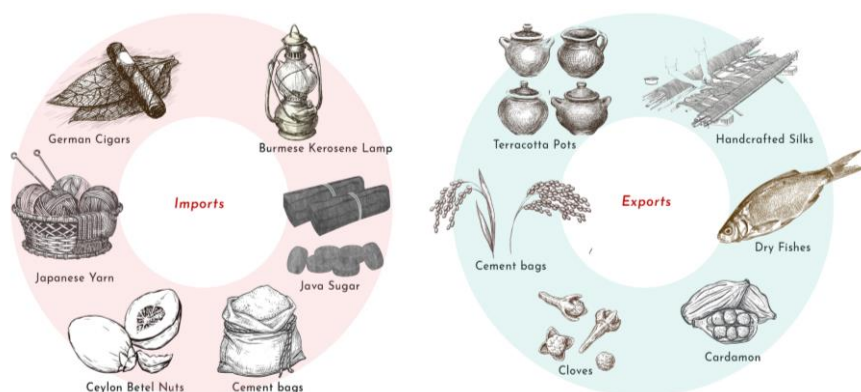
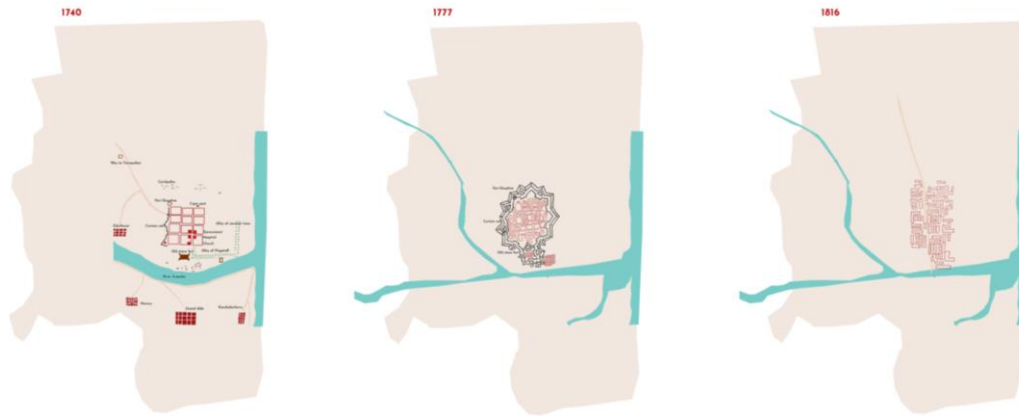


Fig.24.Commodities imported and exported in ancient times

Source: Author

### 3.2.Evolution of the Town



*Fig.24.Map of 1740, 1777 and 1816*

*Source:KPA*

#### **Map of 1740**

According to the above map, the streets were grid-iron patterned with a fort present just beside the Arasalar river. Moreover a curtain wall of 8 feet height was built on the west side of the historic core of the town.

#### **Map of 1777**

In 1777, the historic core was entirely fortified with high bastions on all sides surrounded by a moat. The major streets of Kamaraj and Bharathiyar were prominent from this period.

#### **Map of 1816**

During the beginning of 19th century, the forts were completely destroyed and the prominent streets of the core alone prevailed. This destruction of forts is said to have happened during the invasion of the British during French reign.

#### **Map of 1854**

The above map shows the emergence of channels across the historic core, and the development of small hamlets and agricultural practices over the years. The Thirunallar town has also developed around the temple premises during this period.



Fig.25.Map of 1834 and 1974

Source:KPA

### Map of 1974

Organically many tiny settlements started to emerge around the historic core of Karaikal and they mostly developed along the course of the river and its tributaries. The settlements along the course of the river started spreading and also the practice of agriculture flourished leading to the spread of settlements around the whole town. Salt banes were started to be created along the course of the sea for the extraction of salt. A huge economy of salt production was said to have happened near the port of Karaikal during the 20th century. From 1974 to present, the town has started evolving gradually leading to organic development of residences, commercial areas around the grid patterned core. This spread of settlement was mostly due to the economic development of the town.

### Map of 1992

The main town on the map belongs to the pre-1981 era, as previously observed. The rivers Arasalar (on the south), Vanjiar (on the east), and railway lines (on the north and north-east) surround Karaikal. With an extended series of streets running from North to South and crossing over in East-West directions, the street layout displays a planned structure. The town is traversed by three major thoroughfares: the Chidambaram-Karaikal-Nagore highway running north to south; the Karaikal-Kumbakonam-Thanjavur highway running east to north westerly; and the Karaikal-Thirunallar Road linking the Peralam highway.

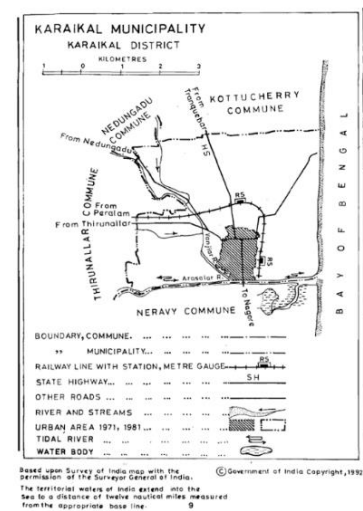


Fig.26.Map of 1992

Source:KPA



In a North-South orientation, four major streets run parallel to one another. The first is located in the middle of Bharathiyar Road, with Church Street to its east and Mastanpalli Street to its west. The fourth longitudinal stretch of the town is formed by Mariyamman Koil street on the north, which is expanded by Nehru street on the south.

### 3.3.Physical Features of the Town

#### 3.3.1.Location

The Union Territory of Puducherry is made up of two separate districts, Karaikal and Puducherry, that are geographically separated from one another. Puducherry, Mahe, and Yanam areas are included in the Puducherry District. Karaikal District is made up of the Karaikal area. About 130 kilometres (km) south of Puducherry is the Karaikal area, which is surrounded by Tamil Nadu's Nagapattinam District. Between 0o49' and 11o01' N and 79o43' and 79o52' E are its coordinates.

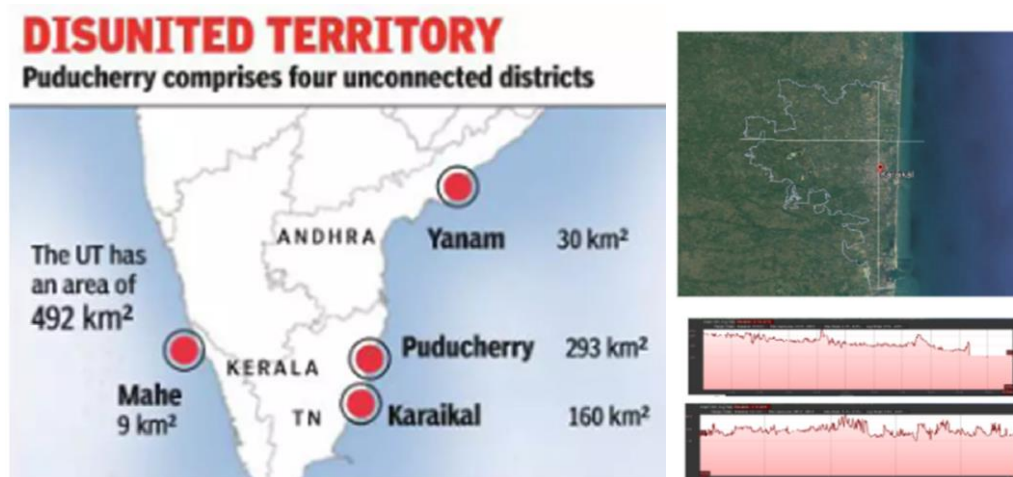


Fig.27& 28.Union Territory of Puducherry & Site section of Karaikal

Source: The times of India & Google Earth

The Karaikal District has a total size of approximately 61 square miles or 161 square kilometres. The regional capital is Karaikal Town, which is located 12 kilometres south of Tharangambadi and 16 kilometres north of Nagapattinam. The Municipality of Karaikal and the Communes of Neravy, Thirumalairayanpattinam, Thirunallar, Nedungadu, and Kottucherry make up the Karaikal area. The site section indicates that the respective region is flat having a gentle slope towards the sea. The mean sea level is 4.21 meters.

#### 3.3.2.Climate

Karaikal, located in the deltaic area of the Cauvery on India's east coast, has a tropical marine climate with minimal daily temperature change and moderate rainfall. 68% of which takes place from October to December.

Less than 20% of the annual rainfall falls during the southwest monsoon period, which is a minimal quantity of rain. The wettest month is November, which accounts for nearly one-third of the yearly rainfall. There are about 55 rainy days each year, or days with at least 2.5 mm of precipitation. In Karaikal, the relative humidity ranges from 64 to 75%, and the wind speed is 20 km/h.

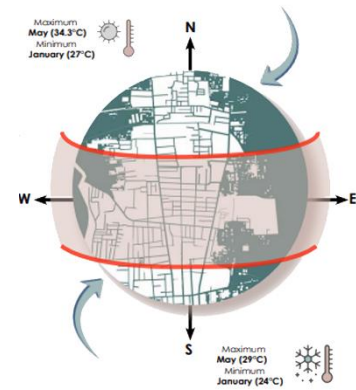


Fig.29. Climate diagram of site

Source: Author

### 3.3.3. Topography

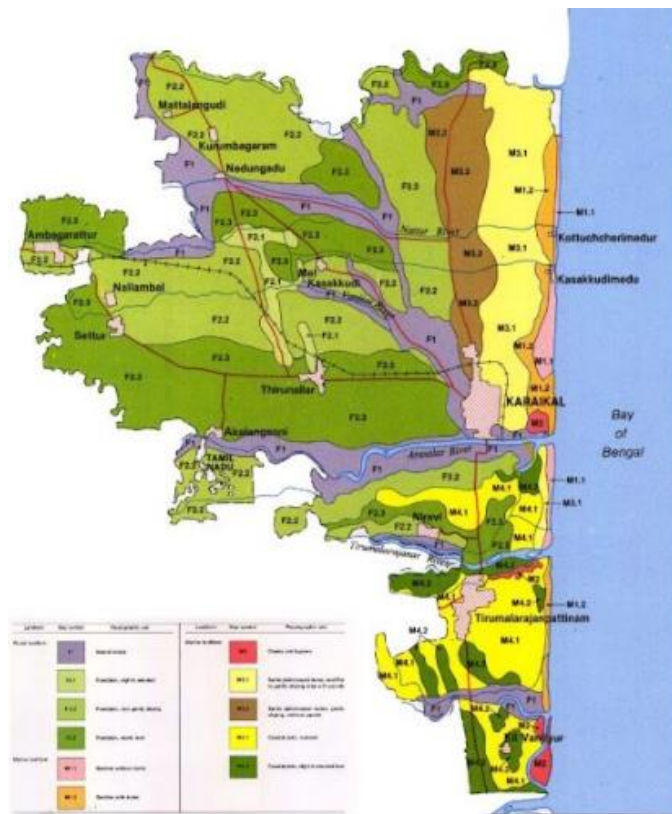


Fig.30. Physiography Map of Karaikal

Source: Department of Agriculture, Karaikal

The Cauvery River's distributaries entirely encircle the district, which is a portion of the lush Cauvery delta. The district is fully covered in an alluvial mantle of varying thickness. Generally speaking, the district only has a flat terrestrial terrain that gently slopes eastward towards the Bay of Bengal. The Nandalar and Vettar form the district's northern and southern boundaries, respectively. The region next to the Karaikal region in Nagapattinam District is home to the set of rock formations known as the Cuddalore formations.

### 3.3.4. Soil Profile of town

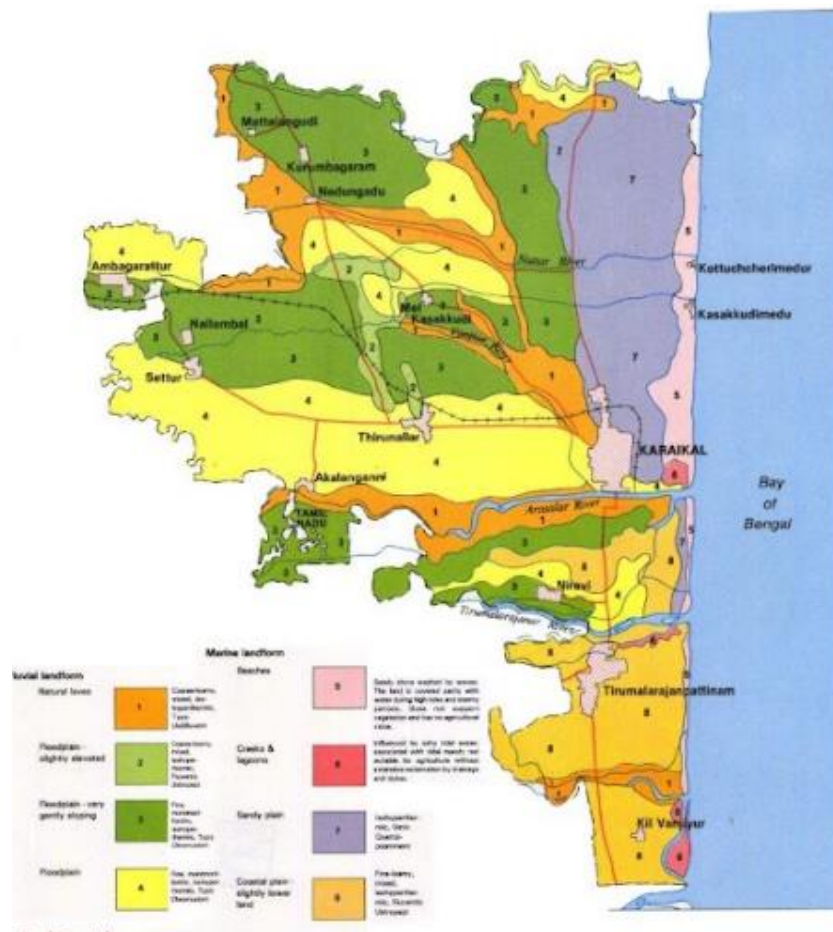


Fig.31. Soil Map of Karaikal

Source: Department of Agriculture, Karaikal

Nearly majority of the district's soil is coastal alluvial, which is good for growing rice and pulses. East of Kizhavanjiyur, in a region with a maximum width of around 60 metres, are seen richer black sands. Light brownish, black, and occasionally localised pink tinted sands are found along the shoreline for an average width of roughly 0.5 km to the south of Karaikal. In Karaikal, 82.61 Hectares are used for brackish water aquaculture and have soil salinities that are too high for cultivation (at least 25 ppt).

### 3.3.5. Geology:

The following are the minerals met with in the region :

**Brick clays** : Brick clays are extracted from the banks of the Arasalar River over a 0.6 square kilometre region, about 1.6 km almost to the south-west of Pudutturai. Bricks are also produced nearby Melakasakkudi, Nedungadu, Ambagarattur, and Vadamattam using clayey soils. The

padugai lands along the Arasalar will contribute for 0.83 million tonnes of the indicated deposits, which total 1.3 million tonnes.

**Kankar** : The village of Melasubbarayapuram is located about 0.4 km to the north, and a minor amount of pisolitic kankar is present there. It is retrieved from 1.2 km or so below the surface.

**Sea Shells** : Lime is created locally from seashells that are gathered along the shore. Near T.R.Pattinam and Akkaravattam, west of Karaikal town, lime kilns were spotted.

**Ilmenite and garnet sands** : Over a distance of roughly 10 km and in widths ranging from 20 to 100 m, the beach sands along the Karaikal coast include ilmenite and garnet sands in different quantities.

**Oil** : Given the advantageous structures and dense sediments that were initially identified by the Oil and Natural Gas Commission and later by the geophysical section of the Geological Survey of India, it would not be inappropriate to highlight the oil prospecting that is now taking place in the region.

### 3.3.6. River System and Water Resources

At the mouth of the Cauvery River, in the Union Territory, is the deltaic area known as Karaikal. The Kodamurutti, Arasalar, Virasolanar, and Vikramanar are the principal branches of the Kaveri River below Grand Anicut. The waters of Kodamurutti and Virasolanar also supply the region with the irrigation needs it requires, despite Arasalar and its branches spreading throughout Karaikal.



Fig.32. Rivers and its Tributaries Map of Karaikal

Source: Department of Agriculture, Karaikal

The Arasalar, which has a 24-kilometer overall run, enters the Karaikal area to the east of Akalanganni. It creates the physical separation between Karaikal and Neravy Commune on the North-East and Thirunallar on the North-West, respectively. Before draining into the sea, the



Nattar flows for 11.2 km in a south-east direction over the communes of Nedungadu and Kottucherry after diverging from the Arasalar at Sakkottai in Thanjavur District. After travelling about 9 km, the Vanjiar, which is supplied by the Arasalar, turns south-east and unites with the Arasalar near Karaikal town. It initially follows the northern border of Thirunallar Commune.

Before joining the Vanjiar north-east of Karaikal town, the Nular, which is also supplied by the Arasalar, travels 13.77 kilometres. The Kodamurutti has two branches: the Puravadaiyanar and the Tirumalarajanar. Before emptying into the sea, Puravadaiyanar travels through Thirumalairayanpattinam Commune for a distance of 5.3 kilometres, south-east of Melvanjiyur. Before it joins the sea, north of Pattanachcheri, the flow of Tirumalarajanar, which serves as the natural border between the communes of Niravi and Thirumalairayanpattinam, travels 5.13 km. The Nandalar begins from Virasolan and travels for approximately 15.15 km via the communes of Nedungadu and Kottucherry before finding its exit into the sea a little South of Tharangambadi.

*i. Underground water resources :*

Because Kaveri provides the majority of the water used for agriculture in the Karaikal area, its groundwater resources have not been fully used. Here, the water table is 3–4 metres below ground level and drops to 6-7 metres below ground level in the summer. Filter point wells with hand pumps that pierce sand materials down to approximately five metres deep give rather excellent quality water in a number of settlements. The quality of shallow groundwater is frequently rather bad. Deep tube wells have been used to get ground water in the past for drinking and agricultural needs.

The area is covered in alluvium, which is made mainly of clay and sand. The Pliocene-aged Karaikal layers, which are composed of sands, gravels, and clay, are found beneath the alluvium. Wells in and near Karaikal range in depth from 3.5 to 10.7 metres, with the summertime maximum water depth being in the neighbourhood of six metres.

In Karaikal, ground water is mostly generated through the use of filter-point wells or excavated wells that pierce blown sands and alluvium. A few shallow boreholes, no deeper than 50 metres, were reported to have been abandoned near Karaikal because to the poor water quality in the granular zones of the alluvium. The data from a deep borehole dug at Karaikal in 1884, however, showed that limited aquifers covered by a thick clay bed may be anticipated to exist below a depth of 90 metres in and around Karaikal, which is predicted to be a source of prospective water supply, if tapped by tube-wells.

Sands are found at depths of 8 to 12 metres to the south and west of Muppattankudi, as well as farther west near Mathur. Water is abundantly produced by wells that tap this sand. around 1.6 kilometres. A tube-well has been used to access limited aquifers in the western part of the area, to the south-east of Nedungadu. Only brackish water is said to have been found in many tube-well attempts that went down up to five metres. Brackish water is reportedly found in a tube well in Akalanganni that extends to a depth of 61.7 metres.

A network of shallow, linked open wells and an infiltration gallery in the bed of Arasalar provide water for Karaikal Town. Between Akalanganni and Karaikal, a few communities also obtain their water from this spring. When the Arasalar is not flowing from April to June, the town suffers a challenging water supply situation. Attempts to expand the number of wells in the Arasalar bed have been unsuccessful due to the restricted extent and thickness of sands in the bed of wells nearby the well site.

In a study published in 1965, the Geological Survey of India recommended exploring the Nandalar River's bed to identify spots where the sands would be thick enough to allow for the construction of wells or infiltration galleries to increase the water supply to Karaikal and neighbouring settlements. The report had also recommended, with proper technical oversight (Gazetteer), the drilling of a few exploratory bore-holes through deeper aquifers in order formations in order to potentially access ground water with good chemical quality using tube-wells.

#### *ii. Surface and Ground Water Quality*

The pH range of the surface water in the Karaikal area is 8.44 to 8.77. The major source of the elevated TDS in coastal locations is salt water intrusion. In the Karaikal district, the majority of the areas have high TDS (in some locations reaching from 800 to 2000 mg/litre), while the alkalinity is between 210 and 270 mg/litre. The quality of the ground water is significantly reduced by brackish water farming in the Karaikal area. In Karaikal, the quality of the groundwater supply is fairly subpar.

### **3.4.Economic Profile of Karaikal**

Agriculture is the district's main source of revenue. The irrigation systems in this district, which is located in the Kaveri delta, enable the production of rice across substantial regions. Here, sugarcane is also grown, but only as a supplementary crop. Millets are only extremely seldom or almost never grown. The Karaikal area is located in the extreme Kaveri Delta. River water from a canal system is the primary source of irrigation. Deep bore wells and filtration points

are other sources. Pulses, cotton, groundnuts, bananas, and vegetables are also promoted in addition to rice crops.

People who work in factories and offices make up the majority of the population. Rolling mills for iron and steel, spinning mills, tile, polythene, rubber, and chemical industries are all present in Karaikal. Business is another prevalent source of income for the populace. Agriculture and fishing are this region's main economic drivers.

A total of 26 kilometres (16 miles) of shoreline make up the seaside town of Karaikal. More than 25,000 fishermen (6,000 families) reside in these coastal settlements, which have 12 large fishing hamlets. Fishing, exporting, and fishing-related businesses are their major sources of income. When compared to the nearby state of Tamil Nadu, the cost is roughly half as much and the tax is lower in the spirits industry, which is the second major source of income. Due to the presence of French NRIs, Karaikal is one of the places in South India with a high cost of living. In France, there are thousands of Karaikal-originating families.

### 3.4.1.Land Use of Karaikal:

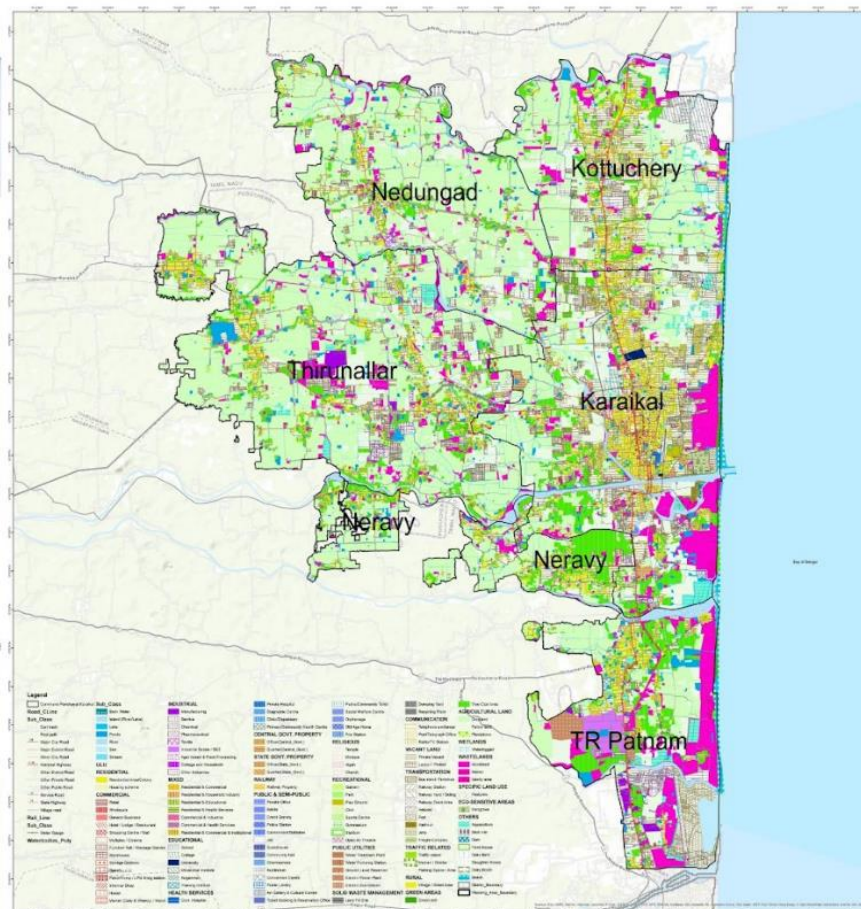


Fig.33.Land Use Map of Karaikal

Source: Karaikal Planning Authority

In Karaikal, the proportions of cultivable land to total land and irrigated land to total cultivable land are 84.92 and 82.81, respectively. This demonstrates that Karaikal is mostly an agricultural region. The following land use categories were found in this area between 2007 and 2008. Each classification's area was computed, along with their percentages in relation to the region's overall size. Of the total population of Karaikal district 51 percent are rural population occupying 118.70 km square and rest 49 percent are residing in urban areas occupying 88.30 km square.

Land use	Area in hectares
Total area	16012
Forest lands	0
Non available for cultivation	4905
Other Uncultivated Land (a+b)	2835
a) Permanent pastures and other grazing lands	0
b) Misc. tree crops and groves not in the net area sown	2835
Fallow Lands	1884
Net Area Sown	6388
Total cropped area	10541
Area sown more than once	4153

Fig.34.Land use cover of Karaikal

Source: Flora Karaikal

### 3.5.Demographics of Karaikal

The Karaikal district is divided into 18 wards. Karaikal district has one Statutory Town namely Karaikal (M), a Census Town named Thirumalairayanpattinam (CT) and 28 Revenue Villages. Karaikal consists of 2 Taluks namely, Karaikal and Thirunallar taluks.

#### 3.5.1.Population:

With 1,44,200 residents, Karaikal Taluk is the most populous taluk in the district. The district's male-female sex ratio increased greatly between the 2001 and 2011 censuses, rising from 1022 females per 1000 men to 1047. (0-6) From 979 in the 2001 census to 969 girls per 1000 boys in the 2011 census, the child sex ratio has dropped by 10 points. The Density of Population (Persons per sq. Km.) is 1275.The Decadal Population Growth is 17.23%.

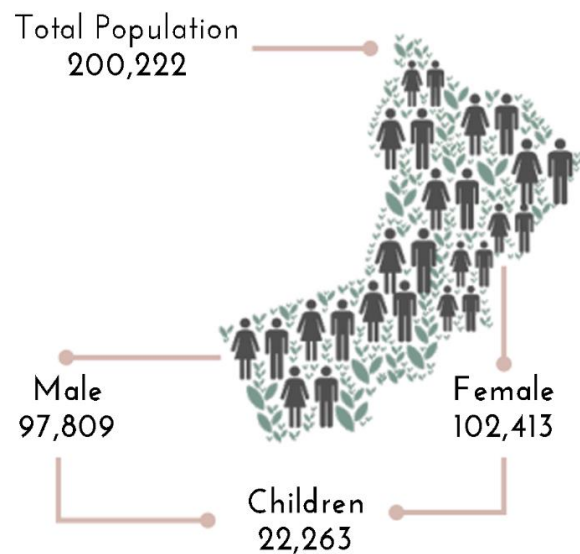


Fig.35.Population of Karaikal

Source: Author

### 3.5.2.Literacy Rate:

The district's effective literacy rate increased from 81.9 in 2001 to 87.1 in 2011, a notable improvement. The district's female literacy rate is 82.0 percent, compared to a male literacy rate of 92.4 percent.

### 3.5.3.Social Structure:

The major languages spoken were Tamil, French, English and Telugu. The majority of the population in Karaikal is occupied by the Hindu at 75.41%, while the Christians are 10.70%, Muslims 6.46% and others 0.12%.

#### Religions:

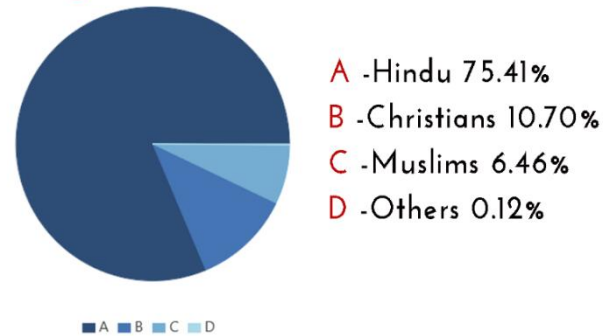


Fig.36.Percentage of people of different religion.

Source: Author

### 3.5.4.Workers profile:

58,342 (85.4%) of the 68,301 total employees are major employees, while 9,959 (14.6%) are marginal employees. The district's rate of employment is 34.1 percent. The rate of male labour force participation is 54.3, while the rate of female labour force participation is 14.8.

The marginal and main workers consist of Cultivators at 3.47%, agricultural laborers at 19.15%, Household workers at 1.94% and other workers at 75.44%.

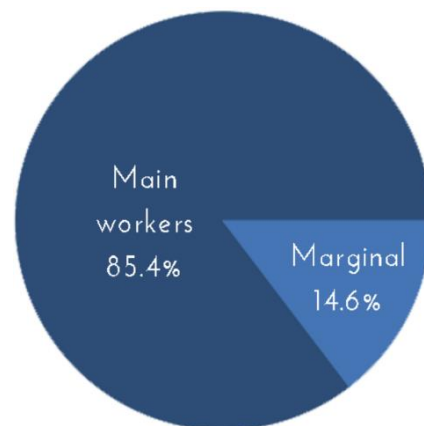


Fig.37.Percentage of marginal and main workers.

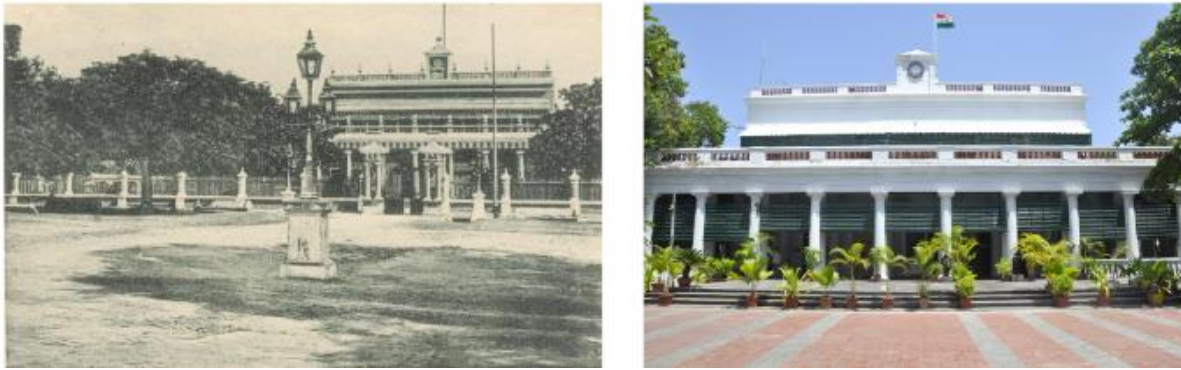
Source: Author

## 3.6. Heritages of Karaikal and their Architecture

Karaikal is mostly famous for its colonial and religious heritages which has been predominantly enhancing the character of the Town. The architecture of the town is of a hybrid type that collaborates both Tamil vernacular architecture with French architecture in case of the colonial heritages. While the religious heritage has its own peculiar style according to the region. The residences, administrative buildings, hospitals and educational institutes are great examples of the town's hybrid style of architecture.



### 3.6.1. District Collector Office:



*Fig.38 a. Karaikal Collector Office at 1986 & Karaikal Collector Office in 2022*

*Source: Karaikal Online*

Karaikal's District Collector office building was constructed in 1770 when initially the French colonial invasion, and at that time the building was run as a government house. The old compound wall along with subsidiary buildings around the main building went down throughout the years. Only the main building still remains and is currently in use. Now, it is used as a District Collector office. This Building is located at the central area of the grid planned zone (Duplex street, Karaikal). The office is still of French colonial style with tall columns, pot balustrades, high ceiling, wooden rafters, madras terrace roofing and red oxide flooring.

### 3.6.2. Residences of historic Town:



*Fig.39. Residences of Karaikal*

*Source: Karaikal Online*

Old residents and visitors agree that Karaikal is fast losing its special character or ambience. This is not just because of increasing population and pollution; one of the major reasons is that old buildings that formed the special quality are disappearing at an alarming rate. Thus the 'sense of place' is getting blurred and there is a loss of the town's cultural identity. These residences are some of the signature marks of Karaikal in the coexistence of two distinct styles - that of the French and that of the native Tamil. It is important to preserve these two styles simultaneously in order to conserve the cross-cultural image of the town.

### 3.6.3. Our Lady of Angels Church:



*Fig.40. Church during the French reign*

*Source: KPA*

The old edifice, which the British are thought to have destroyed, was said to have been erected in 1739. The Church was built by the French in 1739. The Church was constructed in 1828 after the Treaty of Paris entirely placed Karaikal in the hands of the French by 1816. The tower was completed in 1891, even though the original building was constructed in 1822. The church's main chapel, a 133-foot (41-meter) tower that is accessed by a building with a dome-shaped top, and a worship space are all designed in a Neo-Gothic style. Three clocks are housed in a cone-shaped structure at the tower's summit, which has an octagonal base. There are five enormous bells, the sound of which may be heard up to five kilometres away (3.1 miles). The Church's marble altars and stained glass windows are thought to have been constructed in 1739. The temple is oriented eastward, towards the Bay of Bengal. The altar supposedly once held a statue of Our Lady of Angels, but in more recent times, it now has a Holy Cross.

### 3.6.4. Masthan Saheb Dargah:



*Fig.41.a&b Masthan Sahib Dargah Then and Now*

*Source: Karaikal Online*

The Dharga was built in honour of the Muslim Saint Seyed Dawood born at Bukhara, capital of Turkistan in the year 1709 Hijri 1124. He arrived in India in search of his spiritual guru,

Halasrsh Syed Ahamed Kalhel Dewan Oliulla of Tiruchirappalli in his 40th year. He spent his last years in Karaikal which became his last abode. He died on 24.2.1829 at the age of 120. His last rites were performed in the garden adjacent to the Kader Sultan Mahal. He was buried in the maidan or the vacant land opposite to the big mosque.

A Dharga with minarets was built in the year 1891 with Sangili Maistry, as head mason. Opposite to the Dharga, on the western side, stands the big Mosque where Muslim offer prayers. Its frontage facing east was erected during the 1930's. This is the oldest mosque of Karaikal built before the acquisition of Karaikal town by the French company. The masthan saheb dargah of Karaikal has been the one of the most important mosques of Karaikal. The number of visitors to this mosque every year from all over the world has increased due to the regional setting of Nagore Dargah in nearby vicinity. The mosque has two types of long minarets and arched entries with stained glass at lintel level. Entry of women is still banned in this mosque and they are allowed to visit the outer hall during the time of Ramzan for prayers.

### **3.6.5.Karaikal Ammaiyar Temple:**

The Karaikal Ammaiyar temple is one of the oldest monuments of Karaikal. It has been here since the chola period and is also connected to the big temple through an underground pathway. The outer shrines were constructed later in the 20th century. The temple was constructed by Malaiperumal Pillai in 1929. The main goddess is Punithavathi, also known as Karaikal Ammaiyar. There is also a sanctum for Vinayaka inside this temple.

Karaikal Ammaiyar is one of the 63 Nayanmars. Karaikal Ammaiyar (also known as Punithavathi) was born to Dhanathathanar, from a merchant community known as Nattukottai Nagarathar (also



*Fig.42.Ammaiyar Temple at 20th century*

*Source: Pondicherry Tourism*

Known as Nattukottai Chettiar).The temple is located at the historic core of the town and has a sacred tank nearby. The temple is famous for its Mangani Festival which is a centuries old tradition that is being followed till date.



### 3.7.Fairs, Festivals and Traditions

#### 3.7.1.Mangani Festival



*Fig.43 a.Mangani Festival celebration ,b.the deity of bhikshadanar & c.Pooja Offerings for the deity*

*Source: Karaikal Online*

The Karaikal Ammaiyyar temple, which is located inside the Karaikal municipality, hosts the popular annual "Mangani" festival. Karaikal Darga also hosts the Kandoori Festival, while Our Lady of Lourdes Church hosts the Feast of Our Lady of Lourdes. On the full moon day in the Tamil month of Aani, the mango festival, or Mangani Tirunal, is celebrated.

According to popular belief, Bhikshatanar received the food from Karaikal Ammaiyyar while the latter was travelling the world begging for charity. She brought him curd rice and mangoes, therefore on the festival day, such foods are distributed in an enormous hall next to the shrine. This festival has been occurring for more than 3 centuries. This festival is an annual event of the town where revenue flows extensively.

#### *i. Procession of Chariot:*

The grand chariot of the lord travels around the premises of the temple four streets and finally ends at the entrance of Kailasanathar Temple. This procession happens every year during the Mangani Festival and once the chariot moves, the act of catching mangoes occurs throughout the procession route.



*Fig.44.Chariot of Mangani Festival*

*Source: Karaikal Online*

*ii. Traditions:*



*Fig.45. Amudhu Padayal For bhikshadanar*

*Source: Karaikal Online*

During the festival, a whole day Lord Bhikshadanar will be decorated with white jasmine and white clothes as a sign of purity. A heavy feast of Amuthu Padayal happens during night with all fruits dominantly mangoes . During the procession different types of dolls entertain in front of the chariot as a sign of entertainment for the god.

**3.7.2.Mulai Paari Festival**



*Fig.46.Mulai Paari Festival at Local temple*

*Source: Karaikal Online*

This festival marks the start of the season of harvest. Every woman around the locality grows pulses on a pot for a month and by the end of the month , they walk around the procession path behind the goddess to worship rain and fertility to the land. Since Karaikal has huge agricultural practices, these practices have been followed for more than a century. These pulses are finally donated to the lord to seek blessing for a fertile and rich year for harvesting crops.

### 3.7.3.Sani Peyarchi Festival



*Fig.47.Sani Peyarchi Festival at Thirunallar Temple*

*Source: Karaikal Online*

In the nation as a whole, Karaikal is renowned for having the one and only temple in existence that is dedicated to Lord Saneeswara (Lord Saturn), located at Thirunallar. People who suffer by life's hardships and hope for a successful future seek time to pay respects to the Lord Saturn. This Sani Peyarchi event also known as the "Kumbh Mela of Pondicherry", which draws tens of thousands of worshippers.

### 3.7.4.Masi Magam

On the day of the full moon in the Tamil month of Masi (between February and march), this celebration is held every year. Deities are carried to the seaside in ceremonial processions from as many temples in and around Karaikal for a symbolic immersion rite. Many people visit the shoreline to take a swim in the water because it is believed to wash one's sins away. The most significant god present at the festival is Sowriraja Perumal of the Tamil Nadu hamlet of Thirukannapuram. According to legend, Sowriraja Perumal marries a member of the fishing community; as a result, when the deity arrives in Tirumalairayan-pattinam village for the festival, the fishermen take charge of the deity. The fishermen will be replaced after the festival is completed, or after the holy bath. This holiday is celebrated in spectacular popularity, however it cannot be compared to Pondicherry's magnitude of festivity.

### 3.7.5.Fire-Walking Festivals

Numerous men, women, and children walk on fire as part of the yearly celebrations that local temples hold three or four times a year to complete their vows.





*Fig.48.Theemithi Festival at Local Amman Temple*

*Source: Karaikal Online*

### **3.7.6.Kandoori Festival**

At Mastan Syed Dawood Dargah in Karaikal, a well-known Muslim occasion called Kandoori takes place. It is held in commemoration of Syed Dawood, a Sufi saint who spent his final years in Karaikal and travelled to India in pursuit of his spiritual mentor, Halareth Syed Ahamed Kalkhel Diwan Oliulla. Every year, the Kandoori Festival is celebrated with processions, music, and dancing.



*Fig.49.Kandoori festival at Karaikal*

*Source: Karaikal Online*

### **3.7.7.Thetheravu Matha Festival**



*Fig.50.a&bThetheravu Matha procession*

*Source: Karaikal Online*

Thetheravu Matha Kovil, which indicates to "temple of the mother who pacifies," is the name given to the church locally. The church is a functioning Roman Catholic congregation that holds daily services and hourly prayers. Originally, the church's pastors were French, but Tamil people have since taken their places. The Thetheravu Matha festival is observed in the Church every year on August 15; a flag is hoisted on August 6.

### **3.8. Political Structure of Town**

The major contestations of the town lies at the Power politics of Karaikal it selves. Issues on Land ownership, Infrastructure developments, water rights and disputes on public property occur due to the both ruling and opposition party. The government administrative hierarchy is disturbed vastly due to the political issues. Land acquisition, religious riots, and community protest are induced by political parties leading to damage of public property. The site has been vastly affected due to the power exchange during elections leading to mass unemployment, increased poverty and illegal activities leading to death.

All these not only affect the people but also the culture and place identity of the town. Societal hierarchy and discrimination has led to the ban of entry of few communities to the temples. The sanction of development projects in historic and seismic zones are also one of the factors that affects the liveability of the town. Currently not only the cultural identity of the town is degraded but also the quality of life is going down a spiral to these political issues creating a wedge between government and the people of Karaikal.

## **Chapter 4: THEORETICAL FRAMEWORK**

### **4.1.Introduction to Cultural Identity**

The perception of belonging to a culture is referred to as cultural identity. This sense of belonging might be supported by a common set of associations, values, or fundamental principles.

Essentially, it entails possessing the culture together with all of its racial, linguistic, religious, and gender distinctions. And when someone claims a culture as their own, they accept all the customs that have been passed down through the ages. The cultural identity shows one's origins and aids in connecting with those who have the same customs or worldviews.

#### **4.1.1.Cultural Identity of a Town**

The fundamental components that enable social constructs and interactions to function and have an impact on one another are identity and culture.

Over time, it takes a certain amount of involvement and personal perspective to develop an identity. As a foundational component of civilization, culture also needs a historical context, symbolic exchange, and material development. Culture is passed down from generation to generation. The socio-cultural framework continues to evolve in this manner.

Each person makes an intentional, unintentional, and positive contribution to their culture, which strengthens the sense of identification and belonging. Culture and personal identity are merged, developed, and enhanced when individual contribution and societal reaction are in harmony.

With respect to time, the following factors help in shaping the cultural identity of the town.

- i. Natural Elements
- ii. Cultural Practice of Inhabitants
- ii. Architectural Characters
- iv. Traditions and Customs
- v. Archaeological remains/ Monuments
- vi. Geographical Character

### **4.2.Multiculturalism And its Theories**

Multiculturalism values and respects the wide range of cultures existing in society and promotes the contributions of all racial, ethnic, and religious groups. It is a method that values all cultures equally and does it with dignity and compassion. No group has the right to exercise dominance over another's cultural identity or distinctiveness. Multiculturalism is understood

through Ethnic, linguistic and nationalistic factors. With respect to local context, the hierarchy in society is considered to understand heterogeneity and the level of interculturalism in society. There are several geographical interpretations of multiculturalism. It is initially seen as a technique of characterising the very state of a multitude that is visible via different spatial forms. Multiculturalism refers specifically to the presence of difference and unequal power relations among populations in terms of racial, ethnic, religious, geographical disparities, and other cultural markers that diverge from dominant, frequently racist, "norms."

#### 4.2.1.Theories of Multiculturalism

##### *i. Salad Bowl Theory:*

It is a metaphor for how a multicultural society may include other cultures while retaining their own identities. In the salad bowl paradigm, several cultures are combined—like salad ingredients—but they do not amalgamate into a single, homogenous culture; rather, each culture retains its own characteristics. Since the latter hypothesis implies that ethnic groups would not be able to retain their legacy, this theory indicates a society with many distinct cultures. This theory was proposed by Carl Degler in 1959. According to the salad bowl idea, individuals coexist in diverse societies while retaining at least some of the distinctive aspects of their native cultures. Different cultures are combined, much like the components in a salad, but instead of blending into one homogenous culture, they adhere to their own flavour.



*Fig.51a& b. Salad Bowl theory and Melting Pot Theory*

*Source: American rights*

##### *ii. Melting Pot Theory:*

The notion is that a diverse society may become more homogenous as its many components "melt together" to form a cohesive whole with a shared culture. This theory was proposed by Israel Zangerwill in 1908. The melting pot concept has drawn criticism for impairing variety, eliminating cultural customs, and necessitating state regulation.

Therefore, adherents of multiculturalism have dismissed the merits of assimilation and the melting pot concept. According to the multiculturalism "melting pot" hypothesis, separate ethnic groups will ultimately give up their own customs and fully integrate into the dominant civilization.

### 4.3. Indian culture as a Salad Bowl Theory

In India, there are now many different ethnic groups. It is a combination of several social and cultural elements as well as an amalgam of numerous other civilizations. The people who lived in this region represented a diverse mixture of cultures, religions, and tongues. The country's integrity and unity have been preserved despite the large economic and social differences. Due to this amalgamation, India has become a unique cultural patchwork. Actually, India is a vast array of distinctive variations that are unsurpassed on other continents. The salad bowl theory contends that it's not necessary for individuals to renounce their cultural heritage in order to be accepted as members of the dominant culture. Because of its variety, India is exceptional in a way that no other country can match; it is frequently referred to as a melting pot where people from different cultures and nationalities coexist. However, India is more like a salad bowl, incorporating all the many cultures and origins but still being distinctive.

### 4.4. The Theoretical Approach

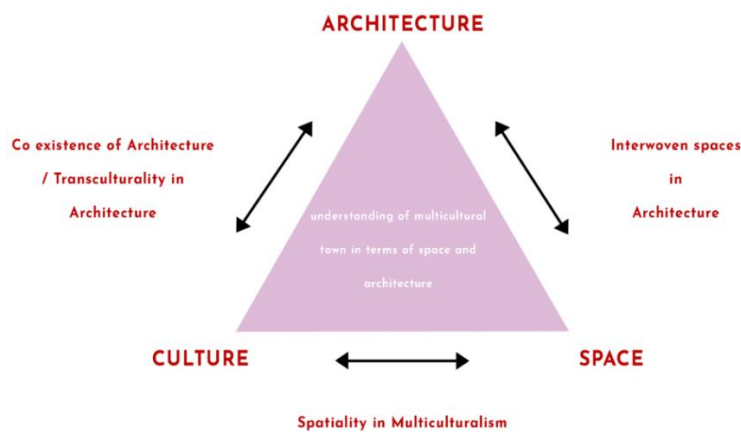


Fig.51. Culture centric Approach

Source: Author

#### 4.4.1. Spatial understanding

When it comes to a spatial understanding of a town with respect to its culture, many factors have to be analyzed in order to understand its origin and setting. The spatiality in multiculturalism can be studied through geographical setting, origin of the settlement, spatial demarcation, social fabric, street pattern, spatial density, spatial dispersion, spatial scale,



circulation pattern of the particular community, Défense mechanism of the space, setting of residential, commercial, and social zones. These spaces of different cultures are interwoven in nature which constitutes a unique type of architecture.

#### 4.4.2 Architectural understanding

The architecture of a particular culture can be understood by examining the basic principles, planning of the building, materials used, ornamentation and detailing, building typology and traditional construction technique. With huge cultural diversity, to understand the architecture of the space, the historic fabric has to be deciphered according to each layer. This helps in understanding the co- existence of architecture in the town. The transculturality can be seen in architecture with patterns being overlaid or interwoven with each other in the elements such as facade, ornamentation, furnishings, etc.

#### 4.4.3.Socio cultural understanding

The socio-cultural understanding of the town can be done by knowing about the cultural parameters such as functional culture, industrial culture, service culture. This will be helpful to provide an insight about the social hierarchy, traditional knowledge and practices, and skills. The beliefs, values, norms and language in a culture is what defines it. The concept of gender, views on space and time and approach towards individualism and collectivism tells about the socio- cultural character of a town’s identity.

#### 4.4.4. The Culture Centric Approach

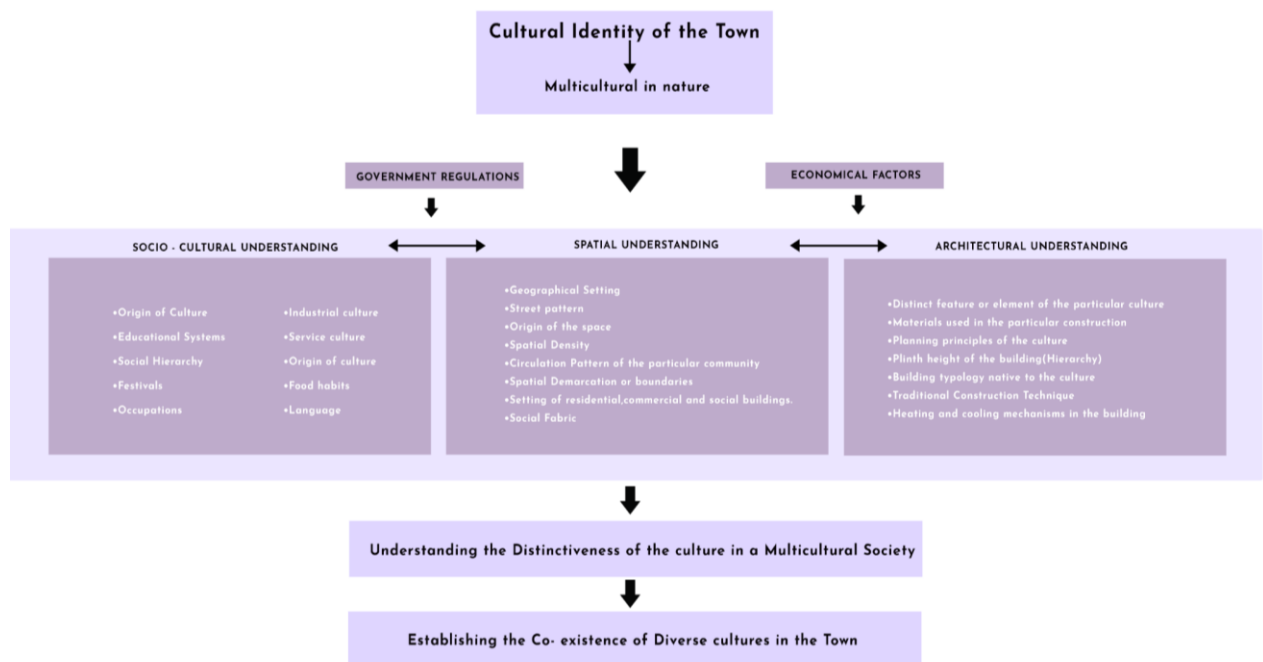


Fig.52. Parameters to understand the Cultural Identity of a town

Source: Author

Based on the five factors, multicultural communities' historical and cultural values exist. They are social conditions, culture, local wisdom, integration, and geographical conditions. When the harmony of a multicultural community is formed in an area, it will help in restoring its cultural significance.

The spatial, architectural and socio-cultural understanding of the town with respect to alterations due to economic factors and government regulation is what shaped the identity of the town. Hence in that case, the cultural identity is dependent on all culture, space and architecture.

So, using the culture centric approach in understanding a historic town will help in deciphering the spatial and architectural characteristics of every community. This culture centric approach helps us in understanding the distinctiveness of the culture of the town. These historic layers are sedimented for centuries adding a complex network of cultural fabric. Hence, the approach helps in establishing the coexistence of different communities and cultural diversity in town making it a town of high historical and cultural significance.

#### **4.5. Legal Framework**

The legal framework helps in understanding the legal instruments that helps in protecting the heritage of Karaikal. Different charters are applicable as the town has a historic value and is also culturally significant.

##### **4.5.1. Charters applicable for the town**

On further research, it can be understood that the town portrays historic and cultural significance due to its unique setting and cultural diversity. Hence the Burra Charter and Washington Charter are applicable for this town to preserve its historic and cultural value.

##### **a) The Burra Charter:**

The Burra Charter provides a framework for managing cultural assets that allows for the understanding and explicit consideration of many, often opposing, cultural heritage and other values. The effectiveness of the charter is due to its adaptability in taking into account shifting ideas about heritage, shifting economic and political conditions, and various sorts of settings.

##### **Article 1 of Burra Charter defines Cultural significance as follows:**

*“Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.”*

The meaning of the phrase "cultural significance" might vary with time and with usage, but it is identical with "cultural heritage significance" and "cultural heritage value."

**i. Need for Conservation:**

According to this charter, a place of cultural significance has to be conserved because,

- Culturally significant locations enhance people's lives
- Offers a strong, uplifting sense of connection to the community and the environment
- Act as archival evidence
- Culturally significant locations showcase the range of cultures of the local communities.

**ii. The Burra Charter Process**

The Burra Charter Process, or the order of inquiries, judgements, and acts, is described below,

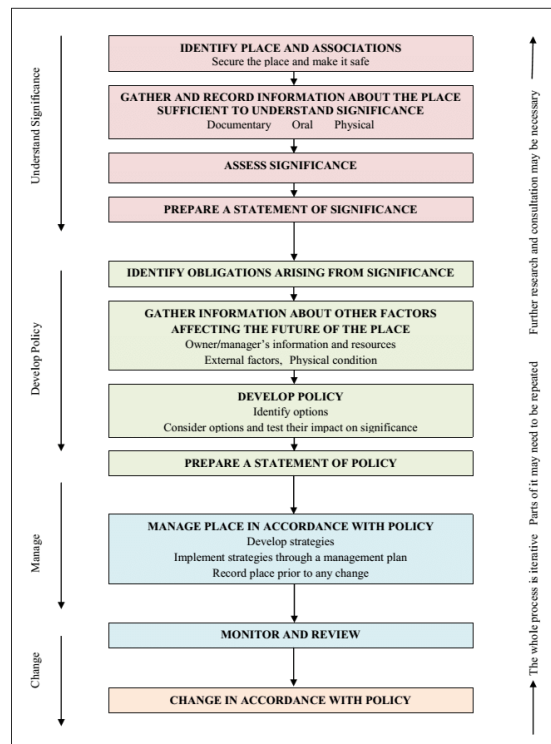


Fig.53. Burra Charter Process

Source: Burra Charter 1999

1. Collecting and analyzing information

2. Understanding cultural significance

3. Development of policy

4. Management of place

### **iii. Why this charter?**

This charter is applicable to the town Karaikal because the town has a setting which is of cultural significance in terms of history, aesthetic, spiritual and social value. The fabric of the town can be seen through the architecture, rituals, festivals which plays a major part of the town. These heritage sites have been part of the people over the years. The diversified culture can be seen distinctly in the multicultural society with its traditional practices.

### **b) The Historic Towns / Washington Charter:**

The US/ICOMOS Committee on Historic Towns modified the 1987 ICOMOS Charter in 1992 to take into account the unique characteristics of municipal governance in the United States. This charter established preservation principles that are recognised as relevant across the civilised world. The concepts and regulations for the preservation and protection of historic communities are outlined in this Charter. The Venice Charter, which places more focus on the individual monument, tries to complement the "International Charter for the Conservation and Restoration of Monuments and Sites." It discusses aspects including how to include preservation goals into planning regulations, what characteristics of historic towns should be preserved, how to involve locals in the preservation process, and the social and economic benefits of preserving historic towns. Historic urban areas are addressed in the Charter. The historic cities that are under danger from industrialisation and urban growth must be protected by the charter.

**i. Objective of the Charter:** The town's or urban area's historic character should be preserved, including urban patterns, the relationship between buildings and open spaces, the interior and exterior building characteristics of scale, size, construction, colour, and decoration, the relationship between the urban area and its surrounding environment, and the functions that the town has acquired.

### **ii. Why this Charter?**

This charter is applicable to the town of Karaikal because the historic town is dated back to the 7th century and the urban patterns have sustained throughout the years of evolution and the spatial setting, and architecture showcases historic value in the historic urban core.

#### **4.5.2. Heritage Protection and Conservation Bye laws for the union territory of Pondicherry**

##### ***i. Regulation for Conservation of Heritage Sites Including Heritage Buildings, Heritage Precincts and Natural Feature Areas (ANNEXURE- XXIII)***

Buildings, artefacts, structures, areas, and precincts of historic, aesthetic, architectural, cultural, or environmental significance (heritage buildings and heritage precincts), naturally occurring areas of environmental significance, or scenically appealing locations shall all be included in the conservation of heritage sites.

##### ***Applicability:***

“ These regulations shall apply to heritage sites which shall include those buildings, artifacts, structures, streets, areas and precincts of historic, architectural, aesthetic, cultural or environmental value (hereinafter referred to as Listed Heritage Buildings/Listed Heritage Precincts) and those natural feature areas of environmental significance or of scenic beauty including, but, not restricted to, sacred groves, hills, hillocks, water bodies (and the areas adjoining the same), open areas, wooded areas, points, walks, rides, bridle paths (hereinafter referred to as ‘listed natural feature areas’) which shall be listed in notification(s) to be issued by the State Government/ identified in the Master Plan.

The provisions in this notification are beyond the regulations applicable on the Prohibited and Regulated areas as defined by Ancient Monuments and Archaeological Sites and Remains (AMASR) Act 2010, where site specific Heritage Bye-Laws prepared and notified by the Competent Authority (National Monuments Authority) under the AMASR Act shall be applicable. NOC shall have to be obtained by submission of required documents as may be necessary, including “Heritage Impact Assessment” report, if so necessitated by the National Monuments Authority (NMA).”

#### **4.5.3. Organizations and Committee for Heritage Protection and Conservation**

##### ***i. State Level Heritage Conservation Advisory Committee:***

“A State Level Heritage Conservation Advisory Committee (SLHCAC) was constituted for protection of Heritage Buildings in the U.T. of Puducherry in 2008 and the Committee was reconstituted in 2014. On expiry of the earlier committee now the SLHCAC has been reconstituted by 2019.

**The functions of the Committee are:**

- i. To tender advice when called upon to do so regarding the issue of development permission and about the conditions of permission to be imposed while granting permission for redevelopment / restoration / addition / alteration / repairs etc. with regard to heritage buildings;
- ii. To prepare a list of heritage sites, which include buildings, artifacts, structures, streets, areas of historic, aesthetic, architectural, cultural or environmental significance and a supplementary list of natural feature areas of environmental significance, scenic beauty including but not restricted to sacred groves, hills, hillocks, water bodies (and the areas adjoining the same), open areas, wooded areas, points, walks, rides, bridle paths etc. to which the Puducherry Town and Country Planning Act, 1969 and the rules framed there under and the Building Bye-laws and Zoning Regulations would apply;
- iii. To tender advice in the matter of applications / enforcement of the Building Bye-Laws and Zoning Regulations;
- iv. To tender advice in the matter relating to designation of 'Conservation area / zone' as provided in clause 57 of Puducherry Building Bye-Laws and Zoning Regulations, 2012.
- v. To advise in the matter of framing special guidelines, if necessary for natural feature areas;
- vi. To generally advise whether to allow commercial / office / hotel use in areas where heritage buildings are situated;
- vii. To tender advice in the matter of erection of outside advertisements / billboards / street furniture;
- viii. To advise in the matter of framing guidelines to be adopted by Private parties or Public / Government agencies who sponsor beautification schemes in Heritage buildings areas;
- ix. To prepare special designs and guidelines / publications in the matter of control of height and essential façade, characteristics such as maintenance of balconies and other heritage items of the buildings and to suggest suitable designs adopting appropriate materials for replacement keeping the old form intact to the extent possible;
- x. To prepare guidelines relating to design elements and conservation principles to be adhered to; and

xi. Tender advice may be required from time to time during the course of scrutiny of development plans and in the overall interest of heritage/ conservation.”

***ii. INTACH, Pondicherry***

In Pondicherry, the INTACH Chapter was established in 1985. The Town and Country Planning Department of the Government of Puducherry provided an initial grant-in-aid for the establishment of the INTACH Conservation Cell in 1998. Since then, it has collaborated with the Pondicherry government and the general public to preserve Puducherry's history and urban landscape.



*Fig.54. Intach Pondicherry*

*Source: Intach*

In the beginning, INTACH Pondicherry worked on a variety of projects in conjunction with Institute Francais de Pondicherry (IFP) and Ecole Francais d 'Extreme Orient (EFEO). The initiative to preserve Pondicherry's architectural history was started by the late Francoise l'Hernault (1937-1999) of EFEO. A group of committed architects, engineers, and other interested parties are presently carrying out this job.

The Public Works Department, the Town and Country Planning Department, the Pondicherry Planning Authority, the Department of Art and Culture, the Department of Education, the Pondicherry Tourism and Transport Development Corporation, as well as specific owners, constructors, and architects of heritage buildings, collaborate with INTACH on projects.

## Chapter 5: SITE STUDY AND DOCUMENTATION

### 5.1. Introduction to Karaikal

Karaikal is a developed town with diverse cultural impact. It has retained its town planning pattern of the past to maximum extent but the newly developed areas don't follow any similar patterns rather they are grown functionally with period of time. In recent times, Karaikal is slowly losing its historic town-planning pattern. Rather than community-based settlement, occupation based settlements started emerging around public buildings that are predominantly in mixed community manner. This mixed settlement was highly developed on almost all the new streets. Karaikal is an old city with a large number of aged buildings, many out of which are undergoing renovation. This promoted the new contemporary architectural style neglecting the traditional style, which had climate responsive elements and heritage values .

### 5.2. Settlement Pattern

The settlement pattern has changed from the historic core and it has spread towards the north from the south. Settlement pattern of Karaikal is influenced by factors such as major routes, topography, religious and cultural impacts, rulers and geographical features resulting in different patterns. According to the site study in comparison with the literature found, it can be understood that various patterns have evolved during the years and can be seen in today's settlement.

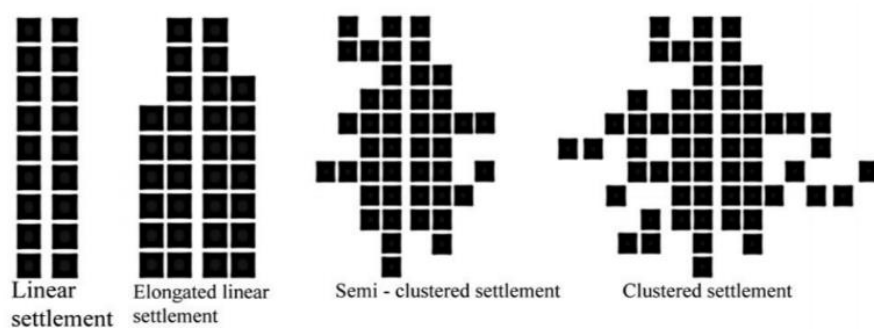


Fig.55. Settlement pattern

Source: Author

*Linear settlement:* From Pre-Sangam age till 9th century, linear wise settlement was commonly found along the artery of Karaikal town, Poraiyar road. It had no obvious centre. The density along the northern side was less compared to the southern side. Major arterial roads of the linear pattern can be seen today.



*Elongated linear settlement:* After the 5th century, the linear pattern started elongating in parallel and upward direction. During this time, the development was in all the 4 directions. Southern side growth was minimal. The density in northern side proves it.

*Semi - clustered settlement:* From the 13th century, the linear pattern started elongating on all the directions in dispersed way due to a merging of new streets. The moderately dense settlement on all directions ahead of the historic core showcases the semi-clustered settlement.

*Clustered settlement:* From the 16th century the settlement pattern was mostly dispersed in the South – East and South – West direction. The Muslims occupied the South – West area during the Muslim rule by Khilji dynasty. The Islamic region once clustered, can be seen as a combination of clusters and grids.

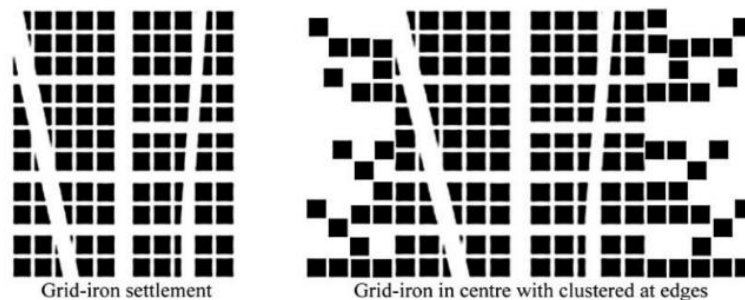


Fig.56. Settlement pattern

Source: Author

*Grid-iron settlement:* During the 18th century the French occupied Karaikal, and fortified the town area. The French formulated the grid – iron pattern in Karaikal during their rule which can be observed in the major streets of historic core.

*Grid-iron pattern with clustered:* Till 19th century the grid iron pattern was retained and the growth was towards the northern side in the same pattern. In the 20th century the growth spread along both the east and west side of Karaikal in a clustered way. Hence the overall combination of streets is an existing example of this settlement.

### 5.2.1. Religious Influence on Settlement

Karaikal town holds large numbers of Hindus, Christians and Muslims with major impact in town planning. Many streets were designed around the religious building corresponding to their respective religions.

*5th Century:* The Somanathar temple marks the northern boundary of Karaikal. The settlement towards the northern side was less because of the bushy land. Karaikal had busy activities around the Vinayagar temple like trading. Large numbers of houses were seen around the area. The Ayyanar temple marked the southern boundary of Karaikal where the settlement growth was restricted.

*9th Century:* During the 9th century the linear growth was towards the Somanathar temple. The Padai Badra Kaliyamman temple marked the North–East boundary. Economically wealthy people occupied the middle part of Karaikal around Vinayagar temple who were mostly traders and farmers. Ayyanar temple marked the southern boundary in this century also.

*13th Century:* Till the 13th century the Hindu community occupied Karaikal. The Arab traders entered India in the west coast as Mohammedians then moved to other parts of India. The group of Mohhamedians who entered Karaikal were called *Maraikkayar*. They settled in the South–West side and they adopted the local language . The Badrakaliyamman temple and Ayyanar temple marked the boundary.

*16th Century:* Karaikal has a Muslim population on the South–West side. A prayer hall was constructed in the area. The Hindu population got denser around the temples. The Badrakaliyamman temple and Ayyanar temple marked the boundary.

*18th Century:* Due to the invasion of French troops in Karaikal the Christian settlement started around the church and the French administrative buildings. During this century mixed community settlement started. The French destroyed the boundary temples and Annamalai Eashwarar temple.

*19th Century:* The zones that were predominantly occupied by Hindus, Muslims and Christians started settling together. Most of the newly developed areas had mixed community settlements.

*20th Century:* This century involved the development of many public spaces, which encouraged the mixed community settlement. Newly developed religious buildings had their respective settlement around it.

### 5.3. Community Planning

The Hindus and Muslims community planning styles are quite similar as they were planned with religious building as main focus, whereas Christians communities settled in grid iron pattern having a church in the central square.



Fig.57 a& b. Agraharam Planning & French Gridiron Planning

Source: Google Maps

*Agraharam planning:* Agraharam is the name of a street or place where Hindu Brahmin community lives. The Agraharam is mostly seen around and along the temple. The linear pattern of planning is seen in Karaikal. In this settlement pattern, the houses culminate at temples, this type of planning is seen in Perumal kovil street and Kailasanathar street. The row houses are connected by a shared wall and have an extended front veranda that is supported by wooden pillars.

*French- grid-iron planning:* In this category, planning the streets run at right angles to each other forming a grid. The French planned an organized arrangement of buildings and spaces. They had planned a church in the central grid around residence and commercial .

### 5.4. Streets and their Pattern

The settlement, which is quasi-rectangular in shape, has a tiny protrusion on its south-western edge. Arasalar River, a tributary of the Cauvery River, forms its southern border. The Northern border is where the Karaikal *vaaikal*<sup>1</sup> forms. On the eastern and western edges, sprouting colonies have now taken over the paddy fields. The Karaikal streets proceed in two directions: north and south and east and west. There are a total of 78 major streets in the historic core, of which 49 run east west and 29 run north south. Under the French regime, the streets in the historic core fell under two categories. They were Grande Voirie and Petite Voirie.

<sup>1</sup> Vaaikal refers to a small stream or a channel.

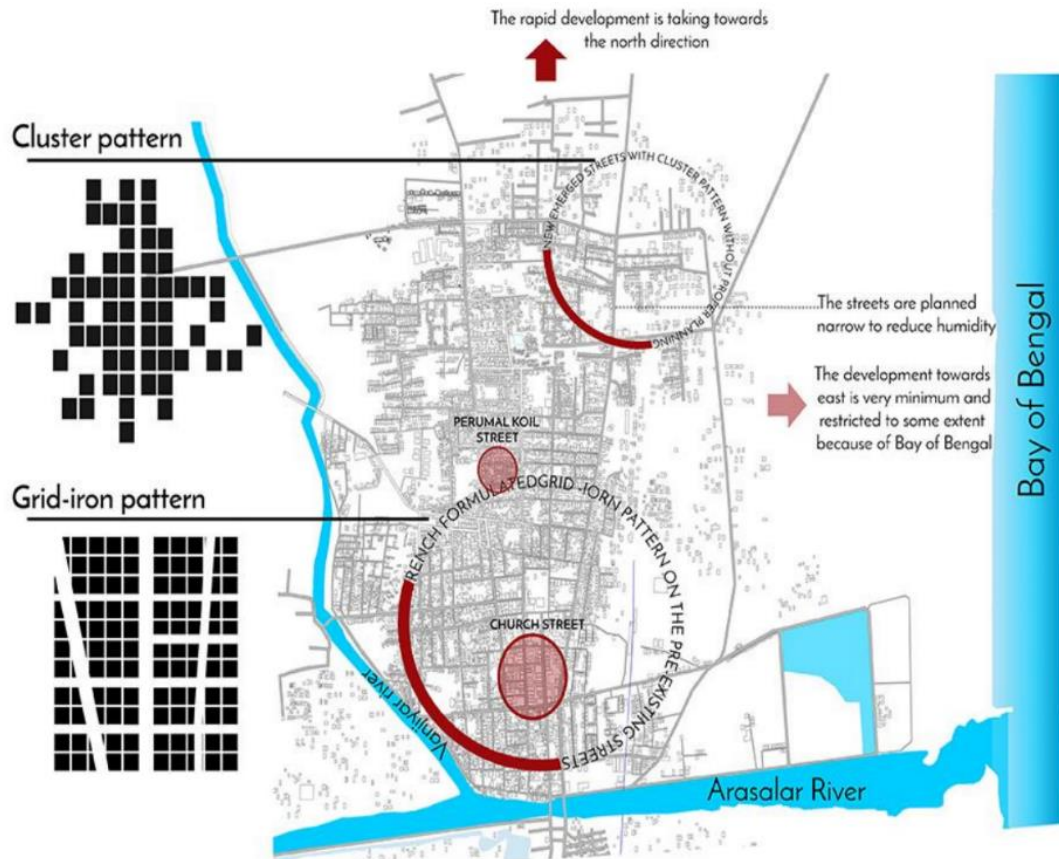


Fig.58. Street pattern

Source: Research Gate

All the streets in Karaikal are rectilinear and geometrically formed. No curve or bend is seen in these streets. They are of adequate width for the free and unhampered movement of the people and their vehicles. It is seen in the paimache or Indian cadastre of the period 1830 that the streets had a minimum width of  $\frac{3}{4}$  "Kole" or 9 feet so as to make them cart worthy, taking into account the vehicular transport conditions prevailing at that time.

One of the most notable aspects of Karaikal town's street layout is the inclusion of a footpath that is 5 feet wide on both sides. In French, it is known as trottoir. Trot is the meaning of the French verb trottoir. The "Trottoir" allows a guy to continue moving forward without any obstacles. As a result, it is known as "alodi" in Tamil. The term 'Anjadi'<sup>2</sup> originated from the breadth of five feet.

#### 5.4.1. Spatiality, streets and Community

Each community has its own space but however they are overlapped with each other throughout the years. The community can be classified on the basis of religion, language, and occupation. Each community has its own culture and has their own structure which are part of their own culture.

<sup>2</sup> Anjadi refers to five feet in tamil language.

Karaikal town had 9 streets with community names. They are as follows:

- 1) Sanakkara street
- 2) Sivambadavar street post
- 3) Karear street (Thiagaraja street)
- 4) Tattara street
- 5) Kannadiar street (Meidine Pally street)
- 6) Kammalar street
- 7) Vannara street (Jeevanandam street).

Out of these streets, 4, namely Sanakkara street, Sivambadavar street, Karear street and Vannara street have been rechristened solely with the purpose of eradication of caste designation of the street by a particular community. It has, as on date, 9 streets with foreign names such as

- 1) Cramp garden South street
- 2) Cramp garden Middle street
- 3) Cramp garden North street
- 4) Le Poliquin street
- 5) Le Poliquin Lane
- 6) Testa-Street
- 7) Deitha Street
- 8) Dupleix street
- 9) J.Lemaire street

The Agraharam can be seen around the temples in the historic core, while the other lower communities are seen away from the temples and they are spread till the rural areas on the basis of their societal hierarchy. The Christian community can be seen around the church and separate schools of Christian missionaries and French people's houses can be observed around this region. The Islamic community occupies the area around the mosque and the residences, market space and burial yards of the community are also present in the same area.

The fisherman community are seen mostly around the seaside, the weaving and textile community can be seen in thirunallar road which was previously the storage of textiles and dyeing of clothes during the French era. The lime manufacturers are seen around the east side of the historic core and near the Arasalar canal. Therefore every community has sustained in

their same place throughout the years and very few have been altered. Even Though urbanization has altered the building characteristics, the spatiality of the communities still remains the same, adding to the cultural and historical value of the town.

### **5.5.Connectivity between the region**

Under the Indian administration, the town is divided into highways , roads and streets. The highway of Porayar- Nagore road which run through the Subramaniya Bharathiyar Road(formerly Porayar road) in north-south directions connects the historic core to the surrounding zones i.e. Kottucherry, Neravy, and Thirumalairayanpattinam. Thirunallar road which starts off from Karaikal Town and Lemaire Street which branches off from Church street in Karaikal town are the other two highways. But the oldest highways were the Old Tranquebar street and Nagore road which linked Tarangambadi Town and Nagapattinam town on north and south. The connectivity between the surroundings and the historic core happens through the highways. Besides these highways, Karaikal has some prominent roads, important streets and 8 obscure lanes in the urban area. The total length of these 78 roads, streets, lanes of Karaikal town network is 31 kilometres 248 metres.

### **5.6.Listing of Heritage of Karaikal**

During the site visit, the entire district of Karaikal was divided into 9 zones in total. Each zone was analyzed and the buildings were listed on the basis of visual and material evidence collected during the site study. A total of 1250 buildings were listed during the site visit. The heritage were selected on the basis of their architectural features, material used in construction and facade treatment and age. Most of the listed buildings are residences and the rest were of religious, administrative and recreational structures.

The buildings were listed according to the divided zones and the zones under the historic core have administrative buildings and residential buildings while the other communes mostly consist of residences and very few religious structures. The main region was considered for the study and it has 261 heritage building in which 87 percent is residential in nature.

### **5.7.Heritage Use**

The use typology mapping is done to identify the buildings which have similarities in their type of function. This helps to analyze the behaviour of the areas in which they are and assist in sustainable town planning. If the building is no longer in use, determining the use typology allows one to designate an appropriate function for it. It also aids in comprehending its spatial

and structural configuration, allowing us to assess its vulnerability and improve its performance. The use typology frequently reveals the evolution of the town as times, needs, and technology change. This helps in analyzing whether the buildings are abandoned, partially used or fully occupied in nature. The usage of these buildings is either residential, commercial, recreational, public, industrial, or religious.

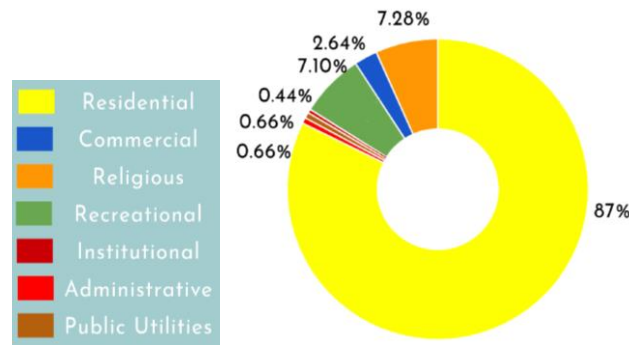


Fig.59. Building Use in percentage

Source: Author

### 5.8.Heritage Age

The age of a building influences the fabric and form of the town. The building age mapping is done to identify the number of buildings in each age class. It helps us in identifying the construction system of the period in which it was built. Heritage structures give us significant visual records of the physical form and history of the place, which serve as the core for local culture. By identifying the age of the building, we can advise a sustainable approach for repair and maintenance of buildings with minimal interventions.

This building's age mapping also helps in determining the evolution of the town and how each building adds to its transformation. Few of the building age were identified through available documents and in case of unavailability, the buildings construction techniques, architectural elements and materials help in determining them. The identification of the building age helps in determining whether they are part of the heritage of the town.

The temples dating to 7th century, are said to have garbhagriha that are said to have been constructed during that time. However numerous layers of intervention have sealed the structure refraining us in determining its original age. Therefore, most of the listed heritage buildings are 50 - 300 years old and above. Buildings of the French era are what constitutes most of the heritage in the historic core.

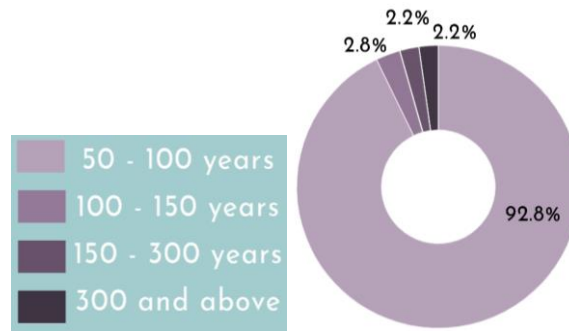


Fig.60. Building age in Percentage

Source: Author

### 5.9. Heritage Character

The heritage character can be determined on the basis of occupancy, ownership, condition and maintenance. The heritage character can be segregated into lost heritage, transformed heritage and continuous heritage. Most of the heritage buildings of Karaikal are part of the transformed heritage while some of them were lost due to the urbanization and natural calamities adding to the lost heritage. Very few are part of continuous heritage that are restored and are in use till date.

Therefore, the character of the heritage not helps in analyzing the architectural value but also helps in improving the significance of historic value of the town. Even though most of these are heritage buildings, the transformation still adds to the cultural linkages of the building. Hence, the character of the heritage is what helps us in understanding the architectural typology seen in the town.

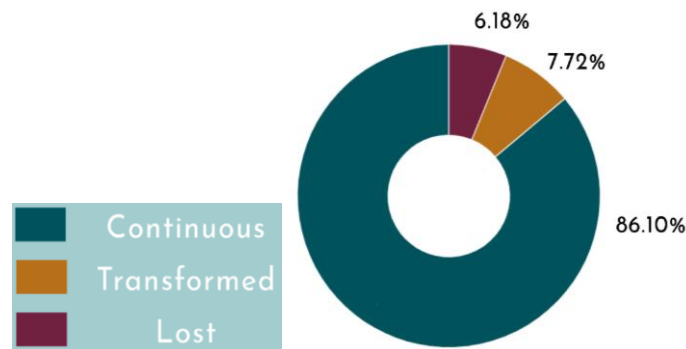


Fig.61. Building character in Percentage

Source: Author



### 5.10. Heritage Height

The height of a building is also a factor that adds to the heritage character. The town mostly has heritage buildings that are of single storey and very few buildings of double storey. The heritage height helps in determining the different layers of construction that has occurred in the town over the past centuries.

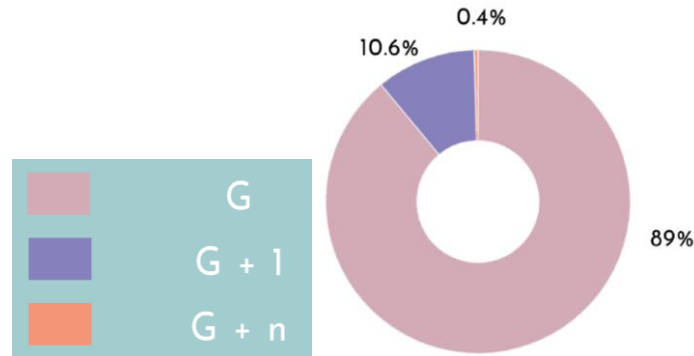


Fig.62. Building height in Percentage

Source: Author

### 5.11. Heritage Ownership

The ownership of the building is what helps in determining its present condition legally. Most of the heritage buildings have potential for restoration, however before restoration, the ownership of the place has to be sorted in order to start working on it. Since most of the heritage constitute of residences, the ownership is of private for smaller residences and joint for huge mansions. The public buildings belong to the government and the religious buildings are mostly of joint or public ownership.

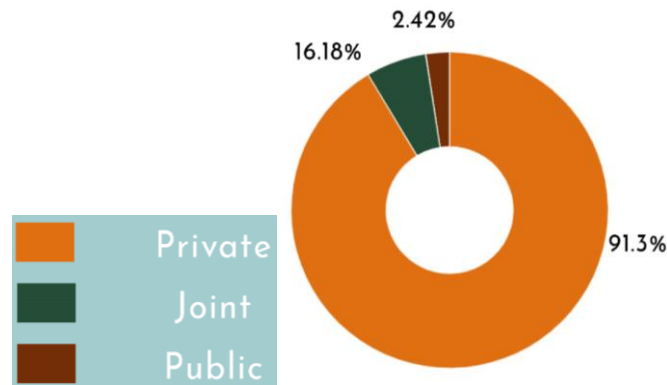


Fig.63. Building ownership in Percentage

Source: Author

### 5.12. Condition Assessment

The present condition of most of the residential heritage is good due to transformation done to the existing buildings. There are very few buildings in the historic core which are abandoned due to improper maintenance which has led to blackening of walls and accumulation of debris. The structural stability of very few structures were affected but still due to alterations and newer constructions, they are restored.

The religious heritage was restored during the past decade and their condition is fairly good due to proper maintenance. However, these alterations are done with modern materials tampering the authenticity of the structure and this calls for the need of conservation of these structures.

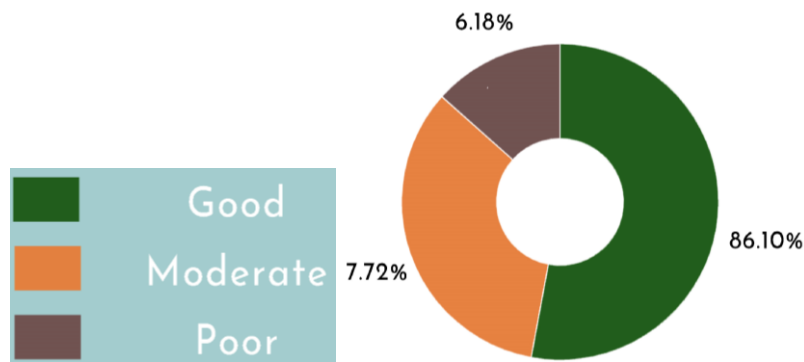


Fig.64. Building condition in Percentage

Source: Author

### 5.13. Architectural Typology of the town

The heritage of Karaikal comprises the residences, administrative buildings, religious structures and recreational/ public buildings present in the historic core region.

#### 5.13.1. Residential Typology

Karaikal has different typologies of architectural styles in housing because of its rich cultural impact on the architecture of the city. The Karaikal housing styles went through many phases starting from traditional style to the present contemporary style.

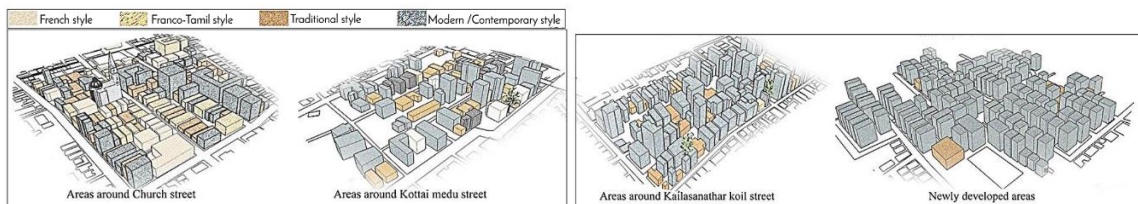


Fig.65. Residences in major streets of the town

Source: Research Gate

### ***i. Traditional Style***

Traditional houses' planning and elements vary based on their religion and customs. Two major traditional housing categories in Karaikal are seen in the historic precinct. They are built according to the status the family beholds in the society.



*Fig.66 a& b. Type A & Type B residences*

*Source: Author*

#### **Type A Residence**

*Planning concept:* Traditional houses concentrated mainly on climate responsive and social interactive planning concepts. The longer side was facing in the North- South direction to get maximum day lighting.

*Characteristics:* Row houses – single or double storied pitched roofing. A extended veranda with stone or wooden pillars stretched along the front section of the row buildings that shared a single wall. Starting from the street front, the passageway travels through the home and ends in the backyard.

*Construction materials:* Rubble foundation, flat brick masonry, madras terrace roofing, Mangalore tiles, pot tiles.

*Roofing style:* Sloped roofs with pot tiles or Mangalore tiles.

#### **Type B Residences**

*Planning concept:* The residences are planned to have two room with a partitioned kitchen and toilet and backyards

*Characteristics:* These houses have square or rectangular plans with minimal rooms and storage spaces in the area.

*Construction Materials:* Terracotta tiles, wooden columns and doors.

*Roofing Style:* They have sloped roofs with cornice detail done under the roofs.

## *ii. French Style*

In Karaikal very less number of French style houses are seen compared to other style of houses. Most of the houses of these styles are demolished due to their age. Some of the common characteristics of this style are as follows:



*Fig.67. French style residence in Kader Sultan Street*

*Source: Dominic Sansoni*

*Planning concept and characteristics:* Symmetrical plan and elevation, tall compound walls with grand gates, colonnaded porticoes, entrance court, rear court, segmental arched doors and windows, bifurcate staircase, large halls column carrying heavy wooden beams, semi-circular arched gates, large front and rear balconies, coloured glass windows .

*Construction materials:* Rubble foundation, Flat brick masonry, Madras terrace roofing .

*Colours used:* Bright white, ceramic yellow, terracotta & other mild colours .

*Roofing style:* Flat roofs & madras terrace roofing.

## *iii. Franco-Tamil Style*

Franco Tamil houses are influenced by the building style of the French. They employ a large number of style elements and while still maintaining their typical Tamil planning concepts. Economically wealthy Tamils people own these buildings.

*Planning Concept and features:* *Ground floor:* Veranda connected with the adjacent building, the corridor lead to the interior or central courtyard (*mutram*<sup>3</sup>), carved doors, lined up by an inner veranda with country tiles, beyond more private rooms, rear courtyard that encloses kitchen, store rooms, back court contains toilet, bathroom and wells.

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<sup>3</sup> Mutram refers to Courtyard in an Agraharam house in Tamil Nādu





*Fig.68. Franco-tamil style Mansion at Perumal Street*

*Source: Author*

*First floor:* First floor influences French style elements like arched windows, plaster decoration, fluted pilaster, columns with capitals, architectural motifs, large balconies, most of the houses have visual connectivity with the ground floor.

*Construction materials:* Rubble foundation, flat brick masonry, madras terrace roofing, Mangalore tiles & pot tiles.

*Roofing style:* Flat roofs & madras terrace roofing.

#### ***iv. Modern/Contemporary Style***

New style of housing followed this style. Modern houses are built by demolishing traditional houses or in a new plot. These houses have simple contemporary plan and elevation, without following any traditional methods. The parking area is included in the frontcourt of houses by cutting thinnais. Mixed-use types are also seen.



*Fig.69. Contemporary House at Lemaire street*

*Source: Author*

#### ***Planning Concept and features***

*Characteristics:* Usage of French windows, brackets for balconies, carved doors and window frames, usage of pediments and pilaster on facade. Stained glasses and semi-circular arches, French style elements like arched windows, plaster decoration, fluted pilaster, columns with capitals, architectural motifs, large balconies, most of the houses have visual connectivity with

the ground floor.

*Construction materials:* Rubble foundation, flat brick masonry, madras terrace roofing, Mangalore tiles , reinforced concrete, steel and iron gates & pot tiles.

*Roofing style:* Flat roofs , sloped roofs & madras terrace roofing.

### 5.13.2. Market:

The Nehru Market was built in 1852 during the French reign but it was restored later by INTACH, Pondicherry due to deterioration and damages that occurred due to aging of the structure. The structure was re-opened 3 years back and was brought into use.



Fig.70 a& b. Nehru Market façade and interior before and after restoration

Source: INTACH

*Planning Concept and Features:* Rectangular in plan, transparent compound walls featuring metal fencing over low walls and free standing hexagonal brick piers, semi-circular arcade and high ceilings.

*Construction Technique:* Load bearing walls and rubble foundation.

*Construction Materials:* Bricks, Wooden/steel beams, terracotta tiles.

*Roofing Style:* Sloped Roof with Mangalore Tiles.

### 5.13.3. Cemetery:

The *Cimetiere Des Blancs* was built during the French reign. It is said to be the graveyard of white people who died during the French invasion. This place also holds graveyards of children who died during that time and is slowly deteriorating in terms of condition.



*Fig.71 a, b & c. Cemetery entrance, Chapel inside the cemetery & Graveyards with ornate tombstones*

*Source: Author*

*Planning Concept and Features:* Rectangular in plan, medium compounds with pedimented facade entryway, has a chapel inside with semi-circular roofing and graveyards are decorated with French architectural elements and detailing on tombstone.

*Construction Technique:* Load bearing walls and rubble foundation

*Construction Materials:* Bricks, Wooden doors, lime plastering.

#### **5.13.4.Storage:**

This storage is said to be in existence since the chola period as this was used for cold storage during sea trades that occurred here in. However the vernacular planning of it shows that it was built during 19th century. This building is falling apart and it has been the main zone for barter system of trade.



*Fig.72.Storage area for trade*

*Source: Author*

*Planning Concept and Features:* Rectangular in plan, has double courtyard with connecting sloped roofing.

*Construction Technique:* Load bearing walls and rubble foundation

*Construction Materials:* Bricks, lime plastering, wooden rafters and wooden columns inside



the space.

*Present use:* Residence , public toilet and commercial space.

#### **5.13.5.War Memorial:**

This war memorial is said to be constructed during the British period ,when the British invaded the French in Karaikal to capture the region. However this memorial was used as a light house or light stump for sailors to reach home after fishing during the 19th century. This structure has sustained till now even though it wasn't well maintained.

*Characteristics:* The structure is built using brick and lime mortar and has a tapering square to top with a pointed edge to it.

*Present condition:* It has defects such as discolouration, blackening due to its location near the sea shore.



*Fig.73.War memorial*

*Source: Karaikal Online*

#### **5.13.6.Lighthouse :**

Karaikal Light, a white circular concrete tower, 18m in height, stands on the Northern bank of the Arasalar River. This lighthouse is considered for the MAUSAM project of the ASI. However, the original light house was destroyed due to its structural instability and new one was constructed during the late 20th century.

*Characteristics:* The first structure was said to be of a masonry column and it was built in 1853 and a monolithic structure.

*Present condition:* At present the light house has a huge lantern which was a lateral addition and has 2 flashes. per 10 seconds.



*Fig.74.Karaikal Lighthouse*

*Source: Author*

## Chapter 6: ANALYSIS

### 6.1. Analysis of Architectural Typology

The heritage buildings present in the Karaikal town has evolved over the period of time in terms of planning, condition, use and character. Hence through analysis , we can understand that the spatial pattern and fabric have been constantly altered with respect to the communities that add up to its character.

#### 6.1.1. Residential building transformation in heritage zone:

The structures in residential typology has evolved both in forms of layout and facade. There are changes made to structure in terms of planning, materials and architectural elements throughout the years due to impact of urbanisation, natural catastrophe, economical influence and modernisation. In terms of Layout of a residence , the spatial planning has been the same over the years.

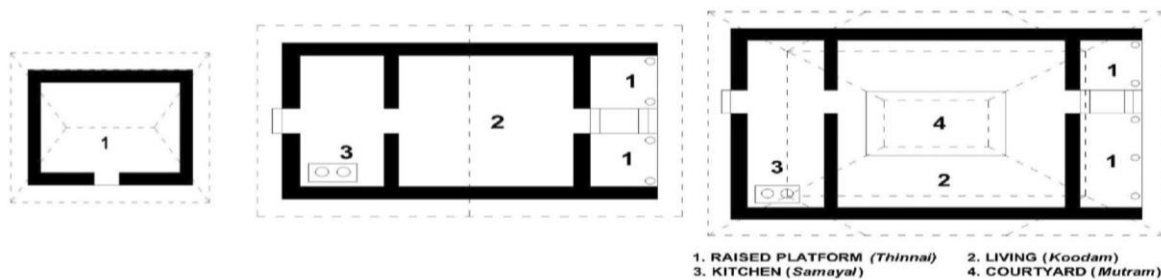


Fig.75. Transformation of spatial planning in residences

Source: Author

The layout of the residences have been gradually evolving according to the size requirements and functions. The additions of *thinnai* to normal housing was to enhance the social connection between people and then a courtyard was added for further ventilation. Addition of storage rooms and *rezhi*<sup>4</sup> where according to the business culture requirements. Backyard and additions of other rooms were laterally done according to requirements.

The roofing has changed from sloped roofing to flat roof with tiles, columns have evolved from wood and brick to reinforced materials , straight staircase to curvilinear entrance, adding of parapet wall with pot balustrades and increase in storey of buildings according to the family requirements. Hence the building has evolve both in terms of space and architecture through cultural influence. The residences being the main heritage of the town has shown distinct

<sup>4</sup> Rezhi refers to the space before foyer where the good are stored.

characters in terms of space, use , architecture and culture. This has prevailed over the years and has sustained many influences making them a hybrid variety.

### 6.1.2. Building Use:

The residences are the main typology in the heritage of the town. However, the use or function of these building has been modified to commercial and administrative purposes.



*Fig.76 a, b & c. Storage to residences & residences to commercial and healthcare spaces*

*Source: Author*

### 6.1.3. Defects observed in Buildings:

The common defects detected in the heritage of Karaikal area are:, blackening, discolouration, biological colonisation, structural cracks, dampness, vegetative growth, peeling of plaster, vandalism, and abrasion. Most of the structures have missing elements due to vandalism and weathering of materials can be seen often since this is a coastal town.

### 6.1.4. Distinctiveness of Architecture in heritage zone

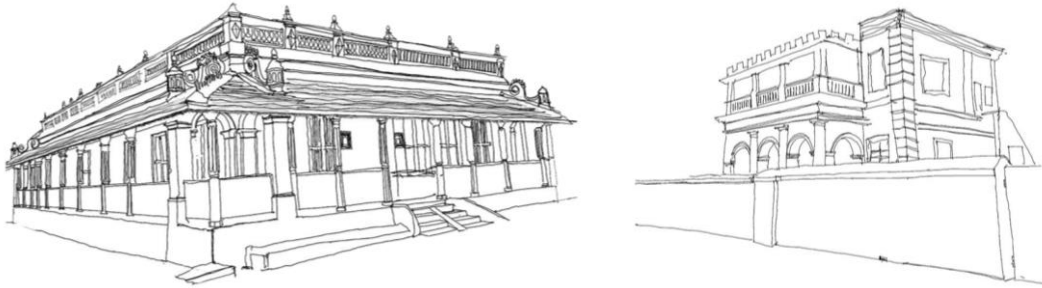
The architecture in this zone has different types of influences due to different invasions during the past 5 centuries. Islamic and French influences are the majority that influences the vernacular and traditional houses of Karaikal. The construction techniques used in these residences are madras terrace roofing, load bearing wall and rubble foundation. The ornamentations are done with wood, and lime mortar. Intricate floral patterns, French curves and jaali works are few features exhibited by these houses.



*Fig.77 a& b. Franco tamil house in Pondicherry and Karaikal*

*Source: Intach & Author*

The vernacular tamil houses have influence of these in planning, materials, and architecture. The geographical factors is what makes the style distinct from that of Pondicherry's Franco Tamil architecture.



*Fig.78 a& b. Vernacular and French residence of Karaikal*

*Source: Author*

The architecture of Karaikal is distinct because of its amalgamation of French, Islamic and vernacular influence in traditional architecture of the town. The buildings exhibit characteristics of each influence either in terms of spatial planning or architectural elements. The coalition of these is what makes it a historically important building and brings in the necessity of conservation.

## **6.2. Architectural and socio - spatial analysis of different cultures**

The socio-spatial pattern of different cultures in the town is a result of constant change in the reign of different dynasty throughout years. However, the major communities that have sustained here in the town are Hindu, Islamic and Christian community and they have played a major role in shaping the identity of the town.

### **6.2.1. Hindu Community:**

#### ***Spatial Density:***

The Hindu community has been existing along the linear stretch of bharathiyar road that connects to Tranquebar and Nagapattinam on N-S direction, since the 7th century according to literary evidences and they have settled around the temples. The area is moderately dense and it's because of the social hierarchy followed since the very start of the region.

#### ***Spatial Demarcation:***

In the core region of Karaikal town, the Hindu community occupies the area from old railway lane to Vayalkara street in N-S axis and Thirunallar road to Kamaraj road in E-W axis.

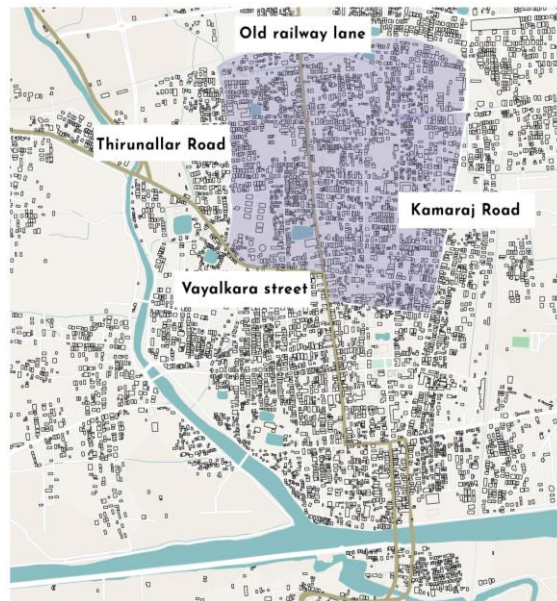


Fig.79.Demarcation of Hindu Community space

Source: Author

**Settlement pattern:**

The Hindu Community were the first to exist at town and the settlement began spreading linearly along the main axial road to Porayar. Hence the Streets here adapted a linear street pattern with minimal clustered settlement on the periphery which is the result of lateral development. Previously, due to working class divisions the privileged were only allowed the periphery of temple while the rest settled far, even 12 to 15 kms away from the temple. Later due to French invasions the street patterns were converted to grid iron pattern.



Fig.80& 81.Street pattern & Origin of Hindu settlement

Source: Author

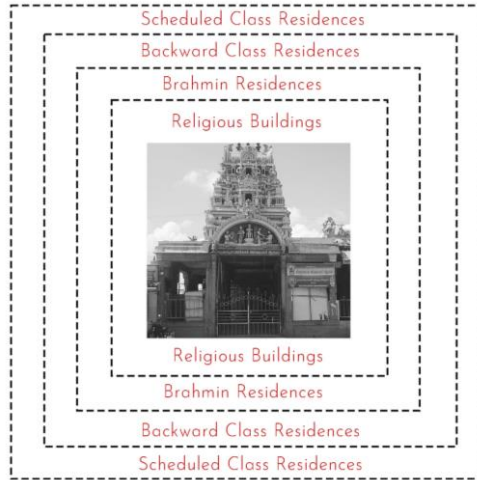
**Origin of Space:**

The Hindu Community area was a linear elongated settlement. The settlement began around the linear axial road leading towards the Tranquebar region. However, the temples were the



main reason for the development around the temple. At the initial stage, the region developed as it was temple centric. And then the region started spreading towards the north.

**Social Hierarchy in Space:**



*Fig.82.Hierarchy in Hindu settlement*

*Source: Author*

The Hindu community has caste divisions in their space. Since , they settled earlier in the core region, the area here around the temple is occupied by brahmin people followed by the backward class and then finally occupied by the scheduled class.

**Geographical Setting:**



*Fig.83.Site section of Hindu settlement*

*Source: Google earth*

The residences of the brahmins i.e. Agraharam houses are located around the temples from bharathiyar street to church street . The residences of the other backward community where pushed later, which makes the modern day commercial zones and market space. The entire tamil town is in relatively flat land and the railway station has a bit of a shallow indent in topography .

**Spatial Fabric:**

The spatial fabric in Hindu community is organically developed. The Agraharam planning is seen around the temple premises. The houses are designed in such a way that they share a wall or a verandah(thalvaram) in general. The Hindu community developed keeping the temple as the centre. This shows that the planning here happened was temple centric unlike the Christian community who planned in grid iron and placed the church in central square.

**Building Typology:**

The major types of buildings observed around the Hindu spaces are residences and temples.

**i. Architectural Features of Residences:**

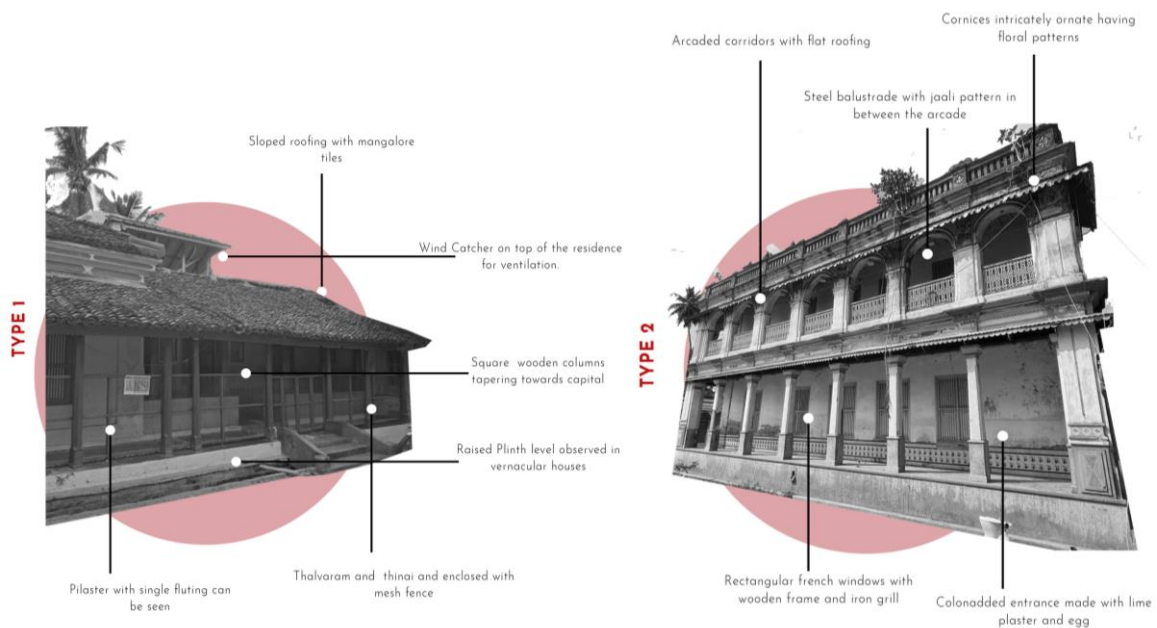


Fig.84 a & b . Type 1 & 2 Residences of Hindu community

Source: Author

**Type 1:**

**Planning Concept:** Rectangular in plan, has corniced end ornament, sloped roofing, square columns, and has courtyard(mutram) and backyard ,Single storey in nature.

**Material used:** Wood, bricks, lime plaster, and steel can be seen .

**Plinth Setting:** 2 to 3 feet plinth height from road.

**Colours:** Blue, white, green, yellow and maroon are used in the residence.

**Type 2:**

**Planning Concept:** Rectangular and symmetrical in plan, has corniced end ornament, parapet with pot balustrades, columns with segmental arches, double storey, and madras terrace



roofing.

*Material used:* Wood, bricks, lime plaster and stained glasses are used.

*Plinth Setting:* 3 to 4 feet plinth height can be seen.

*Colours:* White is used in most residences in common.

**ii. Architectural Features of Religious Building:**

*Planning Concept:* Rectangular in plan, Dravidian vimana, load bearing walls made of stone and ,Single storey in nature.

*Material used:* Brick, stone , lime and steel for lateral additions.

*Plinth Setting:* 1 to 2 feet high from the road level.

*Colours:* wide range of palette for vimana.

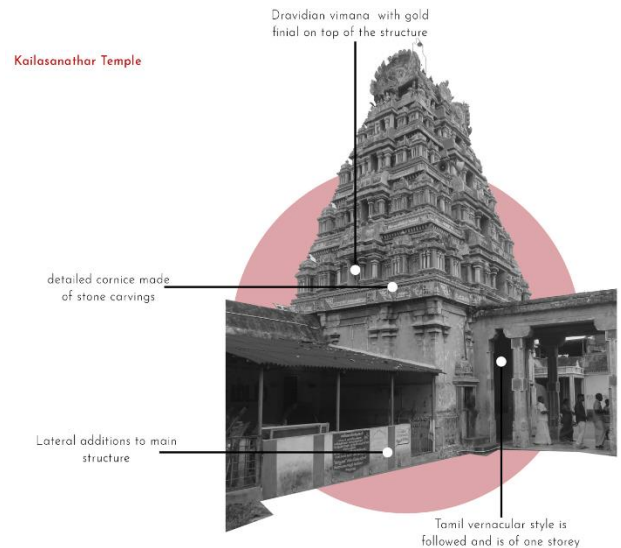


Fig.85. Kailasanathar Temple at Karaikal

Source: Author

**6.2.2. Islamic Community:**

***Spatial Density:***

The Islamic community has been existing since the 16th century and they have settled near Arasalar for the purpose of trade and exports. Since they settled earlier in the core region, the area is moderately dense in nature in terms of buildings.

***Spatial demarcation:***

In the core region of Karaikal town, the Islamic community occupies the area from Thirunallar road to Arasalar river in N-S axis and Bharathiyar road to Sanakkara street in E-W axis.

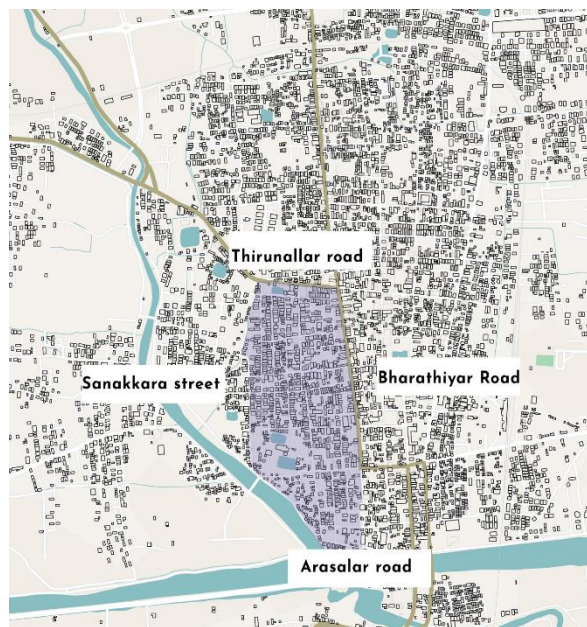


Fig.86. Demarcation of Islamic space

Source: Author

**Street pattern:**

The Islamic Community streets were also previously re-structured by the French Government. Hence the Streets here adapted a grid iron pattern with minimal clustered settlement on the periphery which is the result of lateral development. Previously, when the Muslims settled here, the streets were clustered in pattern.



Fig.87& 88. Street pattern & Origin of Islamic space

Source: Author

**Origin of Space:**

The Islamic Community area was a small clustered settlement before the Khilji Invasion. The arrival Masthan Sahib and the Mohammedians influence slowly created a major influence on people. The Mosque was built around the early 17th century and its said that the settlements came around the mosque. Oldest buildings can be seen around the Masthan Sahib Dargah. Hence the region where the masjid is located is said to be the origin of this community’s space.

**Social hierarchy in space:**

The Islamic community has economic divisions in their space. Since , they settled earlier in the core region, the area around the mosque is occupied by economically wealthier people followed by the community buildings and then finally occupied by the economically weaker people.

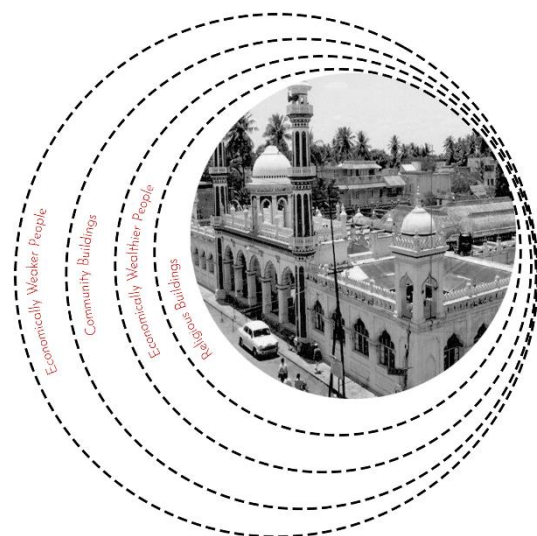


Fig.89. Social hierarchy in Islamic Spaces

Source: Author

**Geographical Setting:**

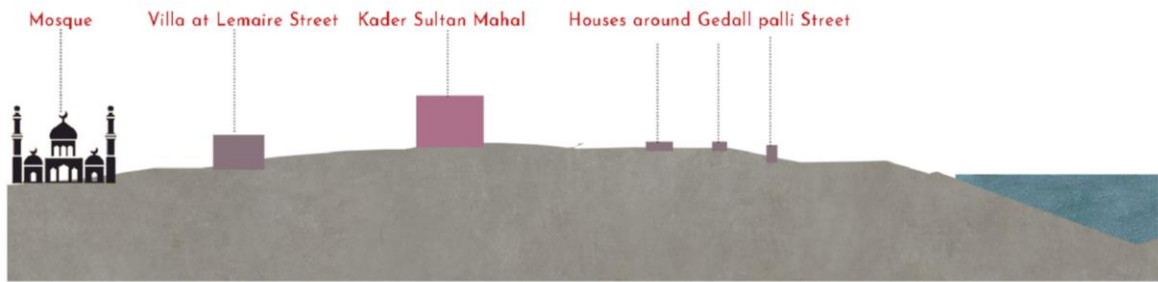


Fig.90. Geographical setting of Islamic region.

Source: Author

The residences of the weaker section can be seen along the banks of the river as the helpers /workers settled near the river for easy access to work , however they were prone to flooding while the wealthier section were relatively safe distant from flood plain . And the Mosque is set in a relatively lower level even though the community originated from there.

**Spatial fabric:**

The space in Islamic community is organically developed around the mosque. The market space is located near the religious space in an axial manner. Public buildings being the core, the residences occupy the periphery. Old heritage are primarily seen only near the mosque and dargah.

**Building Typology:** The major types of buildings observed around the Islamic spaces are residences, community Hall, mosque and Dargah.

**i. Architectural features of Residences:**

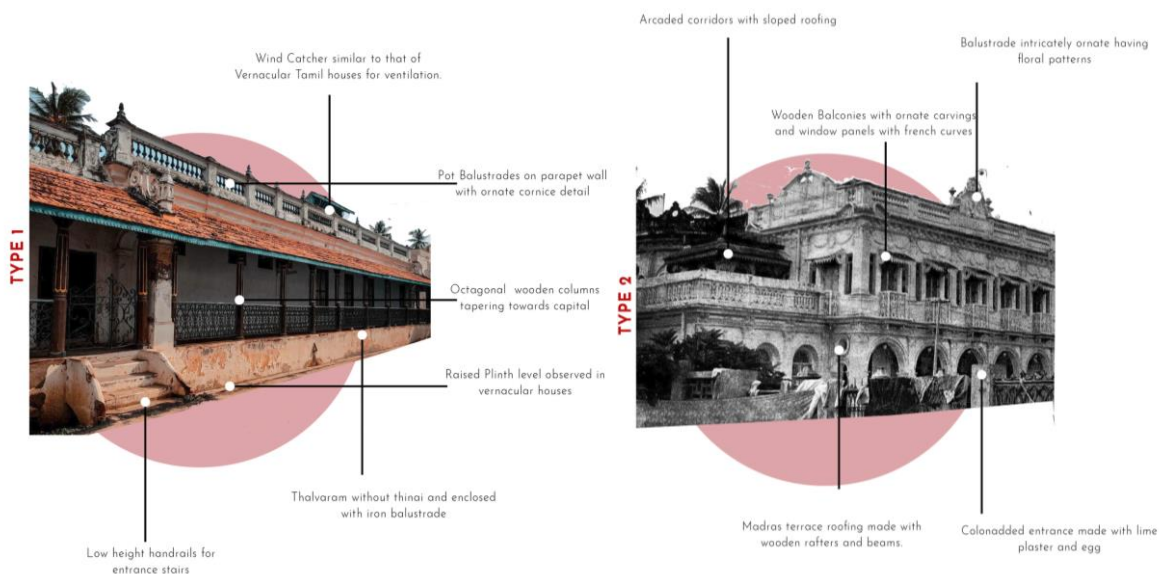


Fig.91 a& b. Type 1 & 2 Residences in Islamic region

Source: Author

## Type 1

*Planning Concept:* Rectangular in plan, has corniced end ornament, parapet with pot balustrades, octagonal or circular columns, and has courtyard (mutram) and backyard ,Single storey in nature.

*Material used:* Wood, bricks, lime plaster, stone capitals and bases and steel are used.

*Plinth Setting:* 3 to 4 feet plinth height is present in the residences.

*Colours:* blue, white green, yellow and maroon was observed.

## Type 2

*Planning Concept:* Rectangular and symmetrical in plan, has corniced end ornament, parapet with pot balustrades, columns with segmental arches, double storey, projected balconies and madras terrace roofing.

*Material used:* Wood, bricks, lime plaster and stained glasses are used here.

*Plinth Setting:* 3 to 4 feet plinth height from the road.

*Colours:* White is mostly used here.

### ii. Architectural features of Religious Building:

*Planning Concept:* Rectangular in plan, has corniced end ornament, parapet with pot balustrades, octagonal or circular columns, and has courtyard (mutram) and backyard ,Single storey in nature.

*Material used:* Wood, bricks, lime plaster, and steel are used .

*Plinth Setting:* 2-3 feet plinth height from the road.

*Colours:* Blue, white green, yellow and maroon are seen here.

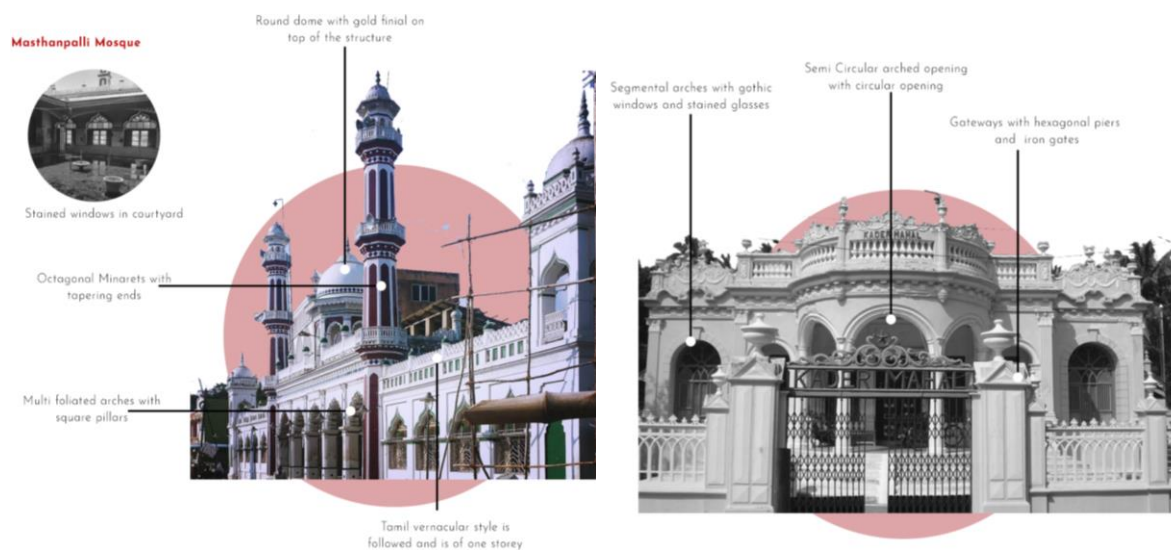


Fig.92& 93 . Maidenpalli mosque and Kader Sultan Mahal

Source: Author



**iii. Architectural features of Community Space:**

*Planning Concept:* Rectangular in plan, has corniced end ornament, parapet with pot balustrades, circular columns, and has courtyard(mutram) and backyard ,Single storey in nature.

*Material used:* Wood, bricks, lime plaster, and steel are used .

*Plinth Setting:* 3 to 4 feet plinth height from the road.

*Colours:* White, yellow and maroon are observed here.

**6.2.3. Christian Community**

***Spatial Density:***

The Christian community came into existence since the 18th century and they occupied the main core area of the town and fortified the town. The area is moderately dense and it constitutes of administrative buildings , institutional buildings, hospital and religious spaces. Since only the privileged occupied the region, it can be understood that the region was designed in such a way that the residential zone can be occupied around the public buildings .

***Spatial Demarcation:***

In the core region of Karaikal town, the Christian /French community occupies the area from Thirunallar road to Arasalar river in N-S axis and Bharathiyar road to Kamaraj road in E-W axis.



*Fig.94. Demarcation of Christian community space*

*Source: Author*

**Settlement Pattern:**

The Christian Community streets were the ones re-structured by the French Government. Hence the Streets here adapt a grid iron pattern with minimal clustered settlement on the periphery which is the result of lateral development. Previously, when the Christians settled here, the streets were clustered in pattern.



Fig.95& 96. Settlement Pattern and origin of Christian settlement

Source: Author

**Origin of Space:**

The Christian community area didn't exist before the French invasion and it was occupied by worker class Hindu community. The arrival of French troops gradually influence impact in space. The organic space occupied by older ones were cleared and a new set of administrative buildings, health care and religious buildings were decided to be added. Hence the buildings were, added to the fortified town by French. Hence the administrative and religious structures were the origin of this community settlement.

**Social Hierarchy in Space:**

The Christian community has administrative divisions in their spatial pattern. Since , they occupied the region near Arasalar river for easy governance, the officials and workers under them occupied the consecutive tiers around the administrative and public buildings.

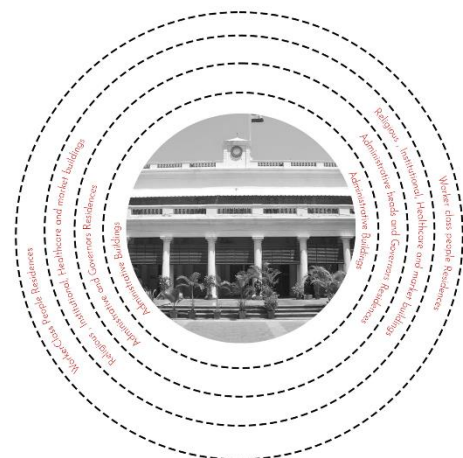
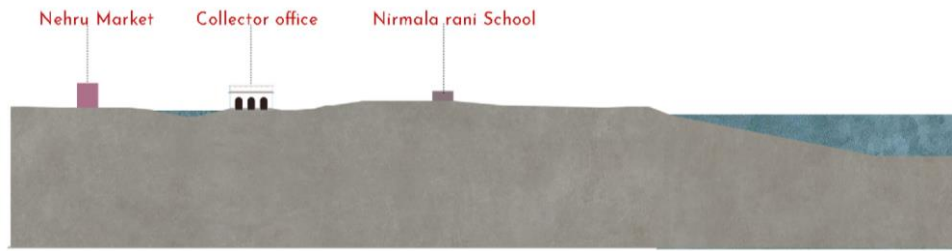


Fig.97. Social hierarchy in settlement

Source: Author

**Geographical Setting:**



*Fig.98. Site section of Christian community space*

*Source: Author*

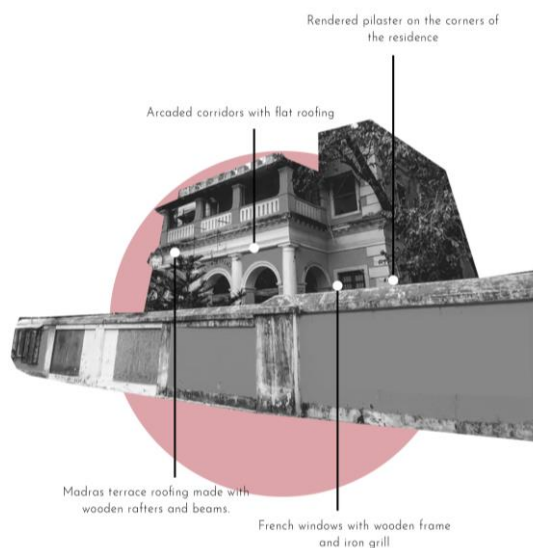
The residences of the working class can be seen along the banks of the river as the helpers /workers settled near the river for easy access to work , however they were prone to flooding while the administrative heads resided among the public amenities for easy access to privileges.

**Spatial Fabric:**

The space in Christian community is specifically planned. The streets run at right angle to each other forming a grid. According to French planning, the fortified town was built with a church and hospital adjacent to the governor’s office. Later market spaces and institutional buildings were added along the residences. At present , the town has administrative, commercial, health and institutional buildings together and the residences around it.

**Building Typology:** The major types of buildings observed around the Christian spaces are residences, church, cemetery, administrative Building and Market.

**Architectural Features of Residences:**



*Fig.99. Residence in Christian community Zone*

*Source: Author*



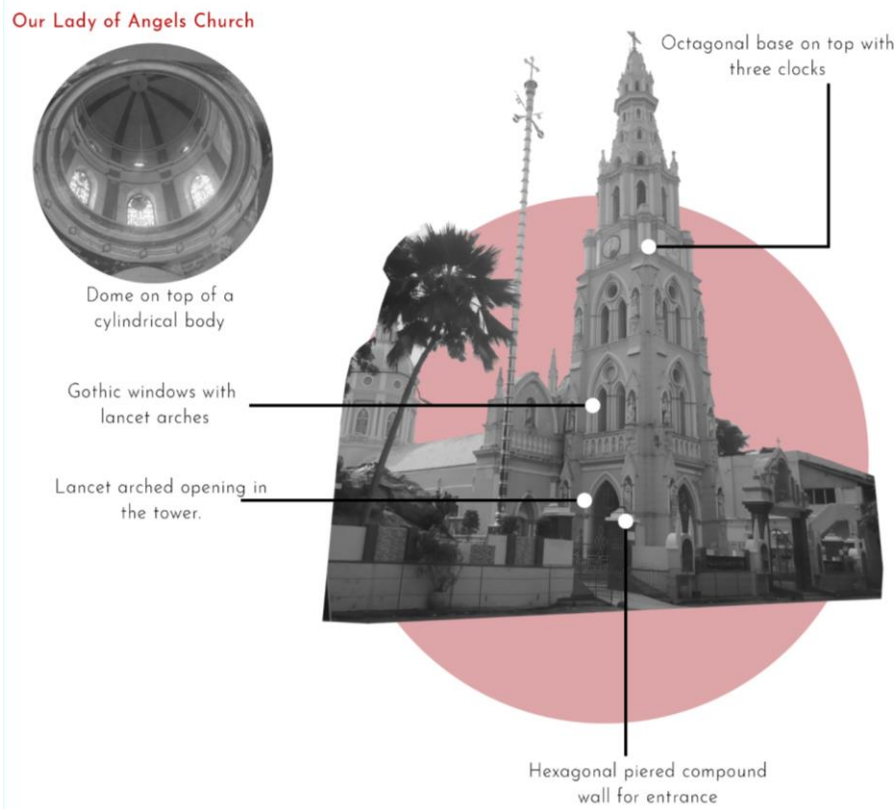
*Planning Concept:* Rectangular and symmetrical in plan, has corniced end ornament,, columns with segmental arches, double storey, and madras terrace roofing.

*Material used:* Wood, bricks, lime plaster and steel are used here.

*Plinth Setting:* 2 to 3 feet plinth height from the road.

*Colours:* White, yellow or blue can be seen here.

### ***Architectural Features of Church:***



*Fig.100.Our Lady of Angels Church*

*Source: Author*

*Planning Concept:* Rectangular in plan, has a large tower with bell and clock ,Single storey in nature and exhibits neo gothic style of architecture.

*Material used:* Wood, bricks, lime plaster, stained glasses, marble and steel are used in the church building .

*Plinth Setting:* 1 - 2 feet plinth height can be observed.

*Colours:* Blue, and white predominantly are used in the church, earlier it was painted as of red and white.

**Architectural Features of Cemetery:**

The cemetery of Karaikal is one of the famous French cemetery of Pondicherry observed till date and it has been abandoned for a very long time. However , it is accessible and is present near a main arterial road.

*Planning Concept:* Rectangular in plan, has corniced end ornament, low compound wall and has a chapel inside.

*Material used:* Wood, bricks, and lime plaster was mostly used.

*Plinth Setting:* 0.5 feet from road height and chapel is around 1 feet high.

*Colours:* White is used for the tombs and the compound entrance.

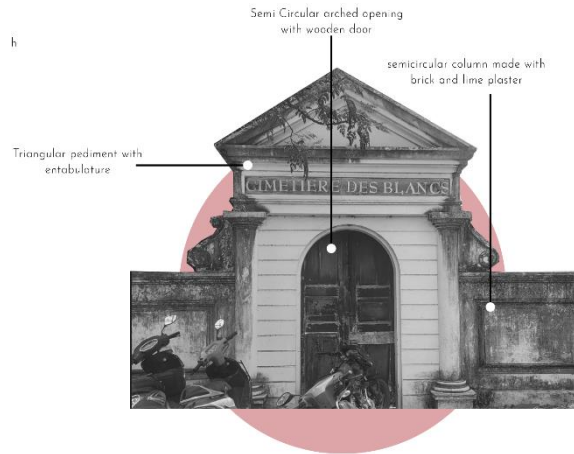


Fig.101.Cemetery at Karaikal

Source: Author

**Architectural Features of Administrative building:**

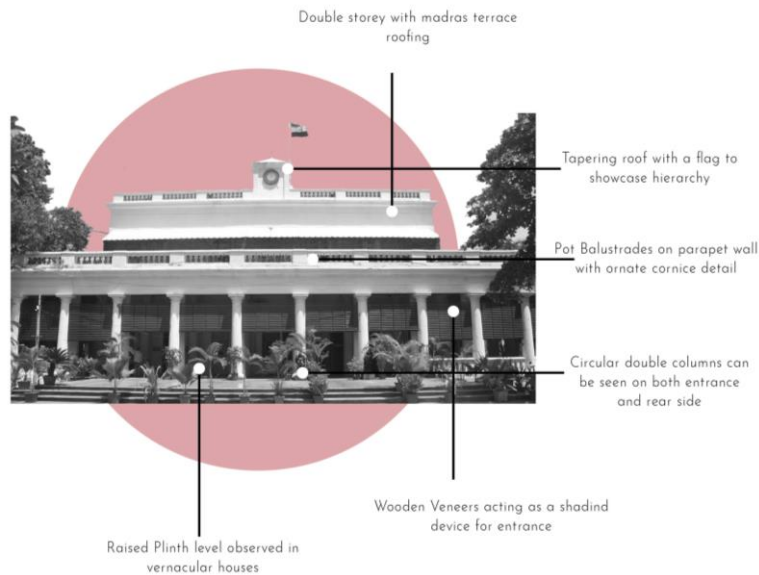


Fig.102.Collector office

Source: Author

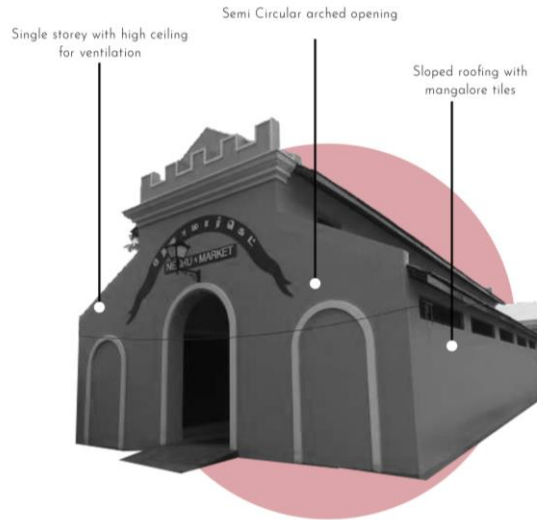
*Planning Concept:* Rectangular in plan, has corniced end ornament, parapet with pot balustrades, circular columns, and double storey in nature.

*Material used:* Wooden rafters, bricks, lime plaster, stone capitals and bases and steel .

*Plinth Setting:* 2 to 3 feet plinth height from the road.

*Colours:* White predominantly is used here in administrative buildings.

***Architectural Features of Market:***



*Fig.103.Market Space*

*Source: Author*

*Planning Concept:* Rectangular in plan, sloped roofing, ,Single storey in nature and arched entrance.

*Material used:* Brick, wood , steel for truss in later stage.

*Plinth Setting:* 1 feet from the road height.

*Colours:* White and pink can be seen in the restored building.

**6.3.Identity and socio spatial complexity**

We are aware of the various impacts that layout and design may have on how people navigate through urban streets, but in this case, it is mobility and way of life of people that affects the layout and design of a place.

Through observation, we may learn how various occupancy patterns affect how places are configured and how they are designed. The spaces are specifically formed by;

- The spaces where the majority of the stationary activities occurred.
- Spaces where the majority of individuals participated in social activities.
- The similarities and variations between other cultures' activities and the settings in which they take place.

This complex network of people, place, time and technology is a densely woven fabric of history separated in terms of community here in Karaikal. The identity of the space varies due to the gradually evolving social fabric. The space follows the ideology of form follows function creating a quasi-rectangular pattern in the main precinct.

#### **6.4. Cultural identity along public spaces and streets**

Through public space, relationships between individuals and their surroundings are continuously rebuilt. Culture and background have a significant impact on how individuals interact with their surroundings, and as populations become more varied, so do the places. Urban populations now come from an increasingly diverse spectrum of social and cultural backgrounds, partly as a result of migration, and they engage with those from other backgrounds most frequently in public areas in the city. So, it's the space or a street that serves as a ground of interaction and activity among different people.

According to the analysis, it is clear that different cultures are observed among the same space. For example, the streets around the religious spaces have complex interwoven spaces that are common to every community for different purposes. However, the space is dynamic and hybrid that can adapt to every event or a community's preference. The cultural identity can be seen on different elements of the space such as elements of a streetscape or a building's facade in varying degrees. It is common in the historic core area that the streets are organized in a social hierarchy according to their business activities. Every street or space dedicated to a particular community portrays its own culture either through activities or simply their appearance.

#### **6.5. Value assessment of heritage precinct**

The values associated with a place or a building is what decides the extent of intervention that has to be done. The cultural context of each historic building or a space can be the one to determine its value. According to Bernard Fielden, "a heritage showcases the following values.

- Emotional value- wonder, identity, continuity, spiritual and symbolic.
- Cultural value- documentary, historical, archaeological/antique, aesthetic and symbolic, architectural, townscape , landscape and ecological, scientific and technological.
- Use value- functional, economic, social and political."

The historic precinct of Karaikal showcases various cultural and use value in general.

**Historical Value:**

The town of Karaikal has physical and literary evidences tracing them back to 7th century and structures such as Kailasanathar Temple, Our Lady of Angels Church and Maiden Pali Mosque and Collectorate built during the 17th century are intact till date and are part of the living heritage of Karaikal. The Mangani Festival is a specific festival which is associated with the town of Karaikal, has been occurring since time immemorable. Few Residences, commercial spaces and institutional spaces which are part of Karaikal's heritage also dates back to late 18th century making them historically important.

**Architectural Value:**

Predominantly, the residential architecture of the town follows a particular style of hybrid architecture which is a synthesis between French and tamil vernacular style. This Franco-tamil style of architecture can be observed in almost all the heritage residences of Karaikal. Influence of tamil vernacular along with French influence( French ruled Karaikal from 17th to 20th century) can be seen in architectural elements and spatial characteristics of the building.

**Associational Value:**

The spatial hierarchy and street division according to occupation has shaped the layout of the town since the early time. The site has associational value due to the influence of communities and religious activity that takes place within the space.

**Socio-cultural Value:**

The heritage structures such as religious spaces gathers huge crowds for various cultural activity such as Chariot festival, Kandoori festival and Thetheravu Madha festival and other related activities which adds up to their social and cultural value. These spaces hold social gathering for religious purposes.

**Religious Value:**

Religious heritage structures have traditional kind of architecture and have been the predominant functioning structures for centuries. The religious value is high in town as all church, mosque and temple have been the sense of spiritual linkage to people for years.

**Economical Value:**

Few of the structures are used for public purposes, such as market space, religious spaces and the festivals celebrated generate a huge amount of revenue. The Karaikal Mangani Festival has more than 2 lakh visitors for the event of Mangani which increases the economy of the town. Residences being most of the heritage, the revenue collected through House taxes also adds to the economic value of the site.

**Functional value:**

The structures present in the zone are utilised as residences in most of the cases. The religious spaces serve as a place of gathering for social purposes and the market space serves for commercial purposes. The structures here are functional in nature making them a living heritage.

**6.6.Issues and challenges involved:**

Different kind of challenges are involved when it comes to the maintenance of the heritage and their conservation and restoration. However, the following factors are the major issues identified in terms of conservation here in Karaikal town.

**6.6.1.Ownership issues:**

The heritage of Karaikal are majorly the residences of the town. The residences are private properties and are occupied in most of the cases. These properties are privately owned by individual and constitute about 90 percent of the heritage of Karaikal. Many residences have complex ownership patterns causing legal issues and leaves the structure abandoned.

**6.6.2.Lack of awareness:**

The lack of awareness about the heritage by the people living there is a major issue in terms of conserving heritage. Additions and alterations are done with modern materials to match the contemporary times. Due to the ongoing demands the residences undergo alterations or additions for requirement.

**6.6.3.Real-estate pressure:**

The town of Karaikal not only had residences but also administrative and public buildings which were part of the heritage of the town. The rapid urbanisation, real estate pressure to rebuild apartments at prim areas have led to people selling their property for monetary requirements. Huge villas and mansions were mostly destroyed in Karaikal for the construction of apartment.eg. Kannadi *maaligai*<sup>5</sup> of Karaikal.

**6.6.4.Misconceptions on conservation:**

Negligence of structures by both government and private letting the structure to decay. Moreover the misconception of restoration and conservation being costly have also stopped them from preserving them rather consider new construction options for a contemporary solution.

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<sup>5</sup> Maaligai refers to a palace in tamil.

## Chapter 7: CONCLUSIONS AND RECOMMENDATIONS

### 7.1. Conclusions

- **Overall configuration of the townscape:** *“the spatial configuration”* is a result of the harmonious synthesis between architecture and culture in accordance to its geographical features. The unique coastline extends to 60 kms and is rich in soil, minerals and water resources enriching its value.
- **Historical stratification** of *“multi-layered cultural and historical heritage”* is one of the most important features of the historic town. This characteristic is of greatest significance because of the influences of hybridity in architecture observed in this region.
- **Urban fabric**, possessing *“cohesion of high quality”* shows that the ensembles with vernacular architecture, among which the religious spaces stand out as notional and composition urban accents, play an important role for *“harmonious homogenous entity”* of the property.
- **Traditional public directions and spaces**, evidence of remarkable continuity throughout the ages: main urban axes (Bharathiyar road and Kamaraj road in north south axis) and public space (market spaces and public squares with public buildings around them).
- **Relations between the town and the natural environment**, especially with the sea: adds to the harmony between architecture and culture in different geographical locations.
- **Urban silhouettes**, each one of them possessing its personal individuality: the business community west silhouette; the north silhouette with administrative buildings and religious spaces; the peaceful and calm south silhouette with residences of different communities that developed later.
- **Traditional functions**, inherited from the millennial development of the town (religious, residential, harbour, trade, related to local crafts, etc.) are part of the town's cultural context.



## **7.2.Co-existence of Different cultures:**

The town of Karaikal has Hindu, Islamic and Christian community predominantly in the historic core of its region. The historic core is an amalgamation of all these three major communities. These communities have shaped the spatial pattern of the core.

### ***Hindu settlement and community***

The Hindu settlement was created around the temples of Kailasanathar and Ammaiyar. The Agraharam planning of residences is seen even today around the temple premises. This settlement pattern have survived over the years and has still sustained throughout history. The festival of Mangani that occurs here every year is a tradition of centuries that is still being carried out till date. The procession route of the Grand Chariot follows along the Bharathiyar Road to Kannadiyar Street and church street, Ambedkar street and back to bharathiyar street.

### ***Islamic settlement and community***

The Islamic settlement developed organically around the religious spaces through social hierarchy in spatial pattern. The religious spaces is the core of the community's development. The event of Kandoori festival is a grand cultural activity that has its procession around the bharathiyar road ,Lemaire street , dargah street and Thirunallar road.

Even though the settlement pattern was altered by French, the spaces in this area are distinct in terms of social , architectural, cultural and historical values. The culture of the community has stayed intact over the years even though different influences can be seen in the zone.

### ***Christian/French settlement and community***

The Christian settlement began when the French invaded the region of Karaikal and developed them into grid iron patterns and their own style of architecture. Different commercial, administrative, institutional, health care spaces were developed by them which are part of the heritage of the town. These buildings follow the same function till date making them historically significant. The Thetheravu Madha festival follows a processional route along the thirunallar road and Kamarajar road and finally reaches the church. This processional route is followed by the community for a very long time.

### **Observations:**

The cultural activity and lifestyle of all these communities have co-existed since time immemorial. The cultural activities happening along the main axial roads of Bharathiyar road and Thirunallar road immensely impact its surroundings i.e., the festivities and culture are harmoniously existing along the core region for years in terms of culture, space and architecture. Even though there are mixed community development observed around the core region, the core still remains intact with distinctive feature.

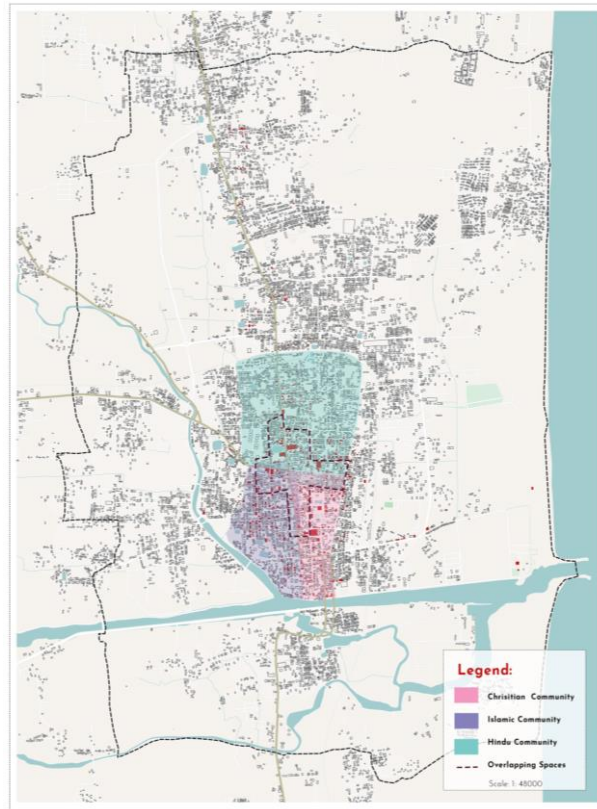


Fig.104.Map indicating the flexible cultural space in Karaikal historic core

Source: Author

### Inferences:

The axial roads of Bharathiyar road and thirunallar road which has been existing since the 17th century still serves its importance by behaving as a flexible cultural space for all cultural activities of all three communities. As studied in Salad bowl theory, the cultures here have remained individual and distinct despite existing together. This space is a perfect example of together in difference culture. Hence, the theory of co-existence in historical core of Karaikal is proven by the assessment of historic core by analyzing the site in terms of architecture, culture and space. The co- existence of different cultures in their individual spaces in the surviving heritage in terms of architecture and , activity has sustained here since time immemorial making it historically and culturally significant.

### 7.3.Cultural Co-existence and Heritage interdependency

- Heritage affects and promotes the co-existence of the town and the coexistence of different communities is what adds to the cultural and historical value of the town in terms of buildings and festivals which exists as heritage.

**Heritage:** The heritage of Karaikal constitutes both buildings and festivals which are a major part of the identity of the town. The cultural identity of the town exists along the built and

cultural heritage. These heritage such as residences, commercial, institutional, administrative and religious spaces are functional in nature till date and follow the same function. However, even though many influences can be observed, the authenticity of the space is still intact due to the deep rooted cultural values of the people. The architectural elements, spatial pattern and culture are distinct but together in a difference.

**Culture:** The co- existence of different cultures have impacted the heritage of the town because numerous layers of historic fabric are buried under every changes a space or element went through since past centuries. A complex network of hybrid culture is stimulated and have remained intact by supporting each other. The streets of Karaikal are also part of heritage considering their major role on shaping the identity of the town and serving as a flexible cultural space.

#### **Historical Significance of Karaikal:**

The heritage of Karaikal are directly associated with the individuals, events, activities, or developments that shaped our history or that reflect important aspects of our history; It also embodies the distinctive physical and spatial characteristics of the architectural style in terms of construction techniques, typology and craftsmanship. It serves as a potential data reserve to understand the past through architectural, and cultural observations.

#### **7.4.Statement of significance**

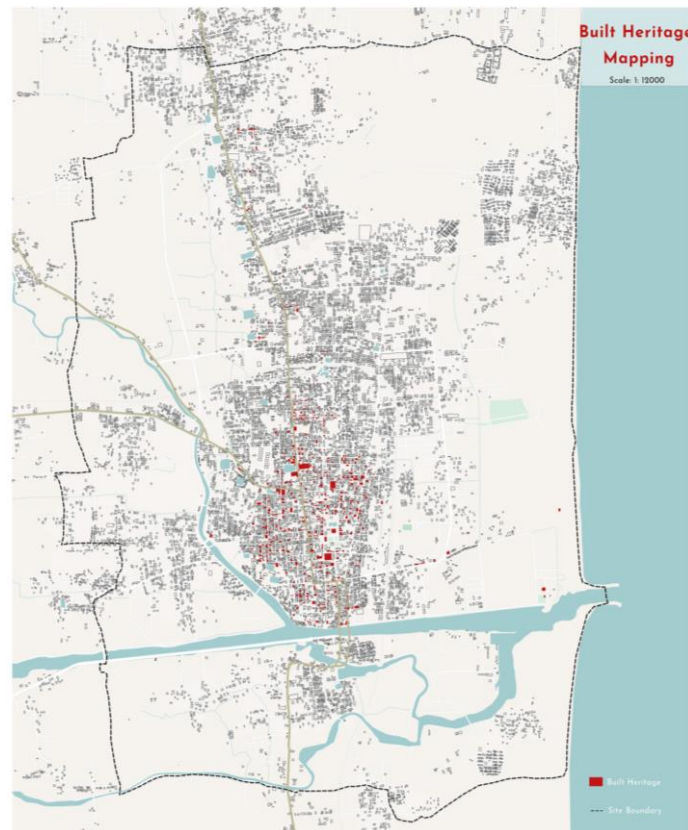
The historic town of Karaikal is historically significant due to its varied cultural influences from different reigns through history. The town exhibits a unique kind of architecture that showcases both cultural and historical values. It showcases an important interchange of human values within a cultural area, and an evolutionary development in architecture and town planning. It is an outstanding example of a hybrid type of franco-tamil building, which illustrates a significant stage in the town's history.

#### **7.5.Recommendations**

The study and research have provided an insight on areas that require immediate attentions, alterations and conservation. The maintenance of the historic fabric is important in order to preserve it as a heritage town. Hence urban conservation strategies must be employed to preserve the existing historic precinct of Karaikal.

The overall recommendations that can be provided for the historic precinct of Karaikal are,-

- Addition of signages: Signages must be added in areas where historically important heritage were lost and images portraying their history and grandeur.
- Sewage systems and pipelines to be made underground: In order to maintain the street continuity, the sewage systems and pipelines must be made underground. This will help in attaining the continuity in streetscape.
- Clearance of shrubs and debris: For maintenance of streetscape, the debris and other accumulations seen around the major streets and heritages must be removed and cleaned to maintain the streetscape.
- Removal of encroachments : The encroachments present around the historical precinct must be removed and they must be shifted to the government housing in order to maintain the architectural harmony.
- Re-defining heritage area by delineation: Demarcation of historic core as heritage town by delineating the core zone which comprises of the major heritages will help in protecting it as a heritage town.



*Fig.105.Map indicating the heritage precinct in Karaikal historic core*

*Source: Author*

- Detailed base map indicating the heritage : A detailed base map must be made indicating the heritages present in the precinct. This will help people in knowing their heritage.

- **Maintain Skyline and Architectural Harmony:** In order to preserve the value and beauty of the heritage site as well as the view from it, buildings in the heritage precinct must adhere to the architectural style of the surrounding area and maintain the skyline of the precinct.



*Fig.106 & 107. Maintenance of the streetscape in precinct and Community Participation*

*Source: Author, Hands on people*

- **Effective community Participation:** Public participation in heritage awareness and conservation of built and cultural heritage will help in involving people to protect their heritage.
- **Alterations, additions and development norms:** Guidelines for conservation, additions or alterations to buildings and spaces in the precinct .

## Chapter 8: PROPOSALS

### 8.1. Guidelines for conservation, and management of historic buildings

The authenticity of the town and its historical significance lies in its location, culture, and its geographical attributes & architecture. Hence the guidelines must not only revive the architecture but also retain the heritage's authenticity.

#### 8.1.1. Building façade

Repairing, stabilizing, and conserving fragile architectural decorative materials. These repairs should be physically and visually compatible and identifiable upon close inspection. Protecting and maintaining the masonry, wood and architectural materials is necessary, here in case of windows, frills must be coated with paints to avoid rusting. Identifying, retaining, and preserving residences and their functional and decorative features that are important in defining the overall historic character of the building, Hence in order to revive a facade, all the decorative elements must be identified, analysed, clean and preserved.



*Fig.108 & 109. Restored and maintained building Façade*

*Source: Author*

#### 8.1.2. Lateral additions

The additions needed for a building's modern use should be made in such a way that it must define its distinctive characteristics rather than placing them on facades. Constructing a new addition in a way that prevents character-defining elements from being covered up, damaged, or destroyed, and that causes the least amount of damage to historic materials. Avoid changing architectural details, site or landscape features, or any other elements that are crucial to establishing the region's overall historic character. The *thalvaram* mustn't be covered by walls and utilised as it will affect the original character of the buildings.



### 8.1.3. Management measures

Maintenance and Regular Inspections: Establish a regular maintenance schedule to address minor repairs promptly. Conduct regular inspections to identify any deterioration or damage and take necessary corrective measures in the residences mostly. The maintenance of these buildings require a bit of craftsmanship as the cornice detailing and parapet details are peculiar in terms of heritage of Karaikal.

### 8.2. Conservation strategy

The Heritage of town has to be protected and at the same time help in generating economy to conserve and maintain them at present and future. However, the income through tourism is an easy way of generating economy as the agricultural economy has drastically reduced in the past decade. Conservation of the heritage of Karaikal will help in protecting them as a heritage town before they get abandoned or fully destroyed. The adaptive re -use of abandoned buildings will help in maintaining them and also serve as a source of economy.

#### 8.2.1. Tourist flow and potential of Karaikal

The town of Karaikal has two major temple related events which adds to the economy and promotes tourism . They are, Sani Peyarchi and Mangani festival dedicated to Sanieashwara Bhagvan and Ammaiyaar . The vent of Mangani happens during June to July while the event of Sani Peyarchi occurs during December to January. During these days, the town has a huge income of 5 lakhs to 8 lakhs Pilgrims/tourist to worship the god. Hence, the tourist flow has been constant over the years and the quarantine during covid period has increased the tourist flow since the events were presumed again without restrictions. The social outreach of these events have started welcoming tourist from around India during the days of Festivals.



*Fig.110 & 111. Pilgrims during Sani Peyarchi and Mangani Festival*

*Source: Polimer news*

### **8.2.2. Significance as a Historical Place:**

Karaikal is present in between, Velankanni, Nagore and Tharangambadi which has a huge tourist influx throughout the year. The heritage of Karaikal has always been concealed making it hidden among the raw sight. However, the revival of these heritages and establishing them will encourage people to stay and experience the culture of the Town. The temples of Karaikal have been established since the 7<sup>th</sup> century making them historically significant and prominent.

### **8.2.3. Adaptive Re-use suggestions**

About 7 percentage of houses i.e., the heritage of Karaikal are abandoned and are left without any proper preservation and conservation techniques. However, these structures require conservation and due to lack of fund it hasn't been restored, These structures can be revived and be used as a source of economic generation. Most of these houses are under private ownership and the owners have transferred areas. So these residences here can be maintained by the street residents and can be taken care of .

#### **Need for adaptive reuse**

The city has maximum tourist input during the Sanipeyarchi and Mangani festival. There are not sufficient stays for the pilgrims and tourists. Hence, the revival of these abandoned heritage residences will help in maintaining the economy of the town. The repurposing of these heritage will not only fund the owner to maintain the structure but also generate incomes. It also helps in sustainable tourism.



*Fig.112 & 113. Abandoned residences in Karaikal Town*

*Source: Author*

#### **Adaptive re-use of structures as Air Bnb**

Since the availability of residences are quite high in core region, the abandoned residences are the best choice to restore and they can be used as Air bnb during festival times. During normal days, these residences can be rented out for small gathering, party or cultural events.

The courtyard houses have been such a great influence in today's contemporary houses. It has always been a favourite element in traditional housing for people due to its extensive uses.

Hence the demand for courtyard or traditional houses has always been high and this would increase the occupancy during normal days too.



*Fig.114. Conversion of Courtyard Houses into Air Bnb*

*Source: Author*

### **8.3.Awareness measures**

A heritage festival based on the heritage of Karaikal has to be conducted every year to invite tourist flow and also enhance the economy of town. Spreading awareness in terms of events will definitely increase the interests of people in participating and learning about the town.

#### ***Workshops:***

One day workshops can be organised regarding the construction techniques of vernacular and traditional housing. Making of lime plaster and façade treatments are the predominantly required skills in terms of conservation of heritage of Karaikal.

#### ***Cultural events:***

Cultural events such as roadshows, instrumental recitals, dance and singing can be held at heritage spaces. Cultural activities must be encouraged in historically significant places to induce tourist influx and also spread awareness about the traditions of Karaikal.

**Competitions:**

Hosting sketching, photography, writing and drawing competition about the heritage of Karaikal at schools and colleges will help in creating awareness about the heritage of Karaikal from the initial level and also prize amounts would encourage participation.



Fig.115,116& 117.Pallanguzhi, traditional street games and oral recital of stories

Source: Alarmy

**Street Plays:**

Revival of Cultural Activities through Street Play in historic Streets through traditional games of *Pallanguzhi*<sup>6</sup>, *adupuli aatam*<sup>7</sup> and other boards games at *thinna*i part of old houses.

**Oral traditions:**

Usage of traditional spaces such as *mutram*, *thinna*i to interpret their function and to revive them by re- enacting or using the space like oral traditions and recitals of stories by grandparents for children in the street.

**Food Trails and traditional Cooking:**

Food trails or cooking of authentic dishes at courtyard spaces in houses as a communal space. This not only helps as a flexible cultural exchange but also promotes the activities and traditional practices and knowledge involved.

**Brochures and books on Heritage of Karaikal:**

Brochures / books for heritage walks and description of heritage of Karaikal must be made in order to spread the importance of the heritage of Karaikal and its significance over the years.

<sup>6</sup> Pallanguzhi, or Pallankuli, is a traditional ancient mancala game played in South India, especially Tamil Nadu and Kerala.

<sup>7</sup> Adupuli aatam is a tamil game which is asymmetric in which one player controls three tigers and the other player controls up to 15 lambs/goats. The tigers 'hunt' the goats while the goats attempt to block the tigers' movements.

### 8.4. Signboards for lost heritage

The town of Karaikal has lost lots of heritage in the past 50 years due to lack of awareness about them. Very few buildings have visual evidences while the rest are lost as a heritage in memory. Hence signboards for heritage that have been lost will be a living awareness for heritage conservation.

A granite/ stone slab can be encrusted to the compound or exterior of the building in order to put up a sign board about the heritage. A small description about its architectural features along with its time period can be added to the signboard.

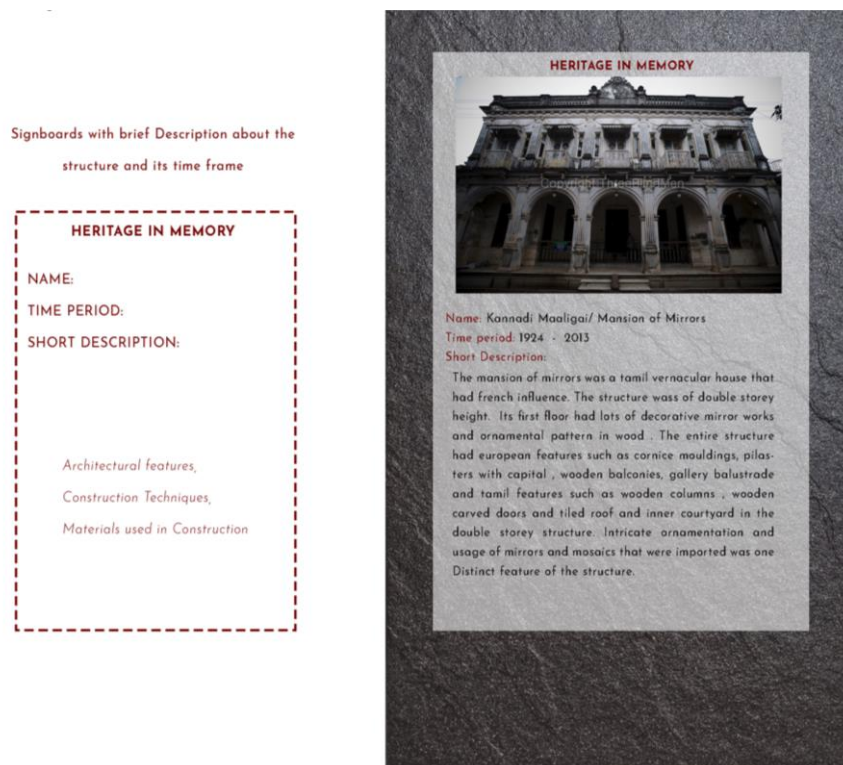


Fig.118. Sign Board Prototype on Lost Heritage of Karaikal

Source: Author



## **Chapter 9: FINAL OUTCOMES**

### **9.1. Understanding the Co-existence of different cultures of Karaikal**

Through the study conducted, it can be understood that Karaikal is a town that reflects different cultures and has been associated with history and the places since time immemorial. The cultural identity of the town has been studied in terms of architecture, space and socio-cultural patterns. Every community i.e., Hindu, Muslim or Christian has historic roots of more than 3 centuries. Through analysis and the heritage mapping done here, the architectural fabric and space has helped in assessment of every culture and their space. Moreover, literary evidences found has helped in identifying the historic core and the divisions based on culture that has existed in Karaikal for years.

Each community has its own spatial patterns and cultural values associated to it and that has helped in mapping the community and their activities in the precinct. On the basis of social hierarchy, business, administration and geographical factors the community has shaped its own space in the town. This pattern in historic core exists till date and can be seen even today.

By mapping every community and its activities, it was identified the main axial roads that existed through centuries has been the main cultural space that has served as a flexible area in serving every community and gatherings. Not only does the communities overlap each other in terms of geographical boundary but also in terms of architectural fabric and use these axial roads as a culturally flexible space. Every community in town has co-existed since the 17<sup>th</sup> century, and that can be seen with the living evidences.

Karaikal follows the multiculturalist theory of salad bowl where different communities not only co-exist but also stays distinctive. Even though put together, these communities survive in a mixed space with many cultural influences and still has kept its identity unique and intact.

### **19.2. Mapping of Urban Historic Fabric of Karaikal and listing of Existing built heritage of the historic town**

Through primary study, documentation of historic structures along with their photographs were done in order to understand the historic structures, their significance and characteristics. Listing of heritage structures inside the historic precinct have been collected along with architectural and ownership details. 262 structures were identified in the historic core of Karaikal by analysing them on the basis of their architectural features, historical values and materials used in construction. A urban historic fabric map was made using GIS with the list of heritage structures marked to indicate the structures present in the precinct.



The historic core is densely settled and even has heritage structures dating back to 17<sup>th</sup> century. These structures are densely seen along the quasi rectangular boundary of the town near the Arasalar river. By documentation and analysis of the historic core, the physical boundary of historical precinct along the river (which once had fort walls) have been demarcated as the historic precinct of Karaikal. This will help us not only in understanding the history of the town but also helps in preparation of site specific guidelines for the specific territory. The inclusion of the area as a historical precinct will indirectly contribute to the conservation of the space. Understanding and awareness about the precinct will be created through this mapping done on heritage structures of Karaikal.

### **9.3.Urban Conservation Strategies and Guidelines for heritage of the town**

The major issues identified in the core of Karaikal based on conservation is the lack of awareness and misconceptions about the practice of restoration. The historical precinct of Karaikal has living heritage i.e., the major heritage structures found here, are residences. Hence the maintenance, alterations and additions done to the structure according to contemporary requirements have changed the architectural fabric and spatial pattern of the town. Hence conservation guidelines based on façade treatments, lateral additions, management and maintenance were produced in accordance to the heritage structures of town. Also various measures such as signages for lost heritage, awareness programmes about heritage to encourage community participation and practices of conservation has to be held. This will not only improve the experiential quality of the space but also retain the historical and cultural value of the town.

Urban conservation strategies such as adaptive re-use methods can be employed here in Karaikal for the abandoned heritages. Many residences have been abandoned due to ownership issues, structural defects and lack of maintenance. More than 7 percent of the heritage found in the region in abandoned. These residences can be restored and converted as Air bnbs for the tourist that visit Karaikal during major events. The tourist potential of Karaikal is high due to annual events of Sani Peyarchi and Mangani festival that occurs every year, However, the touristic places such as Nagore ( dargah) and velankanni ( Church) has a huge tourist flow throughout the year. Hence the touristic potential of the town is high and its revival by enhancing the heritage of town will majorly help in contributing to the economy of the town.

## Chapter 10: FURTHER STUDIES

### 10.1. Archaeological Importance – Akkaravattam

The hamlet of Akkaravattam was once said to have a huge fort dating to the 2<sup>nd</sup> century during the reign of Karikala Chola, however, it is said that there were remains of the fort still seen along the riverbanks of Arasalar river near the ocean. This site might provide an insight into history of Karaikal before the 7<sup>th</sup> century and may provide as a historical data reserve.

### 10.2. Thirunallar and Thirumalairayanpattinam – historical research

The communes of Thirumalairayanpattinam and Thirunallar have history dating back to the 7<sup>th</sup> century, due to the temples of Sani Bhagvan and Petti Kaliyamman in the district. These potential temples have inscriptions about the Ancient Karaikal which might also help in adding to the historical Significance of the town.

### 10.3. Underground Tunnels from Ammaiya Temple to Brihadeshwara Temple, Thanjavur

The temple of Ammaiya and Nitheshwaram is said to have underground tunnels connecting to the Brihadeshwara temple of Thanjavur. However, there isn't solid evidence stating the following, hence the revival of these tunnels after furthest research may help in discovery of new history of the town.

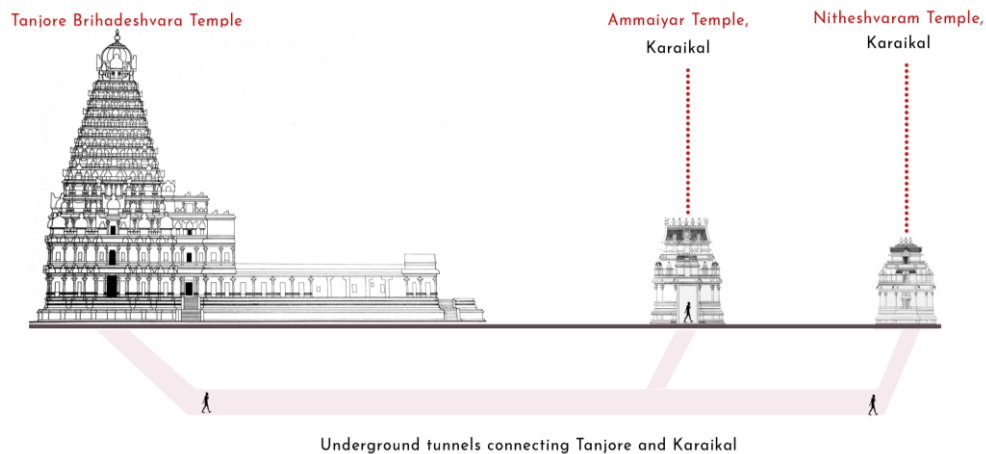


Fig.119. Underground tunnels connecting Thanjavur and Karaikal

Source: Author

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## **Annexures**

**Listing of Heritage Buildings**

**Thesis Sheets**