Mapping the spatial and social changes in Tamil migrant communities in Vathuruthy, Ernakulam

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Abstract. In recent years, Kerala has witnessed an inflow of migrant labourers from various parts of the country. With rapid urbanisation and booms in the real estate markets in Kerala, the state’s economy has seen an increase in the construction sector, which indirectly brings more migrants as a part of growing urbanisation. The research has its focus laid on Vathuruthy, which is believed to be the largest Tamil migrant settlement in the city. This research critically analyses how the area increased in its urban sprawl and also compares the housing situation of these migrant communities in view of their actual housing typology. The outcomes of the research suggest that there exists a housing prototype that has been evolved from the concepts of mixed-use and flexible spaces. A co-relation of housing typology and various other physical parameters was found which had similarities to the housing typology that the migrants had back in their native hometown. Due to the rapid increase in the inflow of these migrants and their settlement in Vathuruthy, the state government has taken initiatives in the betterment of their community like providing basic infrastructure facilities. With the increase in rapid urbanisation and the possibility of a much larger inflow of immigrants, the research stands as a strong base to how the migrants have adapted to their living spaces in view of factors like liveability and adaptability. The research will highlight a study that looks into how the migrants have adapted and converted their households based on their aspiration ladder.

1. Introduction
From the 2011 census, it was understood that Kerala holds the largest number of Tamil migrant workers, which establish to almost 53% of the entire migrant work force in the state. According to another study, Vathuruthy accommodates Kochi’s largest Tamil settlement of migrant labourers [1]. This large cluster of residential networks of 8.5 acres land initially was a bare land. Migrant labourers initially started settling under temporary shelters with around 12 families. Native owners of this place made this as an ‘income generator’ and started providing single rooms for rent. Urbanization brought in more Tamil migrants to work at Fort-cochin and Mattanchery. Affordability factor led them to settle at Vathuruthy and the area started to grow gradually. It was also implicit that in the beginning, the Tamil migrant groups at Vathuruthy have adapted the single-room mass housing settlements, also the public spaces like main roads and streets turned to be spaces of for their recreational activity and interactive spaces. Tamil influences can also be seen in morphological layers of these settlements as well [2].

This paper is intended to study and analyze the growth of Vathuruthy and the influence of Tamil migrant communities in the physical and spatial development of this area. In addition, a comparative study of various physical attributes such as character of built spaces, planning aspects, services and building materials that reflect their actual housing life style will be conducted to trace the influence.
By performing a critical analysis on this pattern and also by finding impact of the increasing Tamil migrant worker population and settlement, we will be able to understand the activity and settlement pattern of these migrant workers who are currently residing in Vathuruthy and to analyze spatial characters and urban layers. With signs of rapid growth of state’s economy and the increase in activities particularly in the infrastructure and construction sectors, the in-migration is expected to grow faster in the coming years [3]. Hence, re-defining the housing typology or defining what sort of typology or housing must be provided migrants in future can provide a healthy social living. Spatial analysis helps identify the level of adaptability in their living pattern and hence to define a liveability factor.

2. Literature Review

The purpose of the literature review is to identify the influence of morphological and cultural aspects on architecture to determine the satisfaction level of users. As per the district urbanization report of Ernakulam, Kerala is witnessing a large influence of migrant labourers from different parts of the country in the recent years. Migrants from Tamil Nadu have outnumbered other labourers from states as far as that of West Bengal, Bihar, Uttar Pradesh and Orissa. Ernakulam accounts for the largest number of migrants [4]. In a study on labourer migration to Kerala, author mentions specifically about Tamil migration to state and their living condition [3]. Shelter is a primary human requirement. Hence, it is the priority of the government to ensure housing development as it is a key factor for economic development as well as overall development of India. The main reasons for migration include better neighbourhood and opportunities, economic necessity, dilapidated houses, other hardship in hometown etc. Most of the migrant labourers are involved in the construction sector and hence it is equally important to provide a healthy living space with basic facilities for increased workability. Different studies reveal that unhealthy living conditions will lead to serious implication on urban environment and public living [3].

As a part of literature review, many textbooks, websites and articles related in this study are referred to identify different terminologies and study the concept of liveability and quality of space as a determining factor for satisfaction level. Liveability is a complex concept, which does not have a universally accepted definition. It encompasses basic human needs and together with the concept of sustainability can provide quality living and defines the social wellbeing of an individual [5].

Hence, based on the literature review, the different parameters that taken for the study to measure liveability and their physical manifestation are the elements of basic needs which includes basic public infrastructure facilities provided in the neighbourhood including water supply, drainage, sanitation, elements of social development which include good education and health and elements of social cohesion. It also includes the identification of areas of interactive spaces that improves social well-being. These include parks and other community interaction spaces or places of worship [6,7].

3. Methodology

Parameters for defining liveability factor are identified from the literature review [7] [5] [6]. User group for study identified is the low-income migrant communities settled at Vathuruthy. Live case studies are conducted to study and compare a typical Tamil settlement pattern and its characteristics. From this, Thiruvarur district in Tamil Nadu is selected since most of the surveyors belong to that area. The fieldwork strategies include conducting surveys and interviews and participant activity observation. Later a qualitative data comparison is carried out to analyze based on the liveability parameters and is compared with the result of the live case study.

In the present study, Vathuruthy, a small village in Ernakulam district of Kerala state is identified as a potential location due to the following reasons:

- Vathuruthy accommodates Kochi’s largest Tamil settlement of migrant labourers
- Self-contained settlement with basic infrastructure facilities. (a community hall, anganwadis, homeo dispensary, public park, electricity, toilets, shops) [2]
- Tamil migrants started settling from 1960s.
For sampling, a small group of area is taken as the representative of the whole mass and the results are drawn. Hence, out of the whole area, a limited sample size of 30 Tamil migrant workers of the selected area, out of a total of around 300 people who belong to low income group of unskilled labourers -both men and women will be selected. After selecting the various households for survey, they were categorized based on various physical and social attributes. The final phase involved in preparing a list of final samples, which were selected on random basis, based on the availability of data and willingness of sharing data. The data collection process was done in two phases over the span of 6 months from October 2019 to March 2020. The data collection process involved a detailed demographic survey and a questionnaire survey. The first phase of this process involves data collection from Kudavasal panchayat in Thiruvarur district, Tamil Nadu, from where the maximum number of migrant workers was recorded. The second phase, which was the detailed study involved in collecting data from Vathuruthy, Kerala. The primary and secondary data collected is categorized and
analyzed. In addition, comparative study of live case studies based on results of survey and made an analysis from the survey.

Figure 3. Location map of Vathuruthy colony and area selected for study (google earth)

Figure 4. Site features in the area of selection.
4. Results and discussion
The primary and secondary data collected is categorised and analysed.

- Comparative study of live case studies based on results of survey: comparing the respondents of native dwelling and how the spatial and architectural characters influence in making the user group feel the current house at Vathuruthy similar to their home at native place at Thiruvarur. In Thiruvarur, two typologies were identified and studied in detail and four typologies were studied in Vathuruthy apart from overall settlement study.

- Analysis from survey: Interviews taken from the respondents and suggestions for improving their existing living conditions.

4.1. Form development: Morphological evolution of Vathuruthy
A single housing prototype remains as a predominant housing typology. It is possibly because the majority of migrant workers are bachelors or those who prefer shared-living or individual rooms. There also exist certain families, where elder people have migrated long back from their native place. Hence, other typologies include individual family living or low-rise group housing shared by two or more families.

![Figure 5. Thiruvarur. (Author 2020)](image)

![Figure 6. Vathuruthy. (Author 2020)](image)

![Figure 7. Analysis of use of space.](image)
4.1.1. Analysis of spatial layout with respect to activities. Migrant workers mostly spend time inside their homes for sleeping only, because of their work schedule, hence, as shown in figure, the shared spaces for common use is very less in percentage compared to the area of private use i.e. bedrooms. Only in very few cases, there are private bedrooms, mostly for couples. In all other cases, individual beds are placed on a single room and shared. In general, all the activities and use of space are the same. There are no attached toilets and, in most cases, there are common toilets. Very few households have individual toilets which are locked by the owners when not in use. Kitchen and utility space are mostly extended spaces from existing building. They may be temporary sheets covered, semi-permanent or permanent spaces. The user group prefer to cook in fire-hearth while some have individual cooking gas connection. Comparing the built-inbuilt ratio, most of the individual open space of dwelling is the space remains in between different houses. Connecting pathways are mostly narrow with a width of 0.8-1 m.

4.1.2. Analysis of dimensions of use of space: progressive growth of flexible spaces with respect to need: increasing demand and need to accommodate the increase in user-group sharing the spaces led to progressive growth in spatial planning. Temporary /semi-permanent partitions such as sheets, thermocol, even wooden/aluminium shelves are used to separate rooms. Hence, a comparatively larger space may become two individual spaces accommodating two different families or bachelors. In addition, the common space becomes mixed-use i.e. living +dining TV room etc.

4.2 Comparison to traditional housing at Thiruvarur

4.2.1. Analysis of spatial layout with respect to activities: Since typology one is a mixed-use residence, the front area is converted to a hotel followed by a large room where most of the other activities take place such as preparation and packing of food by the family. Sleeping area is also integrated to this space. The kitchen and utility area are semi-open with temporary extensions towards the backyard. Typology two is a joint family residence. The front veranda and associated area are rented out and temporarily converted to a play school in the morning. The large space with the courtyard is where all the main functions take place such as sleeping, living etc. Similar to typology one, the kitchen and related activities are placed near the backyard. In both typologies, it is found that the toilets stand as an individual unit placed in the backyard detached from the main building.

![Figure 8. Analysis of use of space.](image-url)
4.3 Result from survey of primary data collection

Results are drawn from the demographic survey conducted on user group considering various parameters like age, sex ratio, education level, occupation, period of stay, place of origin, reason for migration, use of public infrastructure facilities, possession of consumables, and existing housing condition. The parameters were selected based on the liveability factor analysis from the literature review [6,7].

The study suggests that the migrant workers are engaged in different activities including construction field, they may be casual labourers, road workers, domestic workers, plumbing etc. The main reason for migration includes high wage rates and opportunity for the year. There exists a strong networking and the concentration of Tamil workers in the region which help them in finding job with considerable bargaining power. Hence, this led to the evolution of a self-contained settlement of these workers.

![Figure 9. Sex ratio](image)

Table 1. Housing typology identified

| Typology                  | Percentage |
|---------------------------|------------|
| Detached bungalow         | 13%        |
| Semi-detached bungalow    | 10%        |
| Row houses                | 20%        |
| Low rise apartments       | 23%        |
| Traditional housing       | 33%        |

The research shows that the spatial evolution of the existing settlement is the result to meet the increasing demand for rental housing for a certain period of time. The increase in the population density of urban poor in places where there is little or no planning to accommodate the people and provide them with services leads to serious implications including that of health. As mentioned in the book, ‘The planet of slums’, it is necessary to promote a more balanced urban hierarchy of industrial investment and population. The author also mentions the rental system prevailing among the urban poor stating examples of different slums across the world. [8]. “Landlordism is in fact a fundamental and diverse social relation in slum life worldwide.”

Identification of liveable space as a resultant of perception of certain factors considered in the study suggests that the satisfaction level is obtained by the migrants in a liveable space considering a short period of stay. The short period of stay of migrants, suggest that they prefer to spend more savings on their native homes and for personal needs and hence, the rented space is adapted by the user group for their growing needs and aspirations. Also noting the fact that, many families have brought homes in Vathuruthy suggests that liveable space is conceived by the user group. On a research paper by Solomon Benjamin, titled ‘Occupancy Urbanism: radicalizing politics and economy beyond policy
and programs’, the author mentions about appropriations put forth by the poor groups claiming public service on the institutions. The idea of occupancy urbanism can be compared in the context of Vathuruthy, where Tamil migrant community is increasing day by day and hence constitute multiple political spaces inscribed by complex local history. This could lead to point where developmentalism is completely rejected and could lead to the area being ghettoized [9].

Comparative study suggests a correlation observed in the spatial analysis of the native homes and their rented homes at Vathuruthy. The hierarchy observed in the planning level of public, semi-public and private spaces suggests that this acts as the central core of planning with considerable variations according to changing requirements. The idea of mixed-use is well conceived by people in Tamil Nadu as a developed habit of lifestyle. The evolution of spatial planning supports this finding. Saving electricity and community interaction is two of the many factors for this lifestyle. In typical Tamil residence, toilets are either remained as a separate unit detached from the main building or sometimes, common toilet was also seen. Kitchen and workspace were mostly placed near the backyard with washing and cleaning activities done in open backyard. Such similarities are seen in analysis the spatial development of Vathuruthy. Hence, they are easily adapted to single room houses when they come as migrants. Apart from spatial planning, the similarity in morphology is brought in terms of bright colour paints used in facades.

![Figure 10. Open space formed between built spaces at Vathuruthy. (Author 2020)](image)

![Figure 11. Public water taps at Vathuruthy. (Author 2020)](image)

In the chapter ‘The urban roots of Capitalist crisis’, of the book Rebel cities, the author mentions about how the demand and land value of these places increase overtime. Also, by stating the example of Dharavi, which is also considered one of the most productive places. Investment in built environment, particularly in housing, along with urbanization contributes to the National economy. “But land is not a commodity in the ordinary sense. It is a factional form of capital that drives from expectation of future rents...”. This pattern can be seen upon analyzing the development and growth of Vathuruthy over time. Increasing demand for labour brought migrants to the city, and hence brought in a new rental market. The natives started to build houses for renting out and hence eventually a new form of shared-living prototype emerged. Maximizing the yield can drive low-income household with catastrophic effects on underprivileged population [10].

5. Conclusion

Based on the comparison of the collected data, it can be analysed that the existing housing in Vathuruthy colony is satisfactory for temporary inhabitants. There are certain similarities observed in the comparison of architecture and spatial characters in dwelling of native place seen in Kudavasal, Thiruvarur and Vathuruthy colony such as morphology i.e. bright colours in the façade and certain planning aspects. Hence, the sense of belonging of space is seen in this sense.

Single-room shared living is derived for temporary housing. Currently thickly populated masses of this single housing unit are present and it cannot be further developed. Rather, in order to provide satisfactory conditions for their housing needs, certain urban inserts can be provided. Single room dwelling can provide a good base for developing the concept of temporary housing providing flexible spaces. There is improved scope for such spaces in near future with increasing demand rate and influx
of migrant labourers. From the study, it is clear that, the available housing condition is not satisfactory considering long-term living. Absence of proper natural light and ventilation in individual spaces with respect to increase in density, and other public facilities such as toilets and lack of proper drainage system can cause serious health issues in the migrants, which leads to an overall decrease in productivity in work force and indirectly effects the growth and development of in future. With the existing possibility of rapid growth of migrant community in future, there is no sufficient housing provided to meet their demands.

Hence, the significance of the current study lies in alerting the planners, policy makers and administrators about the absence of satisfactory housing conditions for the upcoming migrant community. To address the housing issue among labour through direct state provision, The Kerala state government has already put forth the Bhavanam Foundation Kerala (BFK), under the Department of Labour and Skills. Apna Ghar is one such project, which comes under BFK. Hence, the volume and density of Tamil migrant in Vathuruthy has to be taken into account in these projects and provide them with sufficient housing to avoid violent social unrest in future.

References
[1] B. P. Narendran, "District Migration Profile: labour migration to kerala. Ernakulam," Centre for Migration and Inclusive Development., 2017.
[2] "A settlement by the railway track.," The Hindu, 2017.
[3] S. K. Kumar, "Labour migration to Kerala: A study of tamil migrant labourers in Kochi ,," Centre for Socio-economic & Environmental Studies (CSES)., October 2007.
[4] "District Urbanisation Report," Department of town and country planning, Government of India, Ernakulam, January 2011.
[5] Community and Quality of Life: Data Needs for Informed Decision Making, National Academic Press, 2002.
[6] S. Ukil, "Composite framework for analysis of liveability," SPA Vijayawada, 2014.
[7] "Liveability Standards in Cities," The Ministry ofUrban Development (MoUD).
[8] M. Davis, Planet Of Slums., 2016.
[9] S. Benjamin, "Occupancy Urbanism: Radicalizing Politics and Economy beyond Policy and Programs," International Journal of Urban and Regional Research, 2008.
[10] D. Harvey, Rebel Cities., 2012.