

# THE IDEALIZED HERITAGE VILLAGE: SURVEYING THE PUBLIC PERCEPTION FOR A SUSTAINABLE DEVELOPMENT

**Preeti Nair**

Research Scholar, Amity School of Architecture and Planning,  
Amity University, Uttar Pradesh, India

**Dr. Devendra Pratap Singh**

Professor (Director) Amity School of Architecture and Planning,  
Amity University, Noida, India

**Dr. Navneet Munoth**

Assistant Professor, Department of Architecture and Planning,  
MANIT, Bhopal, India

## ABSTRACT

*This research paper's main objective is to present the current status of the residential Built settlement in the rural areas of Chettinard region in Tamil Nadu, a state rich in heritage, religious and cultural aspects in India. The research paper also correlates to the traces of the human life (socio-cultural and economic) and communities' perception towards built heritage in Rural areas. For this purpose, the studies have been conducted on two of its villages which have been recommended as heritage village by the state government in UNESCO's tentative list. In this study, the survey research is used as a study tool which proved to be a viable method for – First, testing the relevance and public reaction and perception to the conceptual models and theories of sustainable built environment, Secondly, providing relevant empirical and quantitative data documenting the heritage architecture and its effects on the human understanding and community perception. The paper also uses GIS as a software tool for a better understanding and cataloguing of the built heritage in a holistic manner.*

**Keywords:** Rural Heritage, Vernacular architecture, Community Participation, Human Perception, Settlement pattern.

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## 1. INTRODUCTION

The influence of architecture and built structures lies in its ability to shape human understanding and community togetherness. In other terms, human perceptions are often translated to some percentage when people interact with architectural creations. Yet understanding the impact of the architecture and built form on the perception is rather difficult to quantify because of the subjectivity of different human experiences [1]. Conservation and protection of a settlement and understanding the values practiced by the local community helps in preserving the heritage character of rural area [2]. There are many reasons that resulted towards the disappearance of heritage villages, except for urbanization, such as youth leaving for better working, requirement for more well-suited living conditions, heritage village settlement layout can't match the ever-growing traffic congestions, villager lack of consciousness and awareness towards protection. Indeed, heritage village has its own barriers [3]. Historical buildings commonly face neglect for long years, out of repair and lack of basic living facilities. Especially in needy area these problems will be magnified [4]. Heritage village protection is unlike other cultural heritage protection which need to consider the people and the community, including their living conditions and overall village development [5]. The core point of protecting village architecture is to keep a humanitarian spirit and activity. Rural settlement and architecture landscape bases on nature and is a kind of man-made landscape containing persistence and identification is necessary to be preserved. It is the core landscape that reflects the functionality and cultural attributes of local landscape. Traditional culture and folk-custom landscape based on local knowledge and is a kind of social cultural landscape which divided itself with the political landscape that shows folk attributes and nation characters [6].

## 2. IMPORTANCE OF RURAL HERITAGE IN SUSTAINABLE RURAL DEVELOPMENT

The heritage is probably one of the most significant aspect of transformation in rural areas because it has a potential to change people's perception and evaluation criteria of natural environment [7]. Heritage can also become a catalyst for the future development and sustainability of a village settlement. It is also indicates in certain researches that with enhancing heritage character of a village, we can obtain a tool for people who live in rural zones to make them part of the rural development process. Additionally, the tool is likely to give rural areas a positive, renewed image and in this way, a trend for bringing the migrated youth back into these rural areas is supported. It is also indicated that cultural meanings and construction assets such as vernacular construction techniques can be mobilized for rural and regional development, and cultural identities become important for uplifting local economies [8].

## 3. STUDY AREA

The settlement of Chettinad is located in the southern part of the of Tamil Nadu in South India, with Chennai (Madras) as the capital. Chettinad is located in an area Northeast of Madurai, North of the River Vaigai and South of the River Vellar. It is spread on a semi-arid plain of 1,550 square kilometres. It is inhabited by 110,000 Chettiars who are spread over two cities and 73 villages. Out of these 73 villages the following two villages were taken as study areas.

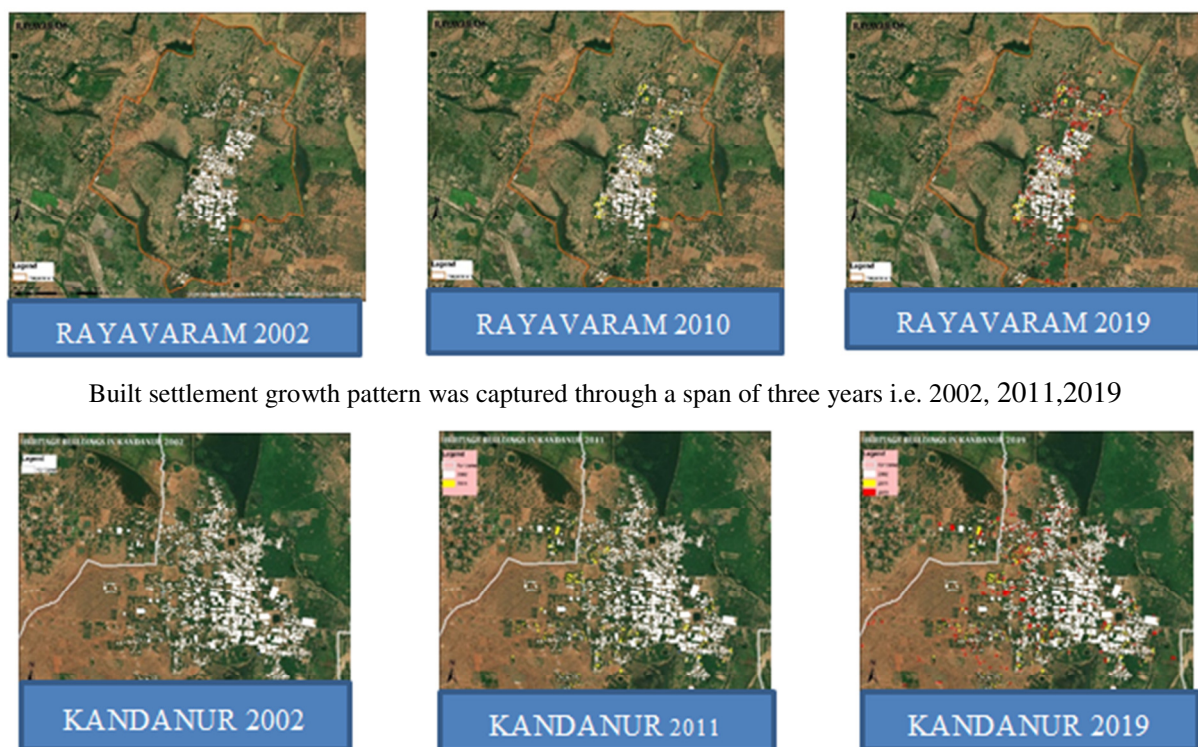
**Kandanur** is a rural settlement of 3,500 inhabitants, which is located 6 km from the main town of Karaikkudi on the road to Pudukkottai and Sakkottai. The core historical area of Kandanur comprises of unique and important 1900's and later Chettiar houses. While the 1870/80's houses of are smaller size and scale but very richly decorated.

**Rayavaram** is a large village of 5000 inhabitants situated in the district of Pudukottai. It is located 6 km from Kothamangalam and is also well connected to Kadiyapatti and Thirumayam Fort on Trichy road. Rayavaram is well endowed with historic Chettinad homes in four distinct zones around shivan temple. They represent over 150 years of domestic Art – deco style architecture.

#### 4. UNIQUE ARCHITECTURAL FEATURE -THE ART-DECO STYLE

The Chettinad region comprises a great number of unique “Art Deco” style houses (also called “French Art Deco”). Largely built in the 1940 to 1950’s, the buildings display architectural elements of different influences taken from both East and West [9]. Many villages have examples of this typical late Art Deco style [10]. Karaikkudi has an important Art-Deco quarter, which includes the Thousand Windows House making it ideal for heritage walks [11].

As a result of their travels, the Chettiars have integrated diverse influences into their traditions which have contributed to their uniqueness [12]. Their villages were constructed following precise and sophisticated rules of urban planning (orthogonal streets, specific water management schemes, technical innovation, artistic creativity, etc.). These settlements are also built in harmony with Tamil traditions: rectangular plots, houses with an inner courtyard (often with around 3 or 4 courtyards).



**Figure 1** Built settlement growth pattern was captured through a span of three years i.e. 2002, 2010, 2019 with the help of GIS software

#### 5. METHODOLOGY

In the following study, survey research is used as a study tool which proved to be a viable method for: 1) testing the relevance and public reaction to conceptual models and theories of sustainable built environment, 2) providing empirical and quantitative data documenting the heritage architecture’s effect on human understanding and perception [13]. Overall, the study reports data gathered from over a hundred survey respondents from a convenience sampling

(n=186) and serves as a preliminary attempt at bringing research into ‘sharper focus’ by surveying the public perception of Heritage architecture. The survey was designed to first test the relevance of the theoretical framework of comparative framework from empirical case study observation, thus following the inductive approach to research by identifying patterns from the built architecture [14]. The survey deals with a different type of empirical observation, namely the quantification of people’s subjective perceptions of heritage villages.



**Figure 2** Showing the “Art Deco Style Houses with Intricate details. Source- Pictures taken by the author.

**Table 1** Data collection towards the number of Heritage houses.

	<b>Kandanur</b>	<b>Rayavaram</b>
Total Residential Buildings	2647	1202
Heritage Building	342	307
New Construction	2305	893
Sample Size for Survey	98	88

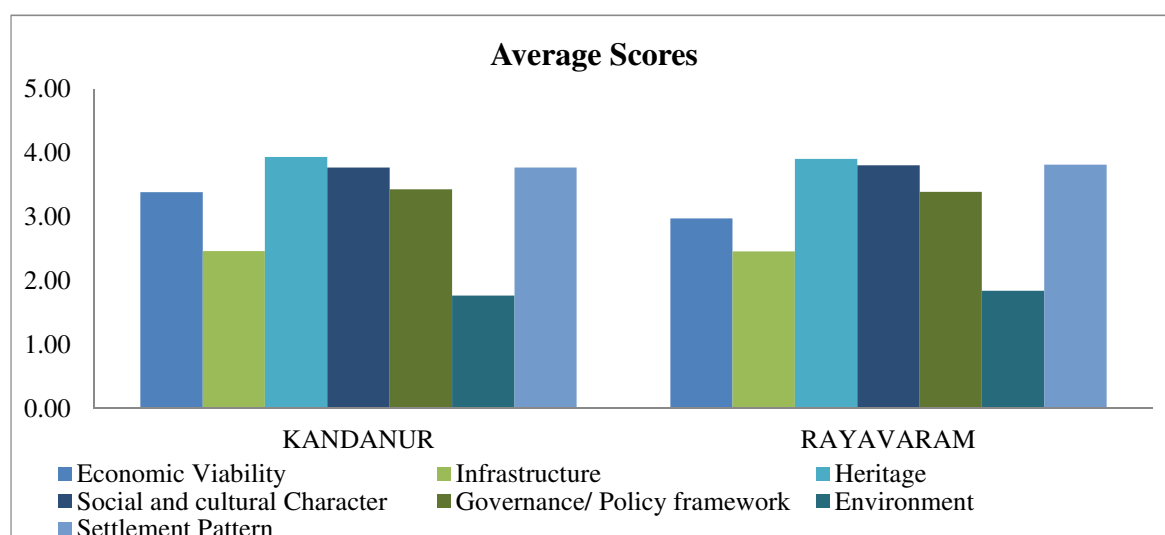
## 6. DATA COLLECTION

A comprehensive site survey was conducted for the area under study forming the historic core, combined with a detailed photo survey of the relevant components in the rural environment [15]. The well documented photo survey of the elevations and places of interest facilitated a better understanding of the identified patterns and their locations. Their villages were designed and constructed following accurate and sophisticated design principles of urban planning i.e. orthogonal streets, specific water management system, technical innovation, artistic creativity an approach, etc. These settlements are also built in harmony with the Tamil traditions of constructing in rectangular plots, houses with an inner courtyard which often ranged around 3 or 4 courtyards.

To understand the evolution of the rural settlement and to catalogue its existence in the rural areas, the help of GIS(Geographic Information System) is taken [16].First, we created a base map of the spatial database of the two villages. Then we tried to attach specific attributes such as the timeline of the construction, the year of the last intervention or restorations or reconstructions over time, etc. to each vector [17]. The main objective was to identify the residential buildings which were constructed through vernacular style and which residential buildings were renovated with their material study used in construction [18]. In this way it was possible to generate a number of maps that emphasize the old village system and the houses which have been abandoned by its residents. This attribute and the data base are updated in real time, and in this way the government can decide their restoration policies in a more precise way, comparing with the traditional methods. The updated data regarding the preservation and conservation status of residential houses represent an important factor in monitoring, protection and documentation of local heritage and, in the same time, offer the possibility to involve the people of local community into heritage management for a sustainable development [19].



A detailed questionnaire survey was also conducted based on the parameters derived from the literature study. A total of 186 respondent were interviewed, 98 respondents in Kandanaur and 88 respondents in Rayavaram. A Statistical analysis is performed by using descriptive and inferential statistics. Pearson correlation was applied to see the relationship between the variables. One-way Anova followed by Tukeys HSD post-hoc test for multiple



**Figure 3** Showing the analysis done comparing the parameters for heritage village of Kandanaur and Rayavaram.

Comparison was applied to see the mean difference between the villages. P-value less than 0.05 considered as significant at 95% confidence level. The statistical software SPSS version 24.0 was used in the analysis. The different parameters under which the study was initiated are 1) Economic Viability 2) Infrastructure 3) Heritage 4) Social and cultural Character 5) Governance/ Policy framework 6) Environment 7) Settlement Pattern.

## 7. RESULTS AND DISCUSSION

By analysing the spatial distribution of the characteristics of the residential buildings we have obtained a number of historical, social and cultural landmarks [20]. Thus, by linking the construction year of buildings with their inclusion in the list of historical construction over time. Most of intervention works, regardless of their complexity and nature (consolidation / restoration / renovation / repainting), were conducted with financial support from the community members [21]. Figure 1 highlights the growth of the settlements and by cataloguing it for three years such as 2002,2011,2019 for Kandanaur and 2002,2010,2019 for Rayavaram. They built is catalogued according to style of their construction, whether they fall under the heritage category or new construction style [22]. The research helped to investigate planning tools that can be used to guide new developments, while respecting rural cultural heritage, distinctive characteristics of the traditional buildings, and understanding priorities and needs of villagers related to make alterations and extensions [23].

## 8. CONCLUSION

Many interesting findings came out of the survey. The built structures (residential houses) plays important role to the development of these villages. A well preserved and of high aesthetic quality building environment adds important value to the place. It is actually one of the main reasons that attract visitors. To them, the architectural identity of a place is of

primary importance and should be definitely protected and further enhanced. Although they are attracted by a traditional settlement, they do encourage its protection mainly for its cultural and its bequest value. Restoration of the traditional characteristics of a place requires definitely some amount of money. Mostly it requires inspired design proposals that will deprive the place from everything that ruins its identity and reveal its hidden, or lost, special character. Architectural proposals inspired from the local tradition and history aiming at harmonically unite the old with the new can ensure a successful restoration project.

The analysis of the community perception also revealed that a lot of intervention is needed from the governments side. The local community is well developed financially and economically, but lacks in public spaces for the younger generation. The infrastructure lacked the modern facility and little intervention was done by the authorities towards making these villages a tourist destination. The number of tourists coming here annually have also reduced drastically due to lack of modern facilities.

As we saw in this paper, the Geographic information systems are very useful tools in the scientific process of managing and conserving cultural heritage. These systems offer the opportunity to collect, process, review and summarize complex data on the influence of environmental (biological and physical), socio-economic and political (tax law) factors on the historical monuments and help us to identify the current conservation status of the local heritage, correlates to the traces of the human life form, to the community attitude towards the built heritage, to the natural risks etc.

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