

# Public Housing as an Engine of Local Employment: Evidence from Life Mission Kerala

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**Abstract**—This study examines public housing as a catalyst for local employment generation through an impact assessment of Life Mission Kerala, the flagship housing initiative of the Government of Kerala. Conceived with the objective of ensuring “Housing for All” in the state, the programme integrates multiple central and state housing schemes including Pradhan Mantri Awas Yojana – Urban (PMAY-U), Pradhan Mantri Awas Yojana – Gramin (PMAY-G), Rajiv Awas Yojana, Indira Awaas Yojana, Integrated Housing and Slum Development Programme, Basic Services for the Urban Poor, and the EMS Complete Housing Programme under a unified institutional framework. With financial assistance of up to ₹400,000 per housing unit, supplemented by state support to bridge funding gaps in centrally sponsored schemes, the programme has facilitated the completion of more than 500,000 houses across Kerala. Beyond its social objective of housing security, this paper evaluates the programme’s contribution to direct employment generation in the construction sector. Using an impact assessment framework, the study estimates trade-wise employment effects across foundation works, masonry, roofing, finishing, electrical installation, plumbing, and painting. The findings highlight the labour-intensive nature of decentralized housing construction and its multiplier effects on local economies. The study argues that large-scale public housing programmes can function not only as social welfare interventions but also as strategic instruments for inclusive economic development and livelihood creation.

**Index Terms**—Life mission, Housing security, inclusive economic development, direct employment

## I. INTRODUCTION

Housing has long been recognized as both a fundamental human need and a driver of economic activity. In developing economies, large-scale public

housing programmes play a dual role: addressing shelter deprivation while stimulating employment and local economic growth. Kerala presents a distinctive case in this regard through Life Mission Kerala, the flagship housing initiative of the Government of Kerala. Launched with the objective of providing “Housing for All” to families without adequate shelter, the programme represents an integrated and mission-mode approach to eliminating homelessness in the state.

Life Mission consolidates several central and state housing initiatives into a unified framework. It aligns with national schemes such as Pradhan Mantri Awas Yojana – Urban (PMAY-U) and Pradhan Mantri Awas Yojana – Gramin (PMAY-G), while also subsuming earlier programmes including Rajiv Awas Yojana, Indira Awaas Yojana, Integrated Housing and Slum Development Programme, Basic Services for the Urban Poor, and Kerala’s EMS Complete Housing Programme. Under this convergence model, beneficiary households receive financial assistance of up to ₹400,000 per unit, with the state government providing additional support to bridge funding gaps in centrally sponsored components. This integrated structure enhances administrative efficiency, financial coordination, and implementation speed.

While the social impact of improved housing conditions such as enhanced health, security, and social inclusion is widely acknowledged, comparatively less attention has been given to the employment implications of large-scale housing delivery. Construction is inherently labour-intensive, particularly in decentralized, beneficiary-driven housing models such as those adopted in Kerala. Activities including foundation construction, wall masonry, roofing, plastering, electrical wiring,

plumbing, and painting generate substantial direct employment for skilled and semi-skilled workers at the local level.

With more than five lakh houses completed, Life Mission provides a valuable empirical context to examine how public housing can act as an engine of local employment. This study conducts an impact assessment of the programme's direct employment generation in the construction sector. Specifically, it seeks to (i) estimate trade-wise employment intensity per housing unit, (ii) assess aggregate employment created across the programme lifecycle, and (iii) evaluate the broader implications for local labour markets and inclusive growth in Kerala.

By situating housing policy within the framework of labour economics and development planning, this paper contributes to the growing discourse on infrastructure-led employment strategies. It argues that public housing, when implemented at scale and supported by adequate fiscal coordination, can simultaneously advance social welfare objectives and stimulate sustainable livelihood opportunities.

### 1.1 Background of the Study

Public investment in housing has historically been viewed as a social welfare intervention aimed at reducing homelessness and improving living standards. However, in labour-surplus economies, housing construction also functions as a significant source of employment generation, particularly for semi-skilled and skilled workers in local construction markets. Kerala's housing sector operates within this dual framework of social protection and economic stimulation.

Life Mission Kerala, implemented by the Government of Kerala, represents one of the largest state-led housing initiatives in India, with more than five lakh houses completed. By integrating central schemes such as Pradhan Mantri Awas Yojana – Urban (PMAY-U) and Pradhan Mantri Awas Yojana – Gramin (PMAY-G) with earlier state housing programmes, Life Mission created a convergence-based institutional model aimed at achieving “Housing for All” in Kerala.

The programme adopts a decentralized, beneficiary-driven construction approach, where houses are typically constructed at the local level (around 500 sq. ft. units) through small contractors, local masons, electricians, plumbers, and painters. Such a model

inherently generates direct employment across multiple trades, including foundation work, masonry, roofing, finishing, electrical installation, plumbing, and painting. Despite the scale of implementation, systematic empirical assessment of employment generation under this programme remains limited. This study addresses that gap by examining construction-linked employment effects at the grassroots level.

### 1.2 Significance of the Study

The following points reveal the significance of the study

1.2.1 Policy Relevance – While housing schemes are primarily evaluated in terms of number of units delivered, this research shifts the focus toward labour market outcomes. It provides empirical evidence on how public housing functions as an employment-generating mechanism.

1.2.2 Evidence for Development Planning – By quantifying trade-wise employment per housing unit, the study offers actionable insights for policymakers designing infrastructure-led livelihood strategies.

1.2.2.1 Decentralized Economic Impact – Since Life Mission houses are constructed across panchayats, municipalities, and corporations, employment benefits are spatially distributed. The findings therefore contribute to discussions on balanced regional development across Kerala's 14 districts.

1.2.2.2 Methodological Contribution – The study integrates contractor-based expected employment estimates with beneficiary-reported observed employment data and statistically tests the goodness of fit between them. This dual-source validation enhances reliability and strengthens empirical rigour.

1.2.2.3 Macro-Level Estimation – By extrapolating observed employment coefficients to district-level housing completion data, the study provides a comprehensive estimate of total direct employment generated across Kerala.

### 1.3. Methodology of the Study

#### 1.3.1. Research Design

The study adopts a quantitative impact assessment approach focusing on direct employment generation in the construction of 640 sq. ft. housing units under Life Mission Kerala.

### 1.3.2. Data Collection

The study relies on primary data collected from two sources:

#### a) Contractor-Based Expected Employment Data

Structured data were collected from contractors involved in constructing 640 sq. ft. houses in Grama Panchayats, Municipalities and Corporations.

Contractors provided trade-wise labour estimates (in labour days/person-days) for Foundation work, Masonry (wall construction), Roofing, Finishing (plastering, flooring, etc.), Electrical installation, Plumbing and Painting

These estimates were treated as the expected employment generation per housing unit.

#### b) Beneficiary-Based Observed Employment Data

Data were collected from beneficiaries who completed houses under the scheme. They provided actual labour utilization details during construction. This constituted the observed employment generation per unit.

#### c). Sample frame

For the present study three Gramapanchayath, Three Municipalities and one Corporation were selected as sample units. A total of 30 contractors and 210 beneficiaries were selected from these samples' units for data collection.

### 1.4. Goodness-of-Fit Analysis

To test the reliability of contractor estimates, the study conducted a statistical goodness-of-fit test between expected and observed employment data.

- Null Hypothesis ( $H_0$ ): There is no significant difference between expected and observed employment generation.
- Alternative Hypothesis ( $H_1$ ): There is a significant difference between expected and observed employment generation.

A Chi-square goodness-of-fit test was employed to determine whether observed labour utilization significantly deviated from contractor estimates. This step ensured that the employment coefficients used for large-scale estimation were empirically validated.

### 1.5. Estimation of Employment Generation

After validation, the observed employment coefficients (average labour days per 500 sq. ft. unit) were used to estimate total direct employment generation.

Steps followed:

1. Calculation of average observed labour days per housing unit (trade-wise and total).
2. Collection of district-wise completed housing data across the 14 districts of Kerala.
3. Multiplication of average labour days per unit by total completed houses in each district.
4. Aggregation of district-level estimates to compute total employment generation in Kerala.

## II. REVIEW OF LITERATURE

NITI Aayog (2020) conducted an evaluation of Pradhan Mantri Awas Yojana-Gramin to assess its effectiveness in improving rural housing conditions. The study used field surveys and secondary data analysis. The findings revealed that PMAY-G significantly enhanced housing quality, sanitation, and access to basic services, while also generating substantial employment opportunities in rural construction activities.

The Pradhan Mantri Awas Yojana-Urban has been studied for its macroeconomic impact on employment. Ministry of Housing and Urban Affairs (2017) reported that PMAY-U contributes significantly to job creation in construction and allied industries, including cement, steel, and transportation sectors.

A study by Planning Commission of India (2013) evaluated the Indira Awaas Yojana using household-level data. The study found that while IAY improved access to housing, it faced issues related to construction quality and inefficiencies in implementation.

National Institute of Urban Affairs (2019) analyzed the socio-economic outcomes of PMAY-U using urban case studies. The study highlighted improvements in housing security and living standards, along with increased employment opportunities for informal sector workers.

A study by National Council of Applied Economic Research (2014) examined the economic impact of affordable housing in India. It found that housing construction has strong backward and forward linkages, generating employment across multiple sectors.

World Bank (2018) studied housing policies in developing countries, including India. The report emphasized that schemes like PMAY contribute to

inclusive growth, poverty reduction, and increased economic participation among beneficiaries.

A study by Kundu, Amitabh (2020) analyzed challenges in PMAY implementation. The research identified issues such as land constraints, delays in fund disbursement, and lack of skilled labor, which affect both housing delivery and employment generation.

Research by Mehrotra, Santosh (2019) highlights that public investment in housing has a strong employment multiplier effect, particularly in labour-intensive sectors like construction. The study shows that housing programmes significantly contribute to job creation and income generation.

A case study by Akhil Baby explored the impact of the LIFE Mission Kerala in Piravom Municipality. The study emphasized that the scheme has a positive influence on human development, particularly among economically weaker sections. It highlighted the integration of housing provision with livelihood support, indicating that the programme contributes not only to shelter but also to economic empowerment and employment opportunities (Baby, 2022).

According to the Local Self Government Department Kerala, the LIFE Mission Kerala integrates housing provision with livelihood and skill development initiatives. The scheme aims to enhance employment opportunities through skill training, self-employment, and institutional linkages, ensuring both housing and livelihood security (LSGD Kerala, 2021).

Recent progress reports show that more than 5 lakh houses have been completed under the LIFE Mission Kerala, benefiting a large population across Kerala. Such extensive public investment in housing has stimulated economic activity, particularly in rural and semi-urban areas, through construction-related employment (Government of Kerala, 2023)

Policy analyses highlight that the LIFE Mission Kerala follows an integrated development model, combining housing with financial empowerment and livelihood support systems. The scheme promotes local participation, use of local labour, and self-employment initiatives, thereby contributing to sustainable livelihood generation (LSGD Kerala, 2021)

### III. THEORETICAL BACKGROUND

India has introduced several housing schemes to support economically weaker and needy sections of society. These schemes include:

#### 3.1 Indira Awaas Yojana (IAY)

Indira Awaas Yojana was a centrally sponsored scheme aimed at providing free housing to Scheduled Caste (SC), Scheduled Tribe (ST), and other Below Poverty Line (BPL) households in rural areas, with the objective of offering a permanent solution to their housing problems. Under the scheme, beneficiaries were required to own land for house construction. Beneficiary selection was carried out through Gram Sabhas to ensure transparency and community participation. Houses were generally sanctioned in the name of the female member of the beneficiary household. In special circumstances, houses were allotted either jointly in the name of both husband and wife or solely in the name of the head of the household.

#### 3.2 Pradhan Mantri Awas Yojana (Urban)

Pradhan Mantri Awas Yojana Urban is being implemented with the objective of achieving “Housing for All” through the joint efforts of the Central Government, State Government, and Urban Local Bodies. In Kerala, the State Level Nodal Agency for the implementation of PMAY (Urban) is Kudumbashree. Under the PMAY (Urban)–Life convergence framework, approvals have been granted by the Central and State Governments for the construction of 102,229 individual houses across 93 municipalities and 34 panchayats falling within the jurisdiction of Development Authorities. The programme aims to complete housing construction for all eligible beneficiaries identified after data cleaning and verification.

#### 3.3 Pradhan Mantri Awas Yojana (Gramin): Financial Structure and Convergence in Kerala

With the objective of achieving “Housing for All” by 2022, Pradhan Mantri Awas Yojana Gramin has been implemented from 1 April 2016 onwards. Under the scheme, financial assistance of ₹1,20,000 per housing unit is provided in the plains, shared between the Central and State Governments in the ratio of 60:40. However, the Government of Kerala enhanced the total unit assistance beyond the central norm. Under

PMAY (G), the State increased the total assistance to ₹2 lakh for the General category, ₹3 lakh for the Scheduled Caste (SC) category, and ₹3.5 lakh for the Scheduled Tribe (ST) category.

### 3.4. Rajiv Awas Yojana (RAY)

Rajiv Awas Yojana was conceived by the Government of India with the objective of creating a “Slum-Free India.” The scheme was implemented through the joint efforts of the Central Government, State Governments, and Urban Local Self-Government Institutions. Its primary goal was to promote the vision of “Slum-Free Cities” by addressing housing shortages and improving living conditions in notified and non-notified slums. In Kerala, the scheme was implemented in six Municipal Corporations, focusing on urban slum redevelopment and housing provision for economically weaker sections residing in slum areas.

### 3.5. Pradhan Mantri Awas Yojana (PMAY)

Pradhan Mantri Awas Yojana is a flagship housing programme implemented by the Government of India in collaboration with State Governments with the objective of achieving “Housing for All” by 2022, coinciding with the 75th year of India’s Independence. Under the scheme, all eligible houseless households are identified as beneficiaries, and provisions are also made for the upgradation and expansion of existing dwelling units. In Kerala, approval has been obtained from the Union Ministry for the inclusion of 93 municipalities under the programme, implemented in three phases (Phase I – 14 municipalities; Phase II – 22 municipalities; Phase III – 57 municipalities).

### 3.6. Basic Services for the Urban Poor (BSUP)

Basic Services for the Urban Poor is a centrally sponsored programme aimed at providing essential basic services to the urban poor residing in slums and other deprived areas of metropolitan cities. In Kerala, the scheme has been implemented in the Municipal Corporations of Thiruvananthapuram and Kochi. The primary objective of the BSUP programme is to improve the living conditions of slum dwellers by ensuring access to basic urban infrastructure. The scheme focuses on the construction of housing in slum areas, development of internal roads and related facilities, provision of water supply, construction of drainage systems, installation of street lighting, solid

waste management, and establishment of social infrastructure such as anganwadis.

### 3.7. Integrated Housing and Slum Development Programme (IHSDP)

Integrated Housing and Slum Development Programme is a slum development programme implemented in urban areas not covered under the Basic Services for the Urban Poor scheme. In Kerala, the programme has been implemented in 45 municipalities, excluding the Municipal Corporations of Kochi and Thiruvananthapuram, where BSUP was operational, as well as the municipalities of Thrippunithura and Kalamassery, which are considered part of the Kochi urban agglomeration.

### 3.8. LIFE Mission (Livelihood, Inclusion and Financial Empowerment)

An examination of Kerala’s housing policy trajectory reveals a clear evolution from fragmented scheme-based interventions to an integrated, mission-mode approach. Early centrally sponsored programmes such as the Indira Awaas Yojana, Basic Services for the Urban Poor, and Integrated Housing and Slum Development Programme focused primarily on addressing housing shortages among specific target groups, particularly rural BPL households and urban slum dwellers. These were followed by more structured urban and slum redevelopment initiatives such as Rajiv Awas Yojana, which introduced the vision of “Slum-Free Cities.”

Subsequently, the launch of Pradhan Mantri Awas Yojana marked a paradigm shift at the national level by consolidating rural and urban housing interventions under the broader objective of “Housing for All.” The scheme introduced multiple verticals, direct benefit transfers, interest subsidy mechanisms, and convergence with basic service provision, thereby strengthening transparency and accountability.

Building upon these earlier initiatives, the Government of Kerala institutionalized a more comprehensive and socially embedded framework through the Life Mission Kerala. Unlike its predecessors, LIFE Mission is not merely a housing construction programme; it represents a rehabilitation-oriented development strategy that integrates housing provision with livelihood support, social inclusion, and financial empowerment. The mission consolidates incomplete housing units from earlier schemes,

provides enhanced unit assistance, ensures rehabilitation of landless households through group housing complexes, and extends renovation support for uninhabitable houses.

From a developmental perspective, LIFE Mission signifies the transition from a welfare-based housing approach to a mission-driven, convergence-oriented, and locally implemented housing strategy. By enhancing unit costs, strengthening the role of local self-governments, and integrating employment-linked schemes such as rural wage employment programmes, the mission creates multiplier effects in the local economy.

Thus, LIFE Mission can be viewed as the culmination of Kerala's housing policy evolution transforming housing provision from a sectoral welfare intervention into a comprehensive socio-economic development instrument. This policy progression provides a strong institutional foundation for examining public housing not only as a social protection measure but also as a catalyst for local employment generation, which forms the analytical core of the present study.

The mission addresses four categories of beneficiaries:

1. Land-owning houseless households.
2. Beneficiaries of earlier housing schemes whose houses remain incomplete.
3. Households living in temporary shelters in puramboke land, coastal areas, and plantation sectors
4. Landless and houseless households.

The first two categories together constitute approximately 10.4 per cent of the total houseless population in the State. Financial assistance for their housing construction is determined based on the Public Works Department (PWD) schedule of rates.

Among the landless houseless households, nearly 50 per cent are concentrated in 5 Municipal Corporations, 16 Municipalities, and 43 Grama Panchayats. For this category along with those residing in temporary structures on puramboke land the mission provides rehabilitation through the construction of group housing complexes. These housing complexes are designed not merely as residential units but as integrated settlements equipped with essential infrastructure, social services, and livelihood-support systems.

In the 64 Local Self-Government Institutions (LSGIs) where the concentration of landless houseless

households is highest, the mission envisions the construction of modern housing complexes that integrate housing, livelihood opportunities, and social security mechanisms. Such an integrated approach is expected to address the structural dimensions of housing deprivation while promoting inclusive socio-economic development.

#### 3.8.1. Beneficiaries under LIFE Mission

1. Land-owning houseless households.
2. Households unable to complete construction under previous housing schemes and those living in uninhabitable houses.
3. Households residing in temporary shelters on puramboke land, coastal areas, or plantation sectors.
4. Landless and houseless households.

#### 3.8.2. Beneficiary Identification Process

The identification of beneficiaries is primarily based on the 2011 Socio-Economic and Caste Census (SECC) conducted by the Government of India. Households identified as houseless in the SECC database are subjected to direct field verification to confirm eligibility.

The responsibility for conducting the survey rests with Kudumbashree, utilizing its community-based organizational network. In tribal areas where the Kudumbashree network is relatively weak, Scheduled Tribe promoters are engaged to facilitate the process.

The following data sources are consolidated and cross-verified during identification:

- SECC data available with Local Self-Government Institutions (LSGIs),
- Lists of houseless households prepared by LSGIs for various schemes,
- Beneficiary lists prepared under Pradhan Mantri Awas Yojana Urban in urban areas

Trained Kudumbashree field workers conduct direct household visits to record accurate and updated information, which is then submitted to the respective LSGI Secretaries. Field-level officers (such as Village Extension Officers and Junior Health Inspectors) are entrusted with supervisory cross-verification to ensure that ineligible households are excluded.

The verified survey data are digitized and incorporated into a computerized database accessible to the public, ensuring transparency. Survey details are published on official websites and displayed at Panchayat and Village Office levels to invite objections. A structured

grievance redressal mechanism is established at the Panchayat level. Field-level officers examine objections and may conduct hearings if necessary. Provision is made to include genuinely eligible households that were initially omitted. The District Mission consolidates the lists received from LSGIs and publishes provisional beneficiary lists at Panchayat and district levels. Appeals against the provisional list may be submitted to the district-level committee. Revenue Divisional Officers (RDOs), Sub-Collectors, or Assistant Collectors examine second appeals and finalize the list. The survey process is scheduled for completion before 15 February, with the first list published on the same date. The final beneficiary list is to be published before 31 March. Kudumbashree is responsible for survey execution and data entry, while District Missions are responsible for hearing objections and finalizing the list. At each stage, separate lists of newly included and excluded beneficiaries are published, with documented reasons for inclusion or exclusion.

3.8.3. Priority Categories

Persons with mental disabilities, visual impairment, or severe physical disabilities, Destitute individuals, Persons with disabilities, Transgender persons, Individuals suffering from serious or terminal illnesses, Unmarried mothers, Persons unable to earn a livelihood due to illness or accident, Widows.

IV. RESULTS AND ANALYSIS

Table No:1 Observed and Expected Employment Generation

| Employment Activity | Observed | Expected |
|---------------------|----------|----------|
| Foundation works    | 63       | 60       |
| Masonry             | 42       | 50       |
| Lintel & Roofing    | 72       | 65       |
| Cement Plastering   | 69       | 60       |
| Electrical          | 34       | 40       |
| Plumbing            | 26       | 30       |
| Furnishing          | 36       | 35       |
| Tile Work           | 38       | 40       |
| Painting            | 42       | 50       |
| Others              | 32       | 40       |
| Total               | 454      | 470      |

Source: Primary data

The observed employment generation closely matches contractor estimates, indicating consistency between planned and actual labour utilization. Lintel and roofing activities generated the highest observed

employment, reflecting the labour-intensive nature of structural works.

Cement plastering also generated substantial labour demand, suggesting that finishing activities require considerable workforce participation under field conditions.

4.1 Chi-Square Goodness-of-Fit Test

The chi-square goodness-of-fit test was used to compare observed and expected employment generation.

| Observed Frequency | Expected Frequency | O-E | (O-E) <sup>2</sup> | (O-E) <sup>2</sup> /E |
|--------------------|--------------------|-----|--------------------|-----------------------|
| 63                 | 60                 | 3   | 9                  | 0.2                   |
| 42                 | 50                 | -8  | 64                 | 1.3                   |
| 72                 | 65                 | 7   | 49                 | 0.8                   |
| 69                 | 60                 | 9   | 81                 | 1.4                   |
| 34                 | 40                 | -6  | 36                 | 0.9                   |
| 26                 | 30                 | -4  | 16                 | 0.5                   |
| 36                 | 35                 | 1   | 1                  | 0.0                   |
| 38                 | 40                 | -2  | 4                  | 0.1                   |
| 42                 | 50                 | -8  | 64                 | 1.3                   |
| 32                 | 40                 | -8  | 64                 | 1.6                   |
|                    |                    |     |                    | 7.98                  |

Source: Primary data

$$\chi^2 = 7.98$$

Degrees of freedom = 9

Critical value at 5% significance level = 16.919

Since:

$$7.98 < 16.919$$

The null hypothesis is accepted. It means there is no statistically significant difference between observed and expected employment generation. Therefore, contractor estimates are reliable indicators of labour utilization in LIFE Mission housing construction.

Table:2 District-wise Employment Generation

| District           | Completed Houses | Total Employment (Person-days) |
|--------------------|------------------|--------------------------------|
| Thiruvananthapuram | 66,441           | 30,429,978                     |
| Kollam             | 45,880           | 21,013,040                     |
| Pathanamthitta     | 16,344           | 7,485,552                      |
| Alappuzha          | 37,291           | 17,079,278                     |
| Kottayam           | 21,374           | 9,789,292                      |
| Idukki             | 28,597           | 13,097,426                     |
| Ernakulam          | 38,154           | 17,474,532                     |
| Thrissur           | 37,590           | 17,216,220                     |
| Palakkad           | 57,175           | 26,186,150                     |
| Malappuram         | 67,407           | 30,872,406                     |
| Kozhikode          | 38,456           | 17,612,848                     |
| Wayanad            | 30,571           | 14,001,518                     |
| Kannur             | 23,548           | 10,784,984                     |
| Kasaragod          | 20,332           | 9,312,056                      |

| District | Completed Houses | Total Employment (Person-days) |
|----------|------------------|--------------------------------|
| Total    | 529,160          | 242,355,280                    |

Source: Life Mission Kerala website

#### 4.2. District-wise Interpretation

Malappuram district generated the highest employment owing to the highest number of completed houses. Thiruvananthapuram and Palakkad also generated substantial employment because of extensive housing construction activity. Kasaragod recorded the lowest employment generation due to comparatively fewer completed houses. The results indicate a strong positive relationship between housing completion and employment generation.

#### 4.3. Activity-wise Employment Analysis

Statewide activity-wise employment estimates indicate that:

1. Lintel and roofing generated the highest employment.
2. Cement plastering generated the second-highest employment.
3. Foundation works generated substantial labour demand during initial construction stages.
5. Plumbing generated the lowest employment due to specialized labour requirements and shorter duration.

This confirms that structural and finishing works account for the largest share of labour demand in public housing construction.

### V. MAJOR FINDINGS

1. Average employment generated per unit: 454 person-days.
2. Kerala total estimated employment: 242.36 million person-days.
3. Masonry generates highest employment.
4. No significant difference between expected and observed employment.
5. LIFE Mission has strong direct and indirect employment effects.

#### 5.1. Policy Implications

The findings of the study indicate that LIFE Mission Kerala should not be viewed merely as a housing welfare programme aimed at providing shelter to homeless and economically weaker sections. Rather,

the programme has emerged as a significant employment-generation mechanism and a catalyst for local economic development. The large-scale construction activities undertaken under LIFE Mission create substantial direct employment opportunities for construction workers, masons, electricians, plumbers, painters, and other labourers, while also generating indirect employment in allied sectors such as cement supply, transportation, hardware, and retail trade. The study further reveals that public investment in housing stimulates economic activities at the local level, thereby contributing to decentralized economic growth. In addition, the programme promotes inclusive growth by improving both housing security and livelihood opportunities among vulnerable sections of society. Therefore, policymakers should recognize LIFE Mission as an integrated development strategy that simultaneously addresses housing deprivation, unemployment, and regional economic disparities.

### VI. DISCUSSION

The findings support Keynesian public investment theory and employment multiplier theory. Housing investment under LIFE Mission has generated substantial labour demand across Kerala.

The programme creates:

1. Direct employment in construction activities
2. Indirect employment in material supply and transport sectors
3. Induced employment through increased local income and consumption

The close correspondence between observed and expected employment also demonstrates that labour demand in housing construction can be reasonably estimated using technical and contractor-based coefficients.

The study further establishes that public housing programmes can function simultaneously as welfare interventions and labour-intensive economic development strategies.

### VII. CONCLUSION

The study concludes that LIFE Mission Kerala contributes significantly to employment generation through labour-intensive housing construction

activities. Based on 529,160 completed houses, the programme generated approximately 242.36 million person-days of employment.

Structural construction activities such as lintel and roofing generated the highest labour demand, while district-wise analysis revealed that employment generation is strongly associated with the scale of housing completion.

The chi-square test confirms no significant difference between observed and expected employment patterns, validating the reliability of employment estimation. The findings demonstrate that LIFE Mission Kerala functions not only as a housing welfare programme but also as an effective mechanism for decentralized employment generation and inclusive development.

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