HOUSING QUALITY AMONG MIGRANT WORKERS IN DELHI-NCR: CONTRACT VS REGULAR EMPLOYMENT

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10 November, 2025

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Acknowledgement

Abstract

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Abstract

Rapid industrialisation in Delhi and NCR has attracted many migrant workers seeking better employment, who support the region's economic growth, yet they often face poor housing conditions. This study looks at how different types of employment—regular, contract, or casual—impact the housing quality of migrant workers living in three major industrial areas: Khoda, Bawana, and Ballabhgarh. We gathered primary survey data from 125 households and created a Housing Quality Index (HQI) using the Rank-Sum Method to measure various aspects of housing adequacy. This includes access to amenities, the type of structure, security of tenure, stability, and affordability.

Our analysis using descriptive statistics and Ordinary Least Squares (OLS) regression shows a clear pattern: regular workers have significantly better housing conditions compared to contract and casual workers. Although this hierarchy might appear intuitive, the key contribution of this study is in quantifying these differences with regression coefficients. This provides solid evidence of how stable employment affects living standards. Income and education also stand out as important factors that improve housing quality, while awareness of policies has minimal direct impact.

A robustness check that includes casual workers as an additional category confirms the reliability of our main findings. It reinforces that job stability and income security are essential predictors of housing outcomes. These results highlight that formal employment not only increases income but also leads to better access to safe, adequate, and decent housing. By linking the structure of the labour market to urban housing inequality, this study advocates for combined policy approaches that include regular employment, social protections, and affordable rental housing to promote inclusive urban development.

I: Introduction

Delhi-NCR's fast industrial growth has attracted millions of migrant workers employed in factories, construction, logistics, and services. These workers have been vital in driving the region's economy, but behind this progress lies a serious problem — lack of proper housing. The very people who keep industries running in areas like Khoda, Bawana, and Ballabhgarh are often excluded from formal housing markets. Most of them end up living in informal settlements with cramped spaces, weak structures, irregular access to water and electricity, and no secure tenancy. Such living conditions affect not just their health and comfort but also reduce their productivity and deepen urban inequality.

This study aims to explore the less-discussed connection between the *type of employment* and the *quality of housing* among migrant workers in Delhi-NCR. While many studies have looked at migration and housing separately, few have examined how the nature of employment — whether regular, contractual, or casual — influences living standards. The core idea is that the formality of one's job plays a key role in determining access to decent housing. Workers on contract or in casual jobs usually earn unstable incomes, lack documents, and have weak social security, which limits their access to good housing. In contrast, regular employees, with more stable earnings and formal recognition, tend to have better living conditions.

Although government programs like the Affordable Rental Housing Complex (ARHC) scheme under PMAY-U aim to address this issue, their reach remains limited for migrant workers. Barriers such as complex documentation requirements, zoning restrictions, and the shortage of rental homes near industrial areas make it difficult for migrants to benefit from these schemes. Moreover, low permissible floor area ratios in industrial zones, slow approval systems, and poor tenant protection laws have further restricted the creation of formal rental housing. Consequently, most workers depend on informal rental markets that offer poor-quality housing at unfair prices.

Delhi-NCR reflects the contrasting reality of India's urban growth — booming industries on one side and deep housing insecurity on the other. Industrial and peri-urban regions here rely heavily on migrants, yet affordable

and safe housing close to workplaces remains rare. This gap forces workers to travel long distances, live in overcrowded areas, and face health and safety risks. The vulnerability of their jobs often overlaps with the insecurity of their housing, making their overall living situation unstable. Recent instances of worker displacement have shown how closely tied employment and housing conditions are in the city.

Given this context, the present research investigates how different types of jobs — regular, contract, or casual — affect housing quality among migrant workers in Khoda, Bawana, and Ballabhgarh. These three locations were chosen because they are key industrial clusters within Delhi-NCR but fall under different state administrations, offering a diverse perspective. This allows the study to capture differences in labour policies, housing conditions, and governance across regions within the same metropolitan area.

The study is based on primary survey data from 125 households and uses a Housing Quality Index (HQI) that combines indicators like access to amenities, housing structure, stability, and affordability. Using descriptive statistics and OLS regression analysis, it identifies how employment regularity affects housing quality while controlling for factors like income, education, and regional characteristics.

By connecting employment formality to housing outcomes, this research highlights a structural dimension of urban inequality in India. It shows that improving migrant housing requires more than just raising incomes — it also calls for strengthening job security, providing social protection, and expanding access to formal rental housing. The findings offer practical insights for policymakers to reduce the gap between workers' livelihoods and their living conditions in rapidly industrializing cities like Delhi-NCR.

II: Literature Review

The relationship between migration, employment, and housing in India has been deeply influenced by the uneven nature of urban development. Since the post-liberalization period, cities have grown rapidly, and migrants have become an essential yet often invisible part of this transformation. They form the backbone of urban economies, working in industries, construction, and services, but continue to face systematic exclusion from the formal housing market. As Kundu and Saraswati (2012) explain, this pattern represents *exclusionary urbanization*—a situation where rural migrants, despite their major contribution to urban growth, are unable to access regulated housing and are forced to live in informal settlements, unauthorized colonies, or poorly serviced resettlement areas. Their study highlights how government policies on land and urban planning have consistently failed to address the housing needs of low-income migrant workers, thereby deepening the gap between formal and informal urban spaces.

In recent years, several researchers have examined whether policy interventions have succeeded in reducing this divide. Manav and Jonnalagadda (2021), for instance, evaluated government schemes like the Affordable Rental Housing Complexes (ARHC) launched under the Pradhan Mantri Awas Yojana – Urban (PMAY-U). Their analysis shows that while these programs were designed to offer affordable rental options to migrant workers, they have largely fallen short due to weak implementation, strict eligibility rules, and a mismatch between the location of housing and job hubs. As a result, a majority of migrants still rely on unregulated private rentals or temporary accommodations provided by employers, which are often overcrowded, unsafe, and poorly maintained.

The everyday living experiences of migrant workers in India's large cities further reveal the depth of this housing crisis. Mathur (2018), in her study of Delhi, found that low-income migrants generally live in congested, poorly ventilated rooms with limited access to essential services like water, sanitation, and electricity. She particularly points out that contract workers suffer the most because their jobs are unstable, their incomes uncertain, and their access to social protection minimal. Similar observations have been made by Chadchan et al. (2024) and Padhan (2023), who argue that rising rental costs and discriminatory practices in housing markets push migrants to city outskirts, far away from their places of work. This spatial

displacement not only increases travel time and costs but also intensifies economic hardship and social isolation.

Research from other countries supports these findings, showing that the connection between insecure jobs and poor housing is a global issue. Martin (2019) and Loewenstein (2016) reveal that migrants working in temporary or low-wage jobs—whether in developing or developed nations—often face exclusion from quality housing, not just due to low income but also because of social discrimination and restrictive rental policies. Likewise, Wang, Luo, and Gong (2024) find that in Chinese cities, rural migrants remain confined to inferior housing with poor infrastructure even after years of residence, compared to native urban populations. Together, these studies demonstrate that the intersection of informal labor markets and unequal housing access reflects a structural pattern worldwide, where low-income workers remain marginalized despite their vital role in sustaining cities.

However, while much of the existing literature describes the general housing vulnerability of migrants and the policy gaps surrounding it, the *specific relationship between employment type and housing quality* remains less explored. Most studies have focused mainly on income and affordability as the key factors influencing housing outcomes, without giving enough attention to how the *formality of employment*—whether a worker is in a regular, contractual, or casual job—directly shapes access to amenities, tenure security, and overall living standards. In industrial areas like Delhi-NCR, where the labor market is sharply divided between formal and informal jobs, understanding this distinction is crucial to uncovering the real causes of housing inequality.

The present study seeks to fill this research gap by empirically examining how employment formality affects housing quality among industrial migrant workers in Delhi-NCR. Using primary survey data collected from selected industrial clusters and constructing a Housing Quality Index (HQI), the study analyzes how job type interacts with factors like income, education, and awareness of housing policies to influence housing outcomes. By linking labor market structures to housing inequality, this research adds to the growing body of work that aims to explain the structural roots of urban exclusion and inform more inclusive urban policy frameworks.

III: Research objectives

This study aims to explore how different types of employment—regular, contract, and casual—affect the housing quality of migrant workers in Delhi-NCR. While previous research has shown that migrants are often excluded from formal housing markets, very few studies have focused on how the *formality of employment itself* determines access to basic amenities, tenure security, and affordability. In an urban environment characterized by widespread informality and deepening inequality, this research seeks to fill that gap by establishing an empirical link between labor market status and housing outcomes.

The central purpose of this research is to assess and compare the living conditions of migrant workers employed under different job arrangements across three key industrial clusters—Khoda, Bawana, and Ballabhgarh. To achieve this, the study constructs a Housing Quality Index (HQI) that captures various dimensions of housing quality, including the type and durability of the structure, access to water and sanitation facilities, availability of electricity, level of crowding, stability of tenure, and affordability of rent.

Beyond simply comparing housing conditions, the study also investigates what determines housing quality more broadly. It examines how factors such as household income, education level, and awareness of housing policies interact with employment type to influence living standards. This allows the analysis to determine whether having a stable, formal job continues to have a significant impact on housing quality even after controlling for other socio-economic variables. Using both descriptive statistics and regression analysis, the study evaluates whether job security in the workplace translates into greater residential stability and improved housing conditions.

In simple terms, the main objectives of the study are to:

1. Assess the overall quality of housing among migrant workers in Delhi-NCR.
2. Compare housing conditions across different employment types — regular, contract, and casual.
3. Develop a composite Housing Quality Index (HQI) to systematically measure and compare housing outcomes.
4. Identify how employment type and other main socio-economic and policy-related factors that influence housing quality.

Through these objectives, the study aims to highlight how employment formalization and job stability can serve as key pathways toward improving urban housing conditions. By linking the nature of employment with housing quality, the research provides insights that can help shape more inclusive housing and labor policies for India's growing urban workforce.

IV: Data Source, Description and Scaling

IV.I: Data Collection and Sampling Strategy

This study draws on primary survey data collected from 125 migrant households living in three major industrial clusters of Delhi-NCR — Khoda Colony (Ghaziabad), Bawana (North-West Delhi), and Ballabhgarh (Faridabad). These locations were purposively selected to focus on low-income settlements with a high concentration of migrant workers. Notably, the three sites are situated in three different states — Uttar Pradesh, Delhi, and Haryana — which allows the study to incorporate cross-state variations in governance, labor regulation, and housing conditions.

The household survey was carried out using a structured questionnaire designed to collect detailed information on multiple aspects of migrants' lives. The questionnaire covered household demographics, type of employment, income levels, access to basic amenities, housing structure and tenure, and affordability. It also included questions on awareness and accessibility of government housing schemes and policies, along with other factors influencing living conditions. This systematic approach enabled the study to generate reliable, comparable data for analyzing the relationship between employment formality and housing quality across the selected industrial clusters.

Table1: Survey Locations and Sample Distribution		
Location	Population (2011)	Sample Collected
Ballabhgarh	206901	50
Khoda	190005	43
Bawana/Ashram	80345	32

A stratified random sampling method was used to ensure that the sample accurately represented the different categories of employment among migrant workers. The sample was divided into four major groups — regular, contract, casual, and self-employed workers. In total, the study covered 56 regular workers, 42 contract workers, 25 casual workers, and 2 self-employed individuals. This classification provided a clear basis for comparing housing conditions with respect to employment types.

Additionally, the sample distribution across the three study sites was adjusted to account for variations in population size and the concentration of migrant workers. Industrial areas with a larger population, such as Ballabhgarh, were assigned greater sample weights. This approach helped maintain both statistical balance and contextual relevance, allowing for meaningful cross-location comparisons within the Delhi-NCR region.
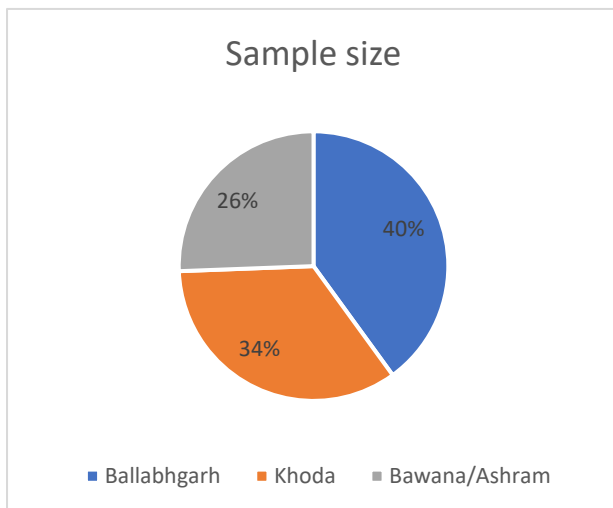
Figure1: pie chart showing percentage share of sample collected
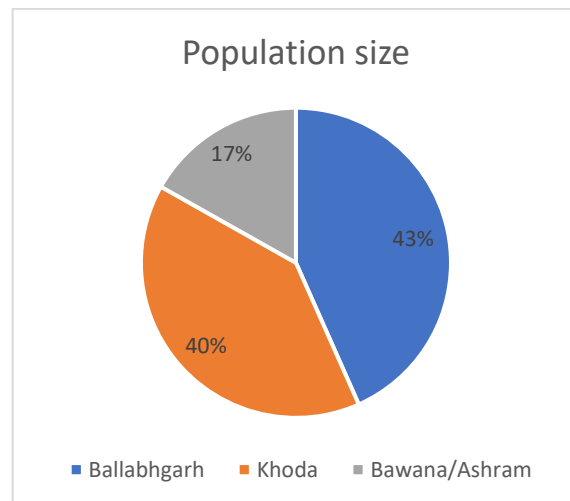From different areas of NCR

Figure2: Pie chart showing percentage share of population
from different areas of NCR

IV.II: Socio-Demographic and Economic Profile of Respondents

The social characteristics of the surveyed households provide important context for understanding the relationship between employment type and housing outcomes. The gender composition is overwhelmingly male-dominated (91.2%), reflecting the persistence of male-led migration flows in industrial and construction work. Female representation remains minimal, primarily limited to household-based informal activities or dependent roles within migrant households. This skewed gender ratio also highlights the gendered segmentation of urban labour markets, where women's participation remains constrained by both the nature of industrial work and limited access to safe housing.

In terms of religion, the sample is largely Hindu (96.8%), with a small Muslim minority (3.2%). This distribution broadly mirrors regional migration trends in northern India, where Hindu male workers constitute the dominant segment of circular and semi-permanent urban migrants. The caste composition of respondents shows a pronounced concentration of socially disadvantaged groups, with OBCs (40%) and Scheduled Castes (37.6%) together comprising nearly four-fifths of the total sample. General caste households account for only 20 percent, and Scheduled Tribes are represented marginally. This pattern is consistent with broader evidence from labour and migration studies, which demonstrate the higher presence of marginalized caste groups in low-wage, precarious, and contract-based employment. The data thus underscore the intersection of caste and labour precarity in shaping urban inequality, with historically disadvantaged groups occupying the most insecure and underpaid segments of the urban workforce.

IV.III: Household Size and Earning Members

As shown in Table 2, the mean household size varies moderately across locations — Bawana records the largest average household size of 4.17 members, followed by Ballabhgarh (3.58) and Khoda (3.44). The larger household size in Bawana likely reflects its higher concentration of extended or joint migrant families living together to manage housing costs and employment instability. In contrast, Khoda and Ballabhgarh exhibit smaller household sizes, possibly due to the predominance of nuclear families and single migrant workers renting shared rooms near workplaces.

In terms of income generation, the average number of earners per household ranges from 1.36 in Ballabhgarh to 1.71 in Bawana, with Khoda standing at 1.53. These figures indicate that the majority of households rely on a single income source, reflecting the limited employment opportunities available to multiple family members within migrant settlements. Bawana's relatively higher average number of earners suggests more

diversified labor participation, possibly due to the coexistence of small-scale manufacturing and informal industrial work that provides intermittent income to secondary workers.

Location	Mean HH size	Avg no. of Earners
Ballabhgarh	3.58	1.36
Khoda	3.44	1.53
Bawana	4.17	1.71

Table 2: Mean Household size and Number of Earners across locations

Overall, the profile underscores that most migrant households in Delhi-NCR's industrial belts operate under tight economic constraints, with limited income stability and small family networks. These structural characteristics — modest household size and restricted earning potential — are critical determinants of housing affordability and quality, as they influence both the ability to pay rent and the choice of dwelling type. The socio-economic fragility observed across all three clusters sets the background against which housing disparities among different employment groups can be understood.

IV.IV: Employment Profile

In addition to household characteristics, examining the employment structure of the respondents is crucial to understanding disparities in housing quality. The type of employment—whether regular, contract, or casual— plays a defining role in determining income stability, access to social security benefits, and the possession of employment-related documentation, all of which significantly influence a household's ability to obtain secure and decent housing.

Data from the survey reveal a labour market dominated by informal and semi-formal employment, typical of Delhi-NCR's industrial ecosystem. The distribution of workers, as illustrated in Figure 3, shows that the majority are casual and contract workers, reflecting the industrial clusters' heavy dependence on flexible, low-cost labor.

Casual workers are typically employed on a daily-wage or short-term basis, with highly unpredictable work opportunities and little to no employment security. They are the most vulnerable group, lacking not only steady incomes but also the formal records or identity proofs often required for renting accommodation legally.

Contract workers occupy a somewhat intermediate position. Although they are hired for longer durations compared to casual laborers, they remain outside the protective framework of formal employment. They may receive slightly more stable wages, but their lack of job benefits, provident funds, or housing allowances continues to limit their access to formal rental markets.

Regular workers, in contrast are generally employed on a permanent or long-term basis, with fixed monthly salaries, greater job continuity, and at least partial access to social benefits such as provident funds or insurance. This relative stability often translates into better housing conditions, as these workers can afford more secure and durable accommodation.

Overall, the employment profile emphasizes the prevalence of informality and precarity in Delhi-NCR's industrial labor force. The dominance of contract and casual employment forms a structural barrier to accessing quality housing, reinforcing the broader cycle of economic vulnerability and residential inequality that shapes the lives of migrant workers in the region.
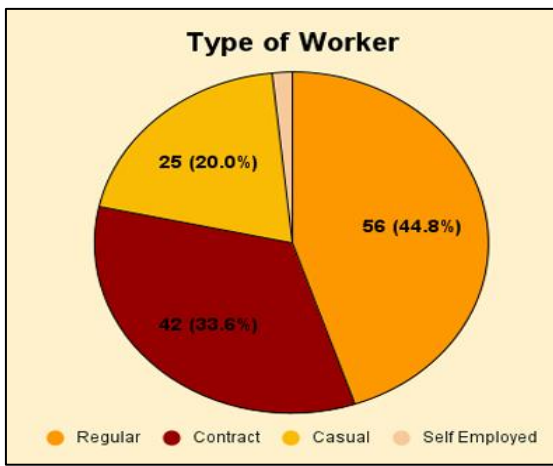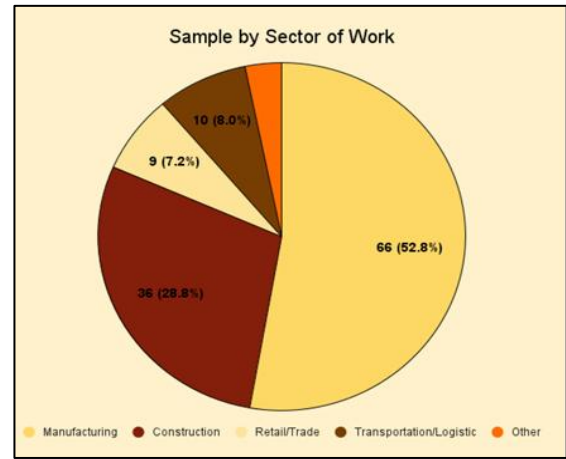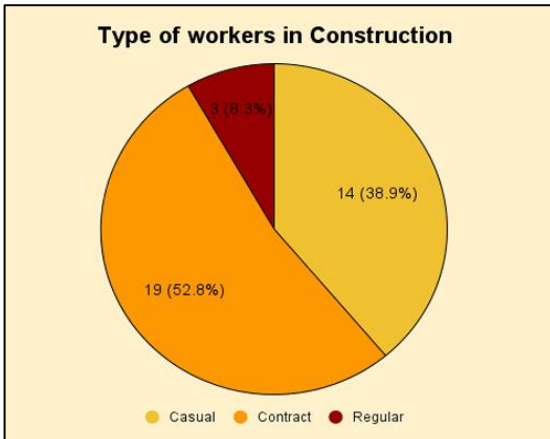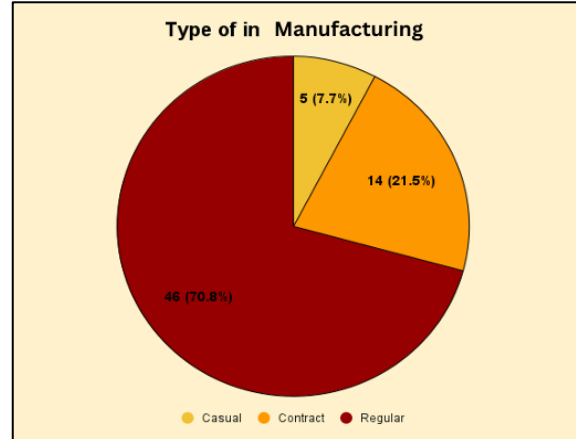
Figure 3

Figure 4

Figure 5

Figure 6

Figure 4 depicts the sectoral distribution of workers, showing that the majority are employed in construction and industrial activities—sectors known for high informality and fluctuating labour demand. Construction work is dominated by casual and contract labour (Figure 5), which is consistent with the sample's composition. Industrial employment, however, shows a noticeable presence of regular workers, reflecting the structured nature of factory-based jobs that offer more predictable wages and longer-term employment relationships. This internal divergence within sectors further reinforces how job-type segmentation aligns with housing disparities.

The coexistence of different worker types across sectors reveals an important trend: even within the same industrial or construction environment, employment formality varies sharply, generating significant inequality in economic resilience and housing access. Regular workers are more likely to negotiate better rental terms, afford less crowded rooms, or remain in the same dwelling for longer periods—advantages that translate into higher HQI scores. In contrast, casual and contract workers often face unstable incomes, frequent job changes, or employer dependency, pushing them into more precarious housing arrangements.

Importantly, although the initial design of the study focused primarily on regular and contract workers, the survey findings and subsequent analysis identified casual workers as a substantial and highly vulnerable segment of the migrant workforce. Their inclusion in the extended analysis was therefore essential to capturing the full spectrum of employment-linked housing inequality in Delhi-NCR.

IV.V: Household Wage Income distribution

The household wage income distribution provides an essential backdrop for interpreting the housing conditions of migrant workers across the three clusters. The distribution captures the spread of monthly wage earnings per household, calculated by summing the incomes of all earning members. Since most respondents are engaged in low-wage industrial or construction work, the data naturally reflect their constrained economic

position. The distribution was constructed directly from self-reported survey responses, retaining both lower and higher-income observations to preserve the true shape of the income spread. A smoothed density curve is overlaid on the histogram to highlight the underlying pattern, while vertical markers denote the mode, median, and mean, enabling clearer comparison of central tendencies.

The plot reveals a distinctly right-skewed distribution, with the bulk of households concentrated in the lower income range between ₹7,000 and ₹30,000, and a peak around the mode of ₹15,000. This indicates that most migrant households operate near subsistence-level wages, consistent with the predominance of casual and contract employment identified earlier. The median income of ₹20,000, slightly lower than the mean of ₹22,724, further illustrates that a small number of relatively higher-earning households pull the average upward, creating a long income tail extending toward the maximum observed income of ₹77,000. These households, though few, are likely to be regular workers with more stable earnings, reinforcing the study's central assertion that labour-market formality is closely tied to economic resilience.

Figure 7
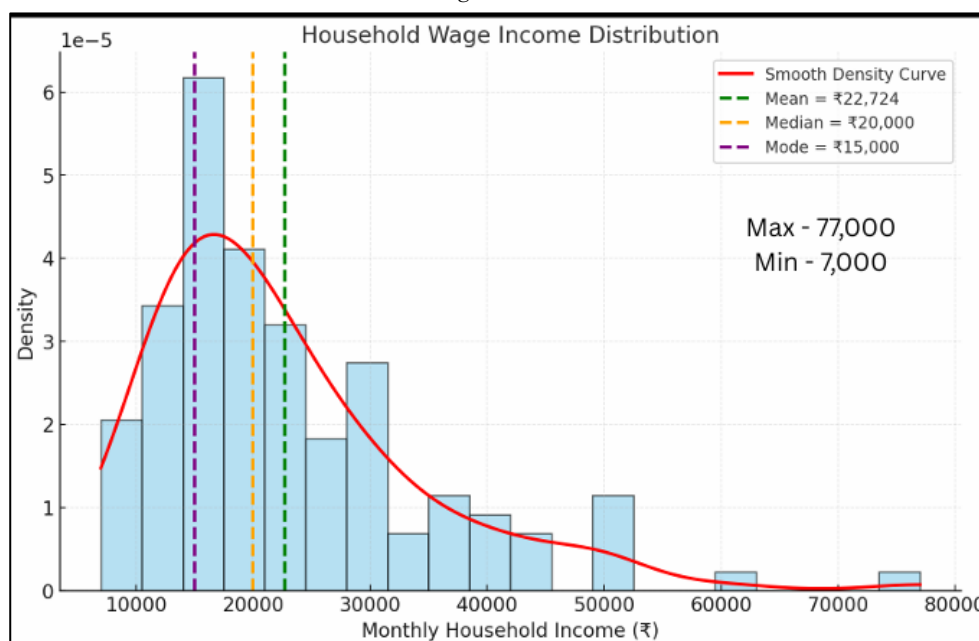
The overall shape of the income distribution clearly influences the housing conditions of migrant workers. Households concentrated at the lower end of the income range face serious affordability challenges, which restrict their access to safe, spacious, and well-serviced rental housing. These families are often forced to live in crowded and informal settlements, where rents are slightly cheaper but living conditions are poor and tenure is insecure. This finding is consistent with earlier observations about small household sizes, limited earners, and widespread landlessness, all of which point toward a broader pattern of economic vulnerability that shapes housing choices for low-income migrants.

On the other hand, households positioned toward the upper end of the income distribution are better able to secure improved living conditions. With more stable and higher earnings, these families can afford housing with better amenities, reliable services, and greater tenure security. As a result, they tend to have higher Housing Quality Index (HQI) scores, reflecting the direct impact of income stability on housing outcomes.

In essence, the income distribution provides more than just a snapshot of earnings—it serves as a key link between employment type, income stability, and housing quality. It shows how economic position determines the kind of housing a worker can access and maintain. This relationship bridges the descriptive findings of the

study with the econometric analysis that follows, reinforcing the argument that employment formality and stable income are central to improving housing quality among migrant workers in Delhi-NCR.

IV.VI: Multicollinearity test:

Before estimating the regression model, diagnostic tests were carried out to ensure that the results were statistically sound and reliable. One of the key checks involved testing for multicollinearity, which occurs when two or more explanatory variables are highly correlated, leading to inflated standard errors and unstable coefficient estimates.

Both the correlation matrix and the Variance Inflation Factor (VIF) were used for this purpose. The results showed a strong correlation between Household Income and Non-Rent Expenditure (correlation coefficient ≈ 0.62, VIF > 5). Since both variables capture similar aspects of household economic capacity, including them together in the regression could have made the estimates less precise and the model harder to interpret.

To address this issue, Household Wage Income was retained as the more comprehensive and representative measure of a household's financial capacity, while Non-Rent Expenditure was excluded from the final model. This adjustment reduced redundancy between variables and improved both the stability and interpretability of the regression results, ensuring that the estimates more accurately reflected the true relationship between employment type and housing quality.

V: Methodology

The methodology of this study was carefully designed to systematically examine how employment type influences housing quality among migrant workers in Delhi-NCR. It combines primary survey data, index construction, and econometric analysis to provide both descriptive patterns and causal insights. This section explains how the Housing Quality Index (HQI) was built and how the analytical framework was structured to capture variations across different worker categories.

V.I: Construction of Housing Quality Index (HQI)

Housing is a multidimensional concept — it provides not just shelter, but also safety, sanitation, stability, and space for family and social life. For low-income migrant workers, housing quality is shaped by both economic factors (like income and job stability) and social factors (like tenure security, health, and dignity). To capture this complexity, a composite measure, the Housing Quality Index (HQI), was developed. This index brings together various indicators that describe the material and social dimensions of housing into a single, comparable score.

V.I.I: Component selection — why these 14 components matter

We selected fourteen components that together capture the multiple relevant dimensions of housing quality for migrant households in industrial clusters.

The first set of components relates to basic amenities, which are foundational for healthy living. Access to a **toilet facility**—whether private, shared, or public—is one of the strongest determinants of health and dignity. Private sanitation reduces the risk of disease and improves privacy, especially for women. **Water access**, whether piped, shared, or from a public tanker, is equally vital for hygiene and nutrition, and reliable access also signals municipal inclusion. **Electricity access** reflects both infrastructure availability and living comfort, influencing lighting, safety, and the ability to use appliances necessary for daily life. **Waste management**, measured by the regularity of garbage collection, is another key element that affects environmental cleanliness and the spread of diseases. Finally, the presence of a dedicated **cooking facility** indicates whether households can safely and hygienically prepare food—an essential but often overlooked indicator of housing adequacy.

The second group of indicators relates to structural and spatial quality. The **type of structure**, classified as pucca, semi-pucca, or kutcha, reflects the durability and safety of the dwelling. A pucca structure provides better protection from harsh weather and fire hazards, symbolizing greater investment in housing. **Overcrowding**, measured by the number of people per room, captures spatial sufficiency and privacy; higher crowding indicates poorer conditions and higher disease risk. The variable is reverse-scaled so that households with fewer people per room receive higher scores. **Ownership type**—whether a household owns, rents, or lives in employer-provided accommodation—determines its stability and control over the dwelling. Ownership enhances security, allows for home improvement, and offers some protection from eviction.

The third group of components focuses on asset ownership, tenure security, stability, and affordability, which provide insight into the socio-economic well-being of households. Ownership of appliances like a refrigerator, air conditioner (AC), and television (TV) reflects not only comfort and convenience but also a household's level of economic security and access to basic utilities such as reliable electricity. Tenure security measures whether households feel safe from eviction or displacement, capturing both legal and psychological stability. Residential stability, defined by years spent in the same dwelling, reflects a household's social integration and gradual improvement in housing over time. Finally, affordability, measured as ratio of rent to household income, captures financial strain; a lower ratio indicates less housing stress and greater economic resilience.

Together, these fourteen components form a holistic framework for evaluating housing quality. They capture not only the physical and infrastructural adequacy of homes but also the social security and economic stability that shape the lived experience of migrant workers. By integrating these dimensions, the HQI provides a comprehensive, continuous measure of housing well-being, enabling meaningful comparisons across employment types, income levels, and locations.

These components are data-driven (contained in the survey) and theory-driven (each has a clear welfare interpretation). In the HQI, each component is coded so that higher values always correspond to better housing conditions.

V.I.II: Normalization and Scaling of components

Each housing quality indicator was standardized to a 0–1 scale, where 1 represents the best observed condition and 0 the worst. Binary indicators were coded as 1 for presence (yes) and 0 for absence (no). Ordinal indicators were assigned ordered numerical values reflecting their quality hierarchy. Continuous indicators were normalized using the Min–Max transformation, ensuring comparability across variables with differing units. For indicators where higher raw values indicate *worse* housing conditions—such as rent-to-income ratio and overcrowding (persons per room), we applied a reverse transformation to ensure consistent interpretation across all components. Specifically, these indicators were redefined as their complement values *(1 – rent/income)* and *(1 – overcrowding)*, so that a higher score reflects better affordability and lower congestion. This standardization allows for cross-sectional comparison and aggregation across dimensions of housing quality.

Table III

Component	Response Categories	Assigned Score (0–1 Scale)
Type of Toilet Facility	Private; Shared; Public/Community; None	1.0; 0.7; 0.2; 0.0
Type of Water Access	Private/Piped; Shared; Public Tap/Tanker; None	1.0; 0.7; 0.2; 0.0

Electricity Supply	Regular; Irregular; No Facility	1.0; 0.5; 0.0
Garbage Disposal	Regular Collection; Irregular; None	1.0; 0.5; 0.0
Cooking Facility	Yes; No	1.0; 0.5; 0.2
Type of Structure	Pucca; Semi-Pucca; Kachha/Temporary; Other(Container)	1.0; 0.7; 0.3; 0.1
Overcrowding	Number of people per room	continuous variable
Affordability	This is constructed by formula: 1-(Rent of the house/Income of the household)	continuous variable
Stability	No. of years residing in the same residence/years since migration	continuous variable
Type of Ownership	Self-owned; Employer-provided; Rented; Other	1.0; 0.8; 0.5; 0.2
Refrigerator	Yes; No	1; 0
Television	Yes; No	1; 0
Air Conditioning	Yes; No	1; 0
Tenure Security	Yes: No	1; 0

V.I.III: Weighing and construction of the composite index

Since not all components contribute equally to housing quality, differential weights were assigned using the Rank-Sum Method, which accounts for the relative importance of each component based on theoretical reasoning and empirical relevance. In this approach, each indicator is ranked according to its perceived contribution to housing welfare, and weights are derived as:

$$w_j = \frac{N - R_j + 1}{\sum_{k=1}^{N}(N - R_k + 1)}$$

where, wj = weight assigned to the jth component,
K = total number of components (14 in the final HQI), and
Rj = rank of importance of the jth component.

The weights were then normalized so that the sum of all weights is 1. This ensures that each component contributes to the composite index in proportion to its relative importance while keeping the total weight consistent.

Table IV represents the differential weights assigned to each component. The weighting structure reflects the relative importance of each housing dimension in determining overall living quality. Basic services such as toilet facilities (0.13), water access (0.12), and electricity (0.11) receive the highest weights, underscoring their fundamental role in ensuring health, hygiene, and basic welfare. Components such as garbage disposal, cooking facility, and structure type also hold substantial importance, reflecting the physical and functional adequacy of the dwelling. Social and institutional dimensions — including ownership type (0.07) and tenure security (0.03) — contribute to the index by capturing the stability and long-term sustainability of housing arrangements. Meanwhile, asset ownership indicators (e.g., refrigerator, AC, television) receive moderate to low weights, representing secondary but meaningful markers of comfort and welfare. Finally, stability of residence (0.02) and affordability (0.01) contribute smaller yet essential shares, ensuring that the index incorporates both temporal continuity and financial accessibility.

Table IV

Dimension	Indicator	Weight
Type of Toilet (L1)	Private, Shared, Public, No	0.133333
Type of Water Access (L2)	Private, Shared, Public, No	0.123810
Electricity Access (L3)	Regular, Irregular, No	0.114286
Garbage Disposal (L4)	Regular, Irregular, No	0.104762
Cooking Facility (L5)	Yes, No	0.095238
Type of Structure (L6)	Pucca, Semi-Pucca, Kutcha, Others(container)	0.085714
Overcrowding (L7)	People per room	0.076190
Type of Ownership (L8)	Rented, Self-Owned, Employer-Provided, Other	0.066667
Refrigerator (L9)	Yes, No	0.057143
Air Conditioning (AC) (L10)	Yes, No	0.047619
Television (L11)	Yes, No	0.038095
Tenure Security (L12)	Threat of eviction (Yes/No)	0.028571
Stability (L13)	Years of dwelling in same residence	0.019048
Affordability (L14)	Rent-to-income ratio	0.009524

The final Housing Quality Index (HQI) for each household i was computed as the weighted sum of normalized component scores:

$$HQI_i = \sum w_j X_{ij}', \text{ where } i = \text{household and } j = \text{Dimension}$$

By construction, $HQI_i \in [0,1]$, where **0** represents the poorest housing condition and **1** the highest quality observed in the sample.

This composite index thus captures the multidimensional nature of housing quality, integrating structural, service-related, affordability, and tenure dimensions into a single continuous metric. We categorize HQI into five *bands for interpretation: Very Poor: (0.00–0.20), Below Average / Poor: (0.20–0.40), Average / Moderate: (0.40–0.60), Good: (0.60–0.80) and Very Good: (0.80–1.00). The defined bands are descriptive in

nature and can be recalibrated to correspond with specific policy thresholds, such as classifying households with an HQI below 0.4 as policy-eligible.

V.II: Econometric Specification

The econometric methodology adopted in the study is designed to examine how the nature of employment—whether regular or contract—affects the housing quality of migrant workers in the Delhi-NCR region. The core purpose is to understand whether differences in employment type and income security translate into significant variations in living conditions. To achieve this, the analysis combines a carefully constructed Housing Quality Index (HQI) with a multiple linear regression framework, enabling a systematic assessment of both economic and social determinants of housing outcomes.

The dependent variable in the model is the Housing Quality Index (HQI), which was created through a weighted aggregation of various housing indicators such as access to toilet, water, and electricity, quality of structure, overcrowding, tenure security, and asset ownership. Each component was normalized between 0 and 1 to ensure comparability, and weights were assigned based on their relative importance using the Rank Sum Method. Thus, the HQI ranges from 0 (poorest quality) to 1 (best quality), capturing the multidimensional nature of housing conditions.

The main independent variable of interest is the type of employment of the worker, categorized as regular or contract. In the econometric specification, contract workers serve as the reference group, allowing the estimated coefficients on "regular" dummies to be interpreted as the difference in housing quality relative to contract workers. In addition to employment type, several control variables were included to account for individual and household characteristics that might influence housing outcomes. These include household income, education level of the primary earner, policy awareness or enrollment in a housing scheme, and location dummies for the three surveyed regions—Bawana, Khoda, and Ballabhgarh, taking Ballabhgarh as the reference category.

The baseline regression model is expressed as:

$$HQI_i = \beta_0 + \beta_1 Regular_i + \beta_2 HouseholdIncome_i + \beta_3 Education_i + \beta_4 PolicyAwareness_i + \beta_5 Bawana_i + \beta_6 Khoda_i + \epsilon_i$$

where HQI_i represents the housing quality of worker i, and the error term ϵ_i captures the effect unobserved factors. This specification estimates the impact of employment type on housing quality index while controlling for (cetris paribus) income, education, policy awareness and location constant

Since the dependent variable, HQI, is continuous and roughly symmetric in distribution, the Ordinary Least Squares (OLS) method was chosen for estimation. OLS is appropriate because it provides straightforward and interpretable coefficient estimates that reflect the average change in housing quality associated with changes in each explanatory variable. The OLS model was estimated using the survey dataset of 123 migrant workers from three industrial clusters in Delhi-NCR. The sample includes both contract and regular workers in the main analysis and was later expanded to include casual workers for robustness testing

The econometric analysis in this study aims to quantitatively examine how the type of employment influences housing quality among migrant workers in Delhi-NCR, after controlling for key socio-economic and locational factors. The analysis builds on the Housing Quality Index (HQI) constructed from primary survey data and employs multiple linear regression models to estimate the determinants of housing quality.

V.III: Robustness checking:

To verify and ensure the reliability and stability of the baseline results, a robustness check was conducted by extending the regression model to include another category of workers — the casual workers.

In the baseline regression, the focus was only on contract and regular workers. However, during the field survey, it was observed that casual workers also form a significant part of the migrant workforce, especially in construction and informal manufacturing units. Casual workers represent the most informal and vulnerable segment of the labor force, often lacking stable employment, social protection, and regular income. Including them in the analysis helps test whether the relationship between employment type and housing quality remains consistent even when the larger employment spectrum is considered

In this extended model, the dependent variable is still the Housing Quality Index (HQI), which measures the overall quality of living conditions on a continuous scale from 0 to 1. The regression equation remains same except an added dummy for Casual workers. Again, the contract workers are taken as the reference category. This means: the coefficient for regular workers shows how their housing quality differs from that of contract workers and the coefficient for casual workers shows how their housing quality compares with contract workers.

 The expanded regression equation can be written as:

$$HQI_i = \beta_0 + \beta_1 Regular_i + \beta_2 Casual_i + \beta_3 HouseholdIncome_i + \beta_4 Education_i + \beta_5 PolicyAwareness_i + \beta_6 Bawana_i + \beta_7 Khoda_i + \epsilon_i$$

This model helps us understand how different employment affect the housing quality of migrant workers. It compares regular, contract, and casual workers while keeping other factors such as income, education, location and policy awareness constant.

VI: Results and Key Findings

This section presents the empirical results derived from the analysis of primary survey data. The findings are structured in two parts. The first part discusses the Housing Quality Index (HQI) results, highlighting the distribution of housing quality across different worker categories and regions within Delhi–NCR. This descriptive analysis provides an overview of the spatial and occupational disparities in housing conditions among migrant households. The second part presents the results from the econometric estimation, where an Ordinary Least Squares (OLS) regression model is employed to identify the key determinants of housing quality.

Together, these results aim to answer the central question of the study: *How does the nature of employment— regular, contract, or casual—shape housing outcomes among migrant workers?* The HQI results illustrate the extent of variation in living conditions, while the regression analysis quantifies the influence of employment formality, income, education, and policy awareness on housing quality

VI.I: HQI – Comparative Results

VI.I.I: HQI across worker types

To explore the relationship between employment formality and housing conditions, the Housing Quality Index (HQI) was compared across three major categories of workers — Regular, Contract, and Casual. The analysis reveals a clear and consistent gradient in housing quality, mirroring the hierarchy of job stability and income security in the urban labor market.

Regular Workers

The mean HQI for regular workers is 0.442, which lies within the "Average" range (0.40–0.60) of the interpretation scale, indicating moderate but stable housing quality. Their median HQI (0.471) is slightly higher than the mean, suggesting that the distribution is left-skewed — with a few lower-quality dwellings pulling the mean downward, while most regular workers enjoy relatively decent housing.
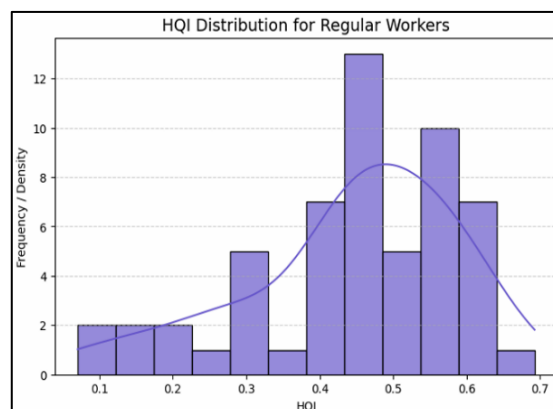
Figure 8

The density curve peaks between 0.45 and 0.50, showing that the majority of regular workers occupy housing with access to core amenities such as private toilets, electricity, and piped water. However, their HQI values do not extend into the "Good" or "Very Good" range (>0.60), implying that while these workers have escaped severe deprivation, they have not yet attained housing comfort or security. This pattern aligns with the economic logic that formal employment provides predictable income and tenure stability, allowing regular workers to afford modest but adequate rented or owned dwellings, often in semi-formal colonies or employer-provided quarters.

Contract Workers

For contract workers, the mean HQI is 0.371, which places them in the "Below Average" category (0.20–0.40). The median HQI of 0.375 further confirms this pattern, indicating that half of the contract workers score below this level. This suggests that, on average, contract workers reside in moderately poor housing characterized by shared facilities, higher overcrowding, and irregular service access.
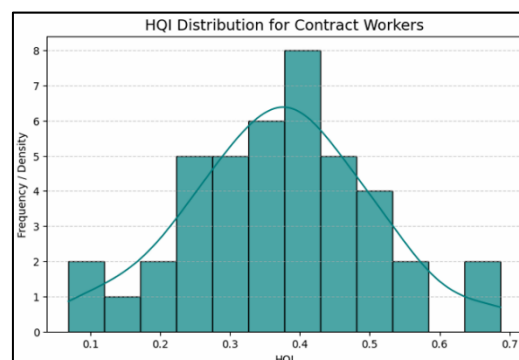

Figure 9

The histogram is approximately bell-shaped and centered between 0.35–0.40, indicating that the housing quality of contract workers is relatively homogeneous — most households occupy similar, lower-quality units. The limited spread in values reinforces that few contract workers experience notably better or worse housing conditions. Importantly, the interquartile range (IQR) shows that even the top-performing contract workers barely reach the median HQI level of regular workers, highlighting a structural gap between the two employment groups. This gap illustrates that contract employment offers limited potential for housing improvement due to uncertain income flows, lack of benefits, and restricted access to formal housing markets. Thus, contract workers represent an intermediate stratum — not as precarious as casual workers, yet unable to secure the comfort and permanence associated with regular employment.

Casual Workers

Casual workers record the lowest mean HQI (0.304) and a median HQI (0.332), both of which fall near the lower bound of the "Average" range. This confirms that casual laborers experience the poorest housing conditions among all groups. The IQR of 0.234 is the widest across the three groups, indicating great variability in housing quality for the central 50% of casual workers.
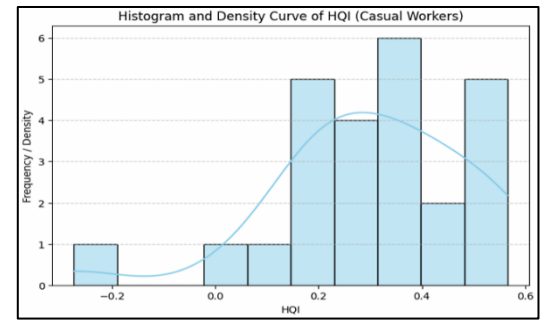

Figure 10

This wide spread reflects the highly uneven nature of informal housing — ranging from temporary shelters and single-room units to slightly better rented accommodations. Although the overall distribution appears roughly normal, it is centered at a much lower mean, reinforcing that housing disadvantage among casual workers is widespread and not confined to a few extreme outliers. Many households in this category face unstable tenure, overcrowding, and lack of access to private sanitation or secure water supply.

The combination of low average HQI and large variability points to deep vulnerability within this group — both economic and spatial — and underscores how income volatility and informality translate directly into inadequate living standards.
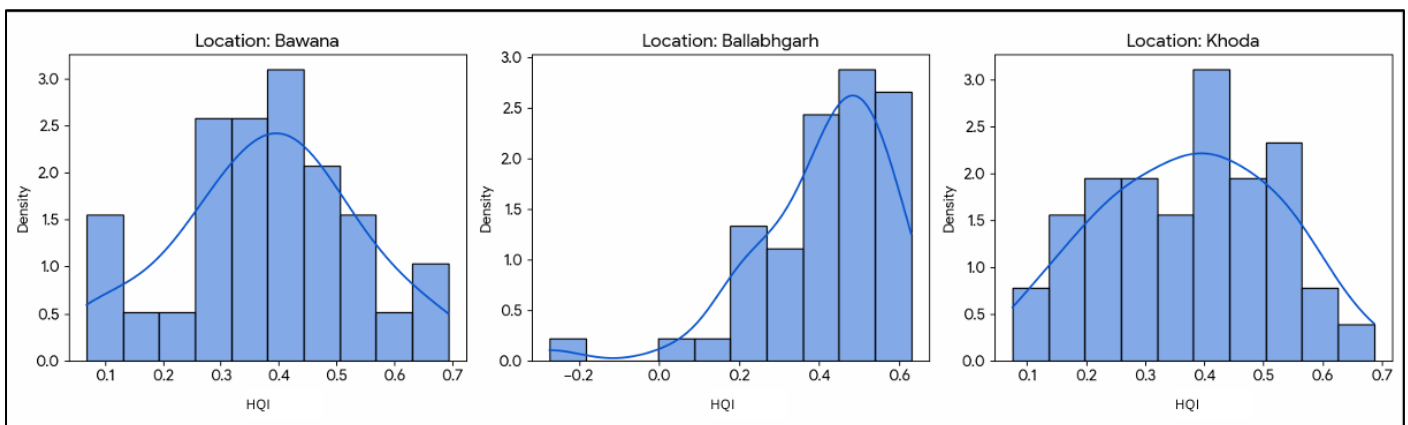
VI.I.II: HQI across regions

Figure 11

Figure 11 presents the distribution of the Housing Quality Index (HQI) across the three major survey clusters — Bawana, Ballabhgarh, and Khoda. The histograms reveal clear regional disparities in the overall distribution and spread of housing quality among migrant workers.

Ballabhgarh reports the highest average HQI (0.411), followed by Bawana (0.379) and Khoda (0.374). The relatively higher mean in Ballabhgarh suggests that housing conditions there are, on average, better than in the other two sites. This pattern may reflect differences in local infrastructure, employer-provided housing, or access to urban amenities. Ballabhgarh, located closer to industrial hubs and better-connected urban corridors, likely benefits from improved municipal services and more formalized rental arrangements. However, Ballabhgarh also exhibits the largest variability (standard deviation = 0.169), implying substantial heterogeneity within the region. This wider spread indicates coexistence of both well-housed and poorly-housed groups — a sign of internal inequality in living conditions. The histogram's longer left tail (negative skewness ≈ –0.27) confirms that a subset of households live in markedly poorer housing environments despite the overall higher mean.

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In contrast, Bawana and Khoda display more compact distributions around their means, suggesting a relatively homogeneous pattern of deprivation. Both areas reach similar maximum HQI values (≈0.69), implying that a few outlier households have attained reasonably good housing — likely self-owned or employer-provided units — amidst otherwise modest conditions.

The median HQI values (Bawana = 0.384; Ballabhgarh = 0.447; Khoda = 0.385) further underscore Ballabhgarh's relative advantage. The interquartile range (IQR) also supports this interpretation: Ballabhgarh's 25th and 75th percentiles (0.321–0.531) cover a broader span than those of the other regions, again signaling greater dispersion in housing outcomes. From a welfare perspective, this regional comparison suggests that Ballabhgarh's higher average HQI may be offset by deeper internal inequality, whereas Bawana and Khoda exhibit more uniformly moderate but stable housing quality. These differences likely reflect variations in employment structure, tenure patterns, and access to public infrastructure.

In qualitative terms, workers in Ballabhgarh may enjoy better opportunities for housing improvement due to relatively stable jobs in manufacturing. Conversely, Bawana and Khoda, characterized by smaller-scale, informal industrial clusters, exhibit less variation but overall lower living standards, shaped by insecure tenancy and weaker municipal provisioning.

VI.II: Econometric Estimation Results

The regression results provide information about the strength and significance of these relationships and also quantifies it. The results of the baseline regression are summarised below:

Variable	Coefficient (β)	Std. Error	t-statistic	p-value
Constant	0.261	0.045	5.819	0.000*
Household Wage Income	0.000004402	0.00000116	3.806	0.000*
Enrolled in Housing Scheme (Y/N)	0.0075	0.04	0.186	0.853
Highest Educational Qualification	0.015	0.009	1.727	0.088
Type of Worker: Regular	0.0594	0.029	2.02	0.046**
Location: Bawana	-0.0562	0.034	-1.66	0.100***
Location: Khoda	-0.0785	0.031	-2.524	0.013**

$R^2 = 0.253$ Adjusted $R^2 = 0.204$ F-statistic = 5.134 (p < 0.001)   Observations (N) = 123

The model explains about 25 percent of the variation in housing quality across workers, which is reasonable fit for a primary field-based cross-sectional dataset. The statistically significant F-value indicates that the explanatory variables collectively have a meaningful effect on housing quality.

Key Findings

The results show a strong and statistically significant relationship between employment stability and housing quality. Regular workers have significantly better housing conditions compared to contract workers. The positive coefficient (β = 0.0594, p = 0.046) implies that, on average, being a regular worker improves housing quality by almost six percentage points. Even after accounting for income and education, this effect remains significant. This means that the benefit of regular employment goes beyond higher wages—it reflects greater job security, stable income flows, and better eligibility for formal rental contracts or loans. In other words, having a regular job helps workers access safer, cleaner, and more reliable housing.

Income plays a crucial role in shaping housing quality. The coefficient for income is positive and highly significant (p < 0.001), which confirms that workers with higher incomes live in better-quality housing. This relationship is quite intuitive: higher income allows workers to afford larger or less crowded homes, better sanitation facilities, and reliable access to electricity and water. It also gives them the financial flexibility to move away from unsafe or temporary housing arrangements.

Education also has a positive but moderately significant effect on housing quality ($\beta = 0.015$, $p = 0.088$). Educated workers often have better awareness of rental markets and government housing programs. They may also be more capable of handling rental negotiations and financial decisions. Although the effect is not as strong as income or employment type, education still helps in improving the overall quality of living conditions by increasing awareness and access to information.

Interestingly, the analysis finds that being enrolled in or aware of a housing scheme does not have a statistically significant impact on housing quality. The coefficient is positive but very small, and the p-value (0.853) indicates that the effect is not meaningful. This suggests that policy awareness alone is not sufficient to improve housing outcomes. Many workers, even if they know about such schemes, face practical challenges like eligibility barriers, complex procedures, or lack of documentation, which prevent them from actually benefiting from these programs. This highlights a major gap between policy intention and on-ground implementation.

Housing quality varies significantly across different regions of Delhi-NCR. Workers living in Khoda and Bawana face poorer housing conditions compared to those in Ballabhgarh, as shown by the negative coefficients for these locations. Khoda, for instance, has the lowest HQI values, reflecting overcrowded settlements and limited access to basic infrastructure. These regional variations highlight how urban infrastructure and local governance play a crucial role in shaping living standards. Poorer industrial zones often lack sanitation, drainage, and organized housing, forcing workers into low-quality accommodations.

VII: Robustness Check

The following section presents the results of the robustness regression, which includes casual workers to test the consistency of the relationship between employment type and housing quality found in the baseline model.

Regression results of the robustness checking:

Variable	Coefficient (β)	Std. Error	t-statistic	p-value
constant	0.335	0.035	9.515	0.000
Household Wage Income	0.0433	0.014	3.138	0.002
Enrolled in Housing Scheme (Y/N)	0.0243	0.038	0.644	0.521
Highest Educational Qualification	0.0188	0.009	2.158	0.033
Type of Worker_Casual	-0.0457	0.038	-1.205	0.231
Type of Worker_Regular	0.0533	0.033	1.641	0.104
Location_Bawana	-0.0497	0.035	-1.414	0.160
Location_Khoda	-0.0332	0.031	-1.057	0.293

The results of the robustness check reaffirm the findings of the baseline regression, showing that the relationship between employment type and housing quality remains largely consistent even after including casual workers in the model. The coefficient for regular workers remains positive and marginally significant ($\beta = 0.0533$, $p \approx 0.10$), indicating that regular employees continue to enjoy better housing conditions than contract workers, even when casual workers are considered in the comparison. This reinforces the idea that employment stability and job formality play a crucial role in improving living standards among migrant workers.

The coefficient for casual workers, on the other hand, is negative but statistically insignificant ($\beta = -0.0457$, $p = 0.231$). This suggests that, on average, casual workers have lower housing quality compared to contract workers, but the difference is not large enough to be statistically confirmed. However, the direction of the

coefficient aligns with expectations—workers in more informal and unstable employment tend to live in poorer housing conditions.

Other control variables maintain their expected signs. Household income continues to have a positive and highly significant effect on housing quality, confirming that higher earnings enable households to afford better housing. Education level also shows a positive and significant association with the Housing Quality Index (HQI), indicating that more educated workers tend to secure better-quality housing due to higher awareness and access to information. Policy awareness, however, remains statistically insignificant, suggesting that being enrolled in or aware of government housing schemes does not necessarily translate into better living conditions, possibly due to limited implementation or poor reach. Regional dummies show that Bawana and Khoda continue to lag behind the reference region, Ballabhgarh, in terms of average housing quality.

Overall, the robustness check confirms the stability of the baseline results. The inclusion of casual workers does not alter the overall pattern: Regular > Contract > Casual in housing quality. The slightly weaker significance for regular employment in the robustness model is due to the increased heterogeneity of the sample when casual workers (with very unstable jobs) are added.

VIII. Qualitative Insights from Field Survey

Along with the quantitative data, the survey also collected people's personal views and experiences about their housing problems, future plans, and suggestions for improvement. These responses help explain the numbers by showing how migrant workers themselves understand and experience their living conditions. Most respondents said they face several ongoing problems, often at the same time—like poor sanitation, irregular water and electricity supply, high rent, overcrowded rooms, and uncollected waste. In areas such as Khoda and Bawana, issues like waterlogging during the rainy season, narrow and congested roads, and poor drainage systems were mentioned frequently. Many also spoke about pollution, the absence of nearby healthcare facilities, and the risks of living in weak or temporary housing, which make them more vulnerable to illness and job loss.

When asked about their long-term plans, most migrants said they wished to stay in Delhi-NCR because of the steady availability of work, even though housing conditions are difficult. However, some workers were still unsure about settling permanently. They pointed to job insecurity, rising living expenses, and the lack of strong social connections in the city as reasons for hesitation.

In terms of solutions, respondents offered several practical suggestions. Many wanted the government to provide affordable rental housing or introduce rent control policies to ease financial pressure. Others emphasized the need for better drinking water, regular garbage collection, improved sewage and drainage systems, and cleaner surroundings in industrial areas. Some also mentioned that creating more stable jobs and enforcing labor rights could help workers access better housing in the long run.

Overall, these on-the-ground insights support the quantitative findings of the study. They show that employment stability and income security are key to achieving better housing conditions. The responses also highlight a strong demand for government action and policy reforms that connect housing improvement with labor welfare, so that migrant workers can live with more dignity and security in the cities they help build.

IX: Policy Implications

The findings of this study make one thing very clear — the kind of job a worker has plays a big role in shaping their living conditions. Even though all three groups of workers — regular, contract, and casual — work in the same low-wage, low- skill and labor-intensive sectors, their housing situations are very different. Both the Housing Quality Index (HQI) and regression results reveal a consistent hierarchy, regular workers occupy

better-quality housing, followed by contract workers, while casual workers experience the most precarious conditions.

These results highlight that urban housing policies in India must consider employment security in addition to income when determining eligibility for support. The current housing schemes use income levels to decide eligibility, but they ignore the fact that people in insecure jobs — like contract and casual workers — face deeper challenges even if they earn the same as regular workers. The study suggests that having a formal, stable job can improve housing quality significantly, even within the same income group. Therefore, government housing policies should also focus on employment regularization, access to social protection, and proper work documentation, since these help workers get better access to credit and formal rental markets.

Policies that strengthen job security, expand social security coverage, and make credit more accessible for informal workers will help them not only earn better but also live better. Integrating labor protections with housing programs can improve both material living standards and social dignity. By linking employment stability with urban housing policies, cities can become more inclusive, resilient, and humane — recognizing the workers who are the true drivers of their economic growth.

X: Limitations and Future Scope

Limitations

Like every research study, this one also has its limits. The study is based on a sample of 123 households from three industrial areas — Khoda, Bawana, and Ballabhgarh — which gives valuable insights but cannot fully represent the entire Delhi-NCR region or all Indian cities. The data is cross-sectional, meaning it captures information at one point in time, not how things change over the years.

Some data, such as income levels and policy awareness, are self-reported, so there is always a chance of overstatement or understatement. Although the responses were verified wherever possible, some amount of inaccuracy is unavoidable in survey-based studies. Another limitation is that the Housing Quality Index (HQI), while detailed, does not include broader neighbourhood factors such as pollution levels, access to transport, or the quality of public spaces — all of which also affect living conditions.

Moreover, since the HQI adds up different housing aspects into a single score, improvement in one area (like electricity) might hide weaknesses in another (like sanitation). It also assumes that each factor is independent, even though in real life, they are often connected. Lastly, policy awareness was measured simply as "aware" or "unaware," which does not fully capture how well people understand or access housing schemes in practice.

Future Scope

Despite these limitations, the study opens several paths for future research. Future studies could follow the same group of workers over time (a longitudinal approach) to see how changes in job type or income affect housing quality in the long run. The research could also be expanded to other cities and industries to compare how housing conditions differ across regions.

Adding a gender perspective would help understand how women migrants experience housing problems — especially in terms of safety, privacy, and shared accommodation. Future research could also evaluate how well government schemes like PMAY-U or Affordable Rental Housing Complexes (ARHCs) actually work for informal workers. The HQI could be improved by including environmental and locational factors such as air quality, green spaces, and commuting distance, to give a more complete picture of housing quality in urban areas.

XI: Conclusion

This study examined how different types of employment influence the housing quality of migrant workers in Delhi-NCR. Drawing on field data from Khoda, Bawana, and Ballabhgarh, it developed a Housing Quality Index (HQI) and applied statistical analyses to assess how employment stability translates into improved living conditions. The results clearly show a consistent pattern: regular workers live in the best housing, followed by contract workers, while casual workers live in the poorest conditions.

These differences remain significant even after considering income, education, and location, proving that it's not just how much people earn — it's also how secure their jobs are that determines their housing situation. Regular employment brings steady income, better credit access, and secure tenure, which together allow workers to afford cleaner, safer, and more stable housing. Meanwhile, the uncertainty of contract and casual jobs forces many migrants into crowded, unsafe, and temporary shelters.

The analysis also finds that income and education positively affect housing quality, while policy awareness has little effect — suggesting that current housing schemes are not reaching those who need them most. Even after including casual workers in the extended a`nalysis, the overall pattern remained unchanged, strengthening the reliability of the results.

The qualitative findings add depth to these results. Workers spoke of poor sanitation, lack of water, high rents, and overcrowding as everyday struggles. Despite these challenges, many still prefer to stay in Delhi-NCR because of job opportunities. Their suggestions — from affordable housing and rent control to better sanitation and drainage systems — reflect a clear need for stronger government action and better urban planning.

In short, the study shows that employment security and housing quality are deeply connected. Better jobs lead to better homes, and without stable work, decent housing remains out of reach. Addressing urban housing inequality, therefore, requires not just building more homes but also making work more formal, secure, and protected.

Ultimately, the research highlights that urban inequality in India is not only about income gaps — it's also about how labor markets are structured. To create cities that are truly inclusive, policymakers must bridge the gap between how people earn and where they live. By focusing on both employment formalization and affordable housing, India can move toward cities that are not only economically productive but also socially just and humane.