Satisfaction on Physical Facilities of Dwelling Units under Low Income Public Housing in Kerala - An Analysis and Review

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ABSTRACT

Kerala, an Indian state in the south, is highly renowned for having high human development indices, especially in the areas of education and health. Notwithstanding these successes, the state still has serious housing problems, especially for its low-income citizens. Public housing for low-income individuals is an important sector in which the state has made significant investments. Kerala has gone a long way in terms of sheltering its impoverished citizens. Numerous initiatives, like as the Pradhan Mantri Awas Yojana (PMAY), have been successfully used to build thousands of houses. Launched in 2017, the LIFE Mission seeks to house every homeless family by 2024. The state has been building homes and apartments as part of its aim, making sure that necessities like power, water, and sanitary facilities are available. The demand for affordable housing still outpaces the supply despite these efforts. Due to increased urbanisation and population expansion, shortages are particularly acute in metropolitan areas. Even if they have more room, rural communities still struggle with connection and infrastructure. This article looks at Kerala's low-income public housing situation as it stands now, the satisfaction on the physical facilities of the dwelling unit, the difficulties it faces, and possible solutions for sustainable growth.

KeyWords: -House, Human Development, Affordable Housing, Housing scheme, Housing Satisfaction, Local Governance

INTRODUCTION

The government is acting as a catalyst for providing homes for low-income people and other issues. In India, the central and state governments formulate policies for providing adequate housing for the poor and marginalised people. The housing policy aims to ensure everyone has a decent place to live. The nation's strategies for human habitation are implemented through local self-government institutions. They plan, design, and implement different schemes following the local conditions and circumstances based on their socio-economic and cultural perspectives. The local self-government institutions play an active role in scheme design and implementation aspects. They provide various types of assistance based on central and state housing policies. It includes housing finance assistance in the form of subsidies, grants, finance for construction, etc., and other forms like apartments, constructed dwelling units, etc.

Statement of the Problem

Satisfaction on dwelling among low-income groups is an important aspect of societal well-being. Adequate housing is a basic human need and it also considered as determinant of human health, social inclusion, and quality of life. However, for many individuals and families with limited financial resources, achieving satisfactory housing conditions poses significant challenges. Housing satisfaction depends on a wide range of elements, including the occupant's home, local amenities, neighbour relationships, and the location of the housing unit. The physical components of the housing area, such as the common areas, ventilation and lighting, kitchen, rooms, drainage system, sanitary latrines and bathrooms, etc., all have a role in the overall satisfaction with the housing. The discernment of housing satisfaction is inclined primarily on the physical characteristics of the house along with different aspects like housing affordability, socio cultural environment, and livelihood opportunities. This research explores the satisfaction of the beneficiaries of the Kerala LIFE mission's housing project with their dwellings and its basic amenities.

Objectives of the Study

1. To study the importance of the physical facilities of the dwelling units towards beneficiary satisfaction.
2. To analyse the overall level satisfaction of the beneficiaries towards the physical facilities of the dwelling units.
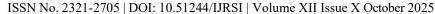
RESEARCH METHODOLOGY

The study employs both primary and secondary data sources. Primary data were collected from beneficiaries. The stakeholders are surveyed with pre-tested organized schedules as part of the research's core data gathering process.

The scope of the study is all Kerala. A multistage sampling procedure was used to choose the sample. The samples of beneficiaries from each of the three LSGI categories—Corporations, Municipalities, and Punjayats—separately. There are very little variances across geographic locations, except from beneficiary eligibility differences amongst the three LSGI categories. Two Districts are therefore chosen in the first stage for the sample. LSGIs are chosen in the second round of sampling as the focus of this study is housing assistance given by local self-government organisations in Kerala. Respondents were chosen at the end from each designated local self-government Institutions.

LITERATURE REVIEW

It is everyone's desire to own a home. The government is working to guarantee that Indians can afford homes. Providing everyone with affordable housing is one of the major issues that emerging nations must deal with. India is now experiencing a severe housing crisis. For those in the lower and medium income brackets, owning a home has become a challenging reality. Therefore, in order to provide the general public with cheap housing, it is imperative that innovative, cost-effective, and environmentally friendly housing technologies be included during the construction process (Ambaliya et al., 2018). Kerala's public housing initiatives have been a fundamental feature of the welfare agenda, demonstrating the state's dedication to social justice and inclusive growth.

Residential satisfaction is a crucial metric that planners, architects, developers, and policy makers utilise in a variety of ways. It is described as the feeling of fulfilment one has when they have or attain what they need or desire in a house. The housing requirements theory, housing deficit theory, and psychological construct theory are the three theories that are connected to residential satisfaction. Most empirical investigations have employed one or more of these theories, or a mixture of them, in their study design. After analysing a number of variables that reflect sociodemographic traits, housing and neighbourhood characteristics, and their perceptions of these things, it has become clear that more research is necessary before a general theory of residential satisfaction or dissatisfaction can be developed (Abidin et al., 2019). Physical characteristics were essential for those living in regular housing, psychosocial factors and physical features were more significant for those living in assisted housing. Adequate housing options for individuals with mental impairments need consideration of these factors by legislators, policymakers, and nursing personnel (Daniel Babalola et al., 2016). Techniques for post-occupancy evaluation were created to assess how occupants react to changes in their surroundings and connect those reactions to tangible aspects of the space (Aigbavboa & Thwala, 2012). Using the Gauteng Province as a case study, a methodology is put forth for forecasting and assessing the degree of housing satisfaction in South African public housing projects (the economic centre of Southern Africa). The proposed model presupposes that the adequacy level of the residence and its surroundings, as well as the beneficiaries' subjective happiness with the housing environment, be measured (Aigbavboa, 2015). Five objective components of satisfaction were examined in order to examine housing satisfaction: the social environment, public facilities, housing unit features, housing unit support services, and neighbourhood facilities. Beneficiaries' levels of satisfaction were measured using a Likert scale (Abdul & Nurul, 2018). The government must update the housing estate to make it more visually beautiful and liveable in order to improve the perception and satisfaction of the estate among residents and non-residents (Adeleye et al., 2014). Indigenous people have unique challenges when it comes to housing and how it affects their health when they live in rural places (Ross S. & Wayte, 2006). Lack of space, the requirement for particular kinds of rooms, and floor layouts that did not provide privacy appear to be the

main causes of dissatisfaction. As a result, there was only moderate to poor satisfaction with the dwellings' physical features (Yahaya et al., 1982). Both homeownership and housing pleasure are important determinants of overall happiness when utilising housing satisfaction as an explanatory variable (Zhang et al., 2018).

Data Analysis and Interpretation

Demographic Profile

Demographic profile is regarded as an important component of all surveys and studies and it is the measurable characteristic of a population. The researcher has attempted to frame the profile of respondents in the Ernakulam and Idukki districts. The table 1 describe the respondent's demographic profile of the beneficiaries of the housing scheme. A residence that was or is still used as a primary residence. The geographical location in which an 'individual or family dwells' is referred to as their "area of residence". The Constitution of India has delegated responsibility for housing and urban development to the state governments. At the local level, a dwelling and shelter strategic plan would be prepared, which would be integrated with the poverty reduction scheme. "APL and BPL categorization" is a financial benchmark based on a certain level of revenue. The Indian government sets it. In general, absolute poverty limits are derived by assessing the survival requirements of diverse households, such as food and shelter. The LIFE mission project provides housing assistance in various forms based on the needs and aspirations by categorizing the prospective beneficiaries.

The Table 1, reveals the Local body-wise area of residence of the respondents, shows that 414 (67.9 percentage) reside in an area under grama panchayat. Out of the 610 respondents, 141 (23.1 percentage) belong to municipalities, and the number of respondents living in corporations is 55 (9 percentage). Table 1 also shows the categorization of the respondents based on the poverty line. It depicts those 328 (53.8 percentage) respondents under the BPL category, and 282 (46.2 percentage) of the respondents fall under the category of APL.The Table 1 depicts 568 (93.1 percentage) respondents who became the housing scheme beneficiaries under "homeless with the land." The landless and homeless categories consist of 34 (5.6 percentage) respondents. Housing assistance is granted to some beneficiaries for completing their houses or converting non-liveable houses into liveable houses, and the number of respondents under this category is 8 (1.3 percentage).

Table 1, Demographic Profile

Demographic Profile	Frequency	**Percentage**
Local body wise residence of the respondents		
Panchayat	414	67.9
Municipality	141	23.1
Corporation	55	9.0
Categorization based on poverty line		
BPL	328	53.8
APL	282	46.2
Category of beneficiary under the scheme		
Homeless with land	568	93.1
Land less and Home less	34	5.6
Unfinished/Non-liveable Houses	8	1.3

Source: Primary Data

Assessment of the Level of Satisfaction with Physical Facilities of the House

Housing satisfaction depends on a wide range of elements, including the occupant's home, local amenities, neighbour relationships, and the location of the housing unit. The physical components of the housing area, such as the common areas, ventilation and lighting, kitchen, rooms, drainage system, sanitary latrines and bathrooms, etc., all have a role in the overall satisfaction with the housing. Mean Score Analysis is a simple analytical tool applied to identify the level of agreement or the level of satisfaction of the variables under the research study. Mean Score Analysis is quite powerful in categorizing the level when the data is collected by using any type of scale. The respondents are asked about the nine facilities available in the house, like Kitchen, sanitary latrine Electrification and plumbing, etc., on a five-point Likert scale. The responses are scored as 1 for 'Highly dissatisfied', 2 for 'Dissatisfied', 3 for 'Neutral', 4 for 'satisfied' and 5 for 'Highly satisfied. The total score of the nine questions for all 610 respondents is found, based on which we calculate the mean percentage score of the level of satisfaction of beneficiaries. $\left[MPS = \frac{MeanScore \times 100}{Maximum possible score} \right]$. This score is classified into one of the four groups as poor or low if the mean percentage score is less than 35 percentage, average if the mean percentage score is between 35 to 50 per cent, good or medium if the mean percentage score lies in the interval 50 to 75 percentage and excellent or high if the mean percentage score is above 75 percentage. Overall housing satisfaction is influenced by the physical aspects of the housing area, including the common areas, ventilation and lighting, kitchen, rooms, drainage system, sanitary latrines and baths, etc.

Satisfaction Level of Beneficiaries on Physical Facilities of House in Corporations, Municipalities and Grama Punchayets The management of urban areas with high population densities and levels of urbanisation is the responsibility of a type of local government called a municipal corporation. An urban local government entity is a municipality. Its primary duties are to provide the metropolitan population with public services. Rural local governments are known as panchayats. It is in charge of managing a village's day-to-day operations, including the upkeep of the village in various respects. The percentage score analysis of overall satisfaction with physical dwelling amenities in corporations, municipalities and panchayats is shown in table 2.

Table 2, Satisfaction on Physical Facilities of House in Corporations, Municipalities and Grama Punchayats

Area - Corporation, Muncipality and Punchayat	Mean	N	Mean % score	Rank
Kitchen	3.98	610	79.57	1
Sanitary latrine	3.96	610	79.25	2
Electrification and Plumbing	3.96	610	79.11	3
Smoke less challah	3.94	610	78.79	5
Drainage system	3.92	610	78.33	7
Bathrooms	3.94	610	78.72	5
Bed Rooms	3.93	610	78.59	6
Veranda	3.94	610	78.85	4
Common Room	3.91	610	78.20	8

Source: Primary Data, Note: N-No. of respondents

The analysis of various physical amenities, including the kitchen, sanitary facilities, electrification, plumbing, smoke-free challah, drainage system, bathrooms, bedrooms, verandas, and common areas, the total score lies between the total score of 75 percentage to 100 percentage. It shows that they are very satisfied with the amenities of the house.

Satisfaction on Physical Facilities of House on Beneficiary Category

The LIFE mission project provides housing assistance in various forms based on the needs and aspirations of the prospective beneficiaries. The categorization of respondents based on the beneficiary category is Homeless with land, Land less and Homeless and Unfinished/Non-liveable Houses. Housing satisfaction is influenced by the physical aspects of the housing area, including the common areas, ventilation and lighting, kitchen, rooms, drainage system, sanitary latrines and baths. Mean percentage score analyses of satisfaction on physical facilities of the house on different beneficiary category have discoursed below. The Table 3 shows the Mean Percentage Score analysis of overall satisfaction on physical facilities of the house by the beneficiary category Homeless with land, landless and homeless, unfinished/non-liveable home.

Table 3 Satisfaction on Physical Facilities of House on Beneficiary Category Under Homeless with Land, Land Less and Homeless and Unfinished/Non-Liveable Houses

Category	Mean	N	Mean % score	Rank
Kitchen	3.98	610	79.57	1
Sanitary latrine	3.96	610	79.25	2
Electrification and Plumbing	3.96	610	79.11	3
Smoke less challah	3.94	610	78.79	5
Drainage system	3.92	610	78.33	8
Bathrooms	3.94	610	78.72	6
Bed Rooms	3.93	610	78.59	7
Veranda	3.95	610	78.86	4
Common Room	3.91	610	78.20	9

Source: Primary Data, Note: N-No. of respondents

In table 3, the Mean Percentage Score analysis results used to gauge respondents' levels of satisfaction with the homes' physical amenities fall under the heading of " homeless with land, land less and homeless and unfinished/non-liveable houses." The range of average ratings for different physical amenities, such as the kitchen, restrooms, plumbing, electricity, drainage system, bedrooms, bathrooms, verandas, and common areas, is 75 percentage to 100 percentage. It demonstrates their high level of satisfaction.

Satisfaction on Physical Facilities of House on Beneficiary Category Based on Poverty Line

At the local level, a dwelling and shelter strategic plan would be prepared, which would be integrated with the poverty reduction scheme. APL and BPL categorization is a monetary benchmark based on a certain level of revenue. The Indian government sets it. In general, absolute poverty limits are derived by assessing the survival requirements of diverse households, such as food and shelter. Table 4 shows the mean per cent score analysis of overall satisfaction on physical facilities of the house by the beneficiaries comes under BPL and APL categories.

Table 4, Satisfaction on Physical Facilities of House on Beneficiary Category Based on Poverty Line-BPL&APL

Category	Mean	N	Mean % score	Rank
Kitchen	3.98	610	79.57	1
Sanitary latrine	3.96	610	79.25	2
Electrification and Plumbing	3.96	610	79.11	3
Smoke less challah	3.94	610	78.79	5
Drainage system	3.92	610	78.33	8
Bathrooms	3.94	610	78.72	6
Bed Rooms	3.93	610	78.59	7
Varandha	3.94	610	78.85	4
Common Room	3.91	610	78.20	9

Source: Primary Data, Note: N-No. of respondents

Table 4 shows the results of the Mean Percentage Score Analysis used to scale respondents' overall satisfaction with the homes' physical amenities under the "BPL, APL and General category." The range of average ratings for different physical amenities, such as the kitchen, restrooms, plumbing, electricity, drainage system, bedrooms, bathrooms, verandas, and common areas, is 75 percentage to 100 percentage. It demonstrates their high level of satisfaction.
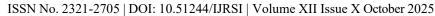
Findings and Suggestions

This study has provided valuable insights into the satisfaction levels of low-income households with their dwelling units. The outcomes suggest that even with the challenges and limitations allied with low-income housing, a significant majority of residents convey high level of satisfaction with their current dwelling units. The leading factors causing to this satisfaction include accessibility, affordability and the availability of basic amenities. The outcomes of this study have important propositions for policymakers, housing developers, and practitioners. They highlight the need to prioritize affordability, community commitment, and the provision of needed services in the development and management of low-income housing. By addressing these critical factors, it is possible to initiate sustainable, liveable, and sustaining housing conditions for low-income households.

Future research should focus on exploring the long-term impacts of low-income housing on residents' attributes of life, health, and socioeconomic results. Furthermore, studies examining the impact of modern housing models, on low-income households' satisfaction and well-being would be valuable contributions to the field.

CONCLUSION

Ultimately, this research exhibits that low-income housing can be more than just a roof over one's head; it can be a base for pride, steadiness, and opportunity. By striving to make housing environments that highlights residents' needs and aspirations, we can better build stronger, more resilient communities. Low-income public housing in Kerala is a complex issue that requires continuous effort and innovation. While the state has made commendable progress, significant challenges remain. By adopting a holistic approach that includes innovative land use, streamlined processes, public-private partnerships, sustainable practices, financial support, and community involvement, Kerala can move closer to its goal of providing safe, affordable, and sustainable

housing for all its residents. This not only improves the quality of life for low-income families but also contributes to the overall social and economic development of the state.

REFERENCES

1. Abdul, M., & Nurul, M. (2018). Social Housing Programme of Selangor Zakat Board of Malaysia and Housing Satisfaction. Journal of Housing and the Built Environment, 26(2), 143–164.
2. Abidin, N. Z., Abdullah, M. I., Basrah, N., & Alias, M. N. (2019). Residential Satisfaction: Literature Review and A Conceptual Framework. IOP Conference Series: Earth and Environmental Science, 385(1). https://doi.org/10.1088/1755-1315/385/1/012040
3. Adeleye, A. O., Azeez, O. T., & Yusuff, O. I. (2014). Perception of Housing Quality by Residents and Non-Residents of Ibara Housing Estate, Abeokuta, Ogun State, Nigeria. American Journal of Human Ecology, 3(3). https://doi.org/10.11634/216796221403586
4. Aigbavboa, C. O. (2015). A Model for Assessing the Housing Satisfaction of Beneficiaries in Publicly Funded Housing in South Africa. http://www.uj.ac.za
5. Aigbavboa, C. O., & Thwala, W. D. (2012). An appraisal of housing satisfaction in South Africa low income housing scheme. International Journal of Construction Management, 12(1), 1–21. https://doi.org/10.1080/15623599.2012.10773181
6. Ambaliya, S. N., Desai, V. N., & Shah, J. (2018). A Critical Study On The Current Status Of Affordable Housing in India. JETIRK006086 Journal of Emerging Technologies and Innovative Research, 5(11), 583–588.
7. Daniel Babalola, O., Ibem, E. O., Olotuah, A. O., & Fulani, O. A. (2016). Residents' Perception of Quality of Public Housing in Lagos, Nigeria. In International Journal of Applied Environmental Sciences (Vol. 11, Issue 2, pp. 583–598). http://www.ripublication.com
8. Ross S., B., & Wayte, K. J. (2006). Housing and health in Indigenous communities: Key issues for housing and health improvement in remote Aboriginal and Torres Strait Islander communities. Australian Journal of Rural Health, 14(5), 178–183. https://doi.org/10.1111/j.1440-1584.2006.00804.x
9. Yahaya, N., Pengajian, L., Manusia, P., & Pertanian, F. (1982). Housing Satisfaction and Aspirations of Householders in Salak Selatan Squatter Resettlement. In Pcrtanika (Vol. 5, Issue 1, pp. 76–83).
10. Zhang, F., Zhang, C., & Hudson, J. (2018). Housing conditions and life satisfaction in urban China. Cities, 81, 35–44. https://doi.org/10.1016/j.cities.2018.03.012