

The Structural Determinants of Slum Deprivation in India: A State-Level Analysis of Indian Slums

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Abstract

Slum deprivation in India is deeply rooted in socio-economic inequalities resulting from rapid and uneven urbanisation. It is primarily due to the interplay of labour markets, capability structures, and gender-based inequality. This study aims to find the hidden factors from the two data sets by adopting a multidimensional, state-level comparative approach by integrating the Periodic Labour Force Survey (PLFS) with Census-based Slum indicators to examine how labour-market vulnerability, employment, and gendered labour division is responsible for shaping slum dwellers living conditions. For this study the theoretical idea has been drawn from urban sociology, Capability theory and Political economy of informality. Further, the gender inequality is studied by using feminist approach. The study, thus, positions slums not merely on the benchmark of housing deficit but also due to the structural inefficiency with strong correlation to employment opportunities and gender based social norms. The study concludes that reduction of slum deprivation in sustainable manner requires integrating labour reforms, capability enhancement, and gender-sensitive interventions into urban policy making, or strengthening India's slum policy architecture.

Introduction

Urban slums represent one of the most visible manifestations of socio-economic inequality in contemporary India. As Mike Davis (2006) argues, slums are not merely the consequence of rapid urbanisation; they are produced through processes of uneven capitalist development, fragmented labour markets and unequal access to urban resources. In India, a substantial proportion of urban households continue to experience inadequate housing, insecure tenure and limited access to essential services such as drinking water, sanitation and drainage. These conditions cannot be understood only as failures of urban infrastructure; they also reflect the unequal economic roles and opportunities that households occupy within labour markets, where differences in assets, education, skills, gender and social position shape their capacity to secure dignified urban living.

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Building on the work of Jan Breman (1996), Amitabh Kundu (2011) and John Harriss (2010), this study approaches slum deprivation as a socio-economic process embedded in labour structures, capability deficits and gendered inequalities rather than as a housing problem alone. The persistence of slums is closely connected to the organisation of urban labour, where economic growth coexists with widespread informal employment and unequal access to social protection.

India's labour market continues to be characterised by the predominance of informal employment, but informality becomes particularly disadvantageous when it is accompanied by low wages, employment insecurity, and absence of written contracts, limited social security and restricted access to collective labour rights. Papola (2012) and Sanyal (2007) argue that these conditions create a large population whose livelihoods remain economically productive yet institutionally vulnerable. From the perspective of Castells and Portes (1989), informality is not an accidental or residual sector; it is a structural feature of capitalist development that enables the reproduction of labour at lower cost while providing flexibility to capital. In this sense, capitalism simultaneously generates formal and informal labour markets, relying on precarious work for its continued accumulation.

India's response to urban deprivation has been reflected in major policy initiatives such as Pradhan Mantri Awas Yojana–Urban (PMAY-U) for affordable housing, the National Urban Livelihoods Mission (NULM) for livelihood promotion, and the Swachh Bharat Mission–Urban (SBM-U) for sanitation and basic urban services. While these programmes have contributed substantially to improving housing, sanitation and urban infrastructure, critical urban scholars such as Ananya Roy (2011) and Partha Chatterjee (2004) argue that interventions focused primarily on physical infrastructure often overlook the structural conditions that reproduce urban poverty.

The significance of the present study lies in demonstrating that slum deprivation is multidimensional and therefore requires a holistic policy approach. Housing is an important outcome of development, but it should not be treated as the sole indicator of improved well-being. Sustainable urban transformation depends equally on secure livelihoods, reduction of labour-market informality, gender-responsive employment opportunities, access to water and sanitation, and the expansion of human capabilities. Consequently, policies aimed at reducing slum deprivation must integrate housing, livelihood generation and social infrastructure rather than treating them as independent sectors. This integrated approach is more likely to produce durable improvements in the quality of urban life.

Against this backdrop, the present study combines data from the Periodic Labour Force Survey (PLFS) and Census/Slum or Slum Deprivation Index (SDI) to conduct a state-level comparative analysis of labour conditions and slum outcomes. This study has attempted a multidimensional analysis to show how employment, wage structure and gendered labour patterns perpetuate urban deprivation with respect to basic amenities of housing quality, healthy sanitation and water access. By understanding these linkages,

this study offers new insight for rethinking slum policy in India.

Historical Origin of Slums

The historical origin of slums in India dates back to the colonial urbanisation during the British rule. With the growth and expansion of the port cities like Bombay (Mumbai), Calcutta (Kolkata) and Madras (Chennai), large numbers of migrant labourers moved to these places. The new settlements of the migrants were known as “bustees” in Calcutta and “chawls” in Bombay. Slums functioned as necessary labour reservoirs, but were viewed with threats to public health, especially after the outbreak of plague in the 1890s. Post independence, India faced massive rural-urban migration, refugee influx and concomitant housing shortage in urban areas leading to urban squatting with absence of basic housing facilities and amenities.

During the initial years after the independence, slums in India were viewed as unsanitary, environmentally hazardous and obstacles to planned urban development. The Indian state responded to urban settlement crisis by slum clearance and resettlements but this disrupted the labour supply to both formal and informal sector. From the perspective of urban political ecology, policies towards slums in India aimed to clean the ecological space by displacing the vulnerable population to environmentally precarious locations and reinforced spatial inequalities across urban spaces (see Baviskar, 2003). A visible policy shift was observed since the 1970s when slum areas witnessed new interventions through provisioning of water supply, sanitation and basic infrastructure. But the access to these services was contingent upon legal status, political patronage and administrative discretion. The post structural reforms in 1990s transformed urban governance and slum development became integral to developments tied to real estate markets, public-private partnerships and land valorisation. The Draft National Slum Policy 2001 was formulated, advocating in-situ upgrading of slums which marked an important shift-from eviction towards spatial inclusion and service provision. The most notable beginning of the slum development policies in India can be understood when one reads through the programme on urban renewal viz. the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) launched in 2005. It introduced a reform-linked, investment-driven approach to urban governance. The key components of the policy included *integrated housing and slum development programme* (IHSDP) and *basic services to the urban poor* (BSUP). In the year 2011 Rajiv Awas Yojana introduced the vision of a “slum-free India”, operationalised through *slum-free city plans of action* (SFCPoA) and project-based interventions in selected slums. Importantly, RAY encouraged states to grant property rights to slum dwellers (MoHUPA, 2013). This was replaced with Pradhan Mantri Awas Yojana – Urban (PMAY-U), launched in 2015 which aimed to provide “Housing for All” by addressing the needs of economically weaker sections (EWS), low-income groups (LIG), and middle-income groups (MIG).

Theoretical Framework

Slum deprivation is not simply the result of inadequate housing or poor urban infrastructure. It emerges through the intersection of labour-market inequality, unequal

urban development, and gendered access to resources. This study therefore brings together the Urban Political Economy perspective, Sen's Capability Approach, and Feminist Development theory to explain how economic disadvantage is translated into unequal living conditions in Indian cities.

The Urban Political Economy perspective provides the structural starting point. Marx and Engels argued that capitalist development creates a large working population dependent on insecure and poorly paid labour, compelling many workers to live in overcrowded and unhealthy neighbourhoods. Building on this, Lefebvre, Harvey and Castells demonstrate that urban space is not neutral; it is produced through unequal investment, uneven development and differential access to land and public infrastructure. In this sense, informal employment and precarious work are not only labour-market conditions but also factors that determine the location and place where people live and the quality of the settlements.

However, labour-market inequality alone cannot explain why similar levels of income often produce different living outcomes. This is where Amartya Sen's Capability Approach becomes important. Sen argues that well-being should be understood in terms of people's capabilities, the real opportunities they have to achieve valued ways of living rather than income alone. Stable employment and adequate wages expand a household's ability to secure better housing, sanitation, clean water and other basic amenities, whereas insecure work and low earnings restrict these capabilities. In the present study, PLFS indicators such as informal employment, wages and employment participation represent these economic capabilities, while the Census slum indicators reflect their material outcomes in everyday living conditions.

These processes are further shaped by gender, making deprivation inherently intersectional. Feminist development scholars, particularly Naila Kabeer and Bina Agarwal, argue that resources do not automatically translate into well-being because access to and control over resources are mediated by gender relations. Women's labour-force participation, employment security and bargaining power influence not only their economic position but also household decisions regarding housing, sanitation and access to basic services. Consequently, two households with similar incomes may experience very different levels of deprivation depending on women's access to employment and agency within the household.

Drawing these perspectives together, the study argues that labour-market vulnerability creates unequal economic capabilities, and these capabilities are converted into unequal urban living conditions through gendered social relations within an uneven urban environment. Slum deprivation is therefore understood as a socio-spatial outcome produced by the interaction of labour, space and gender, rather than as an infrastructure deficit alone. This integrated framework provides the basis for examining whether state-level variations in informal employment, wages and female labour-force participation correspond with variations in slum deprivation across India.

Research Questions

Given the theoretical backdrop at the intersection of the frameworks, the study poses three questions to understand the issue of slum deprivation looking into the informality of labour market, deprivation in slum and gendered labour impacting each other in the overall socio-economic outcomes in slum areas.

1. **RQ1:** How does state level labourmarket informality impact the overall slum deprivation in India?
2. **RQ2:**How does economic capability deprivationproduces multidimensional slum deprivation?
3. **RQ3:** How do gendered labour disadvantages like low wages corresponds to gendered slum deprivation across states?

Data and Methodology

Research Design

This study adopts a comparative, state-level research design to examine the relationship between labour-market vulnerability and slum deprivation across India. The analysis integrates two nationally representative datasets: the Periodic Labour Force Survey (PLFS) 2023–24 and the Census of India 2011 Slum Data. While the Census provides information on housing and basic amenities within officially identified slum settlements, PLFS offers state-level indicators of employment, wages, labour-force participation and labour-market informality. The state/Union Territory is the unit of analysis, and the two datasets are harmonised at the state level to facilitate interstate comparison.

The objective is not to establish household-level causality but to examine whether differences in labour-market characteristics correspond with spatial variations in slum deprivation across Indian states. The analysis therefore represents a comparative ecological study based on aggregated state-level observations.

Data Sources

The study combines two complementary datasets.

Census of India 2011 Slum Data provides information on the physical and environmental conditions of slum settlements, including housing quality, sanitation, drinking water, drainage and overcrowding. These variables are used to construct the Socio-Economic Slum Deprivation Index (SE-SDI).

Periodic Labour Force Survey (PLFS) 2023–24, published by the Ministry of Statistics and Programme Implementation (MoSPI), provides state-level labour-market indicators including informal employment, Female Labour Force Participation Rate (FLFPR), female informal employment and average daily wages. These variables represent labour-market vulnerability and economic capability in the analysis. Because the two datasets

refer to different periods (2011 and 2023–24), the findings are interpreted as state-level structural associations rather than temporal or household-level causal relationships.

Table 1 : Variables Used in the Study

Analytical construct	Indicator	Source	Year
Slum deprivation	Housing quality	Census of India (Slum Data)	2011
Slum deprivation	Sanitation	Census of India (Slum Data)	2011
Slum deprivation	Drinking water	Census of India (Slum Data)	2011
Slum deprivation	Drainage	Census of India (Slum Data)	2011
Slum deprivation	Overcrowding	Census of India (Slum Data)	2011
Labour-market vulnerability	Informal employment	PLFS	2023–24
Gendered labour position	Female LFPR	PLFS	2023–24
Gendered labour position	Female informal employment	PLFS	2023–24
Economic capability	Average daily wages	PLFS	2023–24

Construction of the Socio-Economic Slum Deprivation Index (SE-SDI)

To measure interstate variation in slum living conditions, the study develops a Socio-Economic Slum Deprivation Index (SE-SDI). The index is a study-specific composite measure designed to capture the combined burden of material and infrastructural deprivation in slum settlements. It is not intended to represent a Multidimensional Poverty Index (MPI) or Multidimensional Deprivation Index (MDI).

Five dimensions of deprivation were selected based on the availability of Census 2011 slum data:

1. Housing deprivation – proportion of slum households living in kutchha or semi-pucca structures.
2. Sanitation deprivation – proportion of households without improved toilet facilities.
3. Water deprivation – proportion of households lacking access to safe drinking water within the premises.
4. Drainage deprivation – proportion of households without closed drainage systems.
5. Overcrowding – proportion of households living in overcrowded conditions.

Each indicator is expressed so that higher values represent greater deprivation.

Indicator Normalisation

Since the five indicators have different empirical ranges, they were normalised using the min–max normalisation method:

$$X_{is}^* = \frac{X_{is} - X_{i,\min}}{X_{i,\max} - X_{i,\min}}$$

Where:

X_{is} = observed value of indicator i for state s

$X_{i,\min}$ = minimum observed value across states

$X_{i,\max}$ = maximum observed value across states

X_{is}^* = normalised deprivation score

This transformation rescales each indicator onto a common scale, ensuring comparability across dimensions.

Aggregation

Following equal weighting, the SE-SDI is calculated as the arithmetic mean of the five normalised indicators:

$$SE-SDI_s = \frac{H_s + S_s + W_s + D_s + O_s}{5}$$

Where:

H_s = Housing deprivation

S_s = Sanitation deprivation

W_s = Water deprivation

D_s = Drainage deprivation

O_s = Overcrowding

Higher SE-SDI values indicate greater aggregate slum deprivation, while lower values indicate comparatively better living conditions. The index is subsequently used to classify states into five deprivation categories (Very High, High, Moderate, Low and Very Low) for comparative analysis.

Analytical Procedure

The empirical analysis was conducted in three stages.

Stage I: Construction of the SE-SDI using Census 2011 slum indicators and generation of state-wise deprivation rankings.

Stage II: Compilation of PLFS 2023–24 labour-market indicators, including informal employment, FLFPR, female informal employment and average daily wages.

Stage III: State-level comparative analysis through descriptive statistics and graphical representation. Figures 1–7 examine the co-variation between labour-market indicators and slum deprivation across states. The figures are interpreted as descriptive evidence of association and do not constitute household-level or causal estimation.

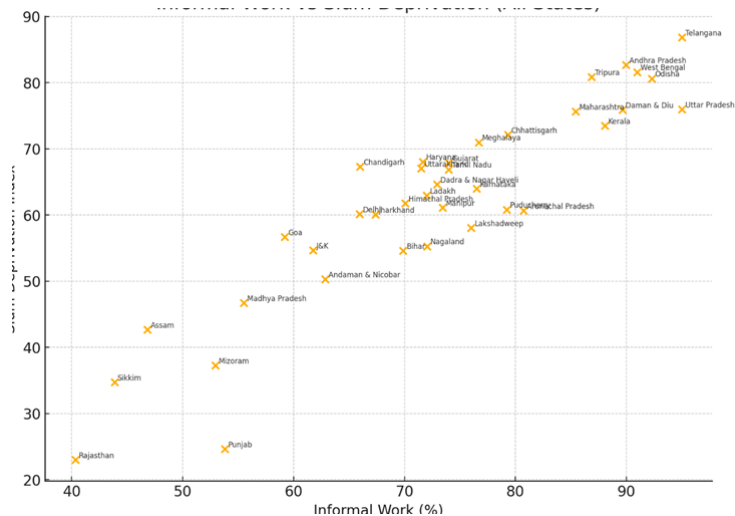
Methodological Limitations

The study has two important methodological limitations. First, the Census 2011 and PLFS 2023–24 datasets refer to different reference periods; consequently, the analysis cannot establish temporal causality. Second, the datasets are harmonised at the state level rather than linked at the household level. Therefore, the findings should be interpreted as evidence of structural interstate association rather than direct causal relationships between individual employment conditions and household deprivation.

Results & Analysis

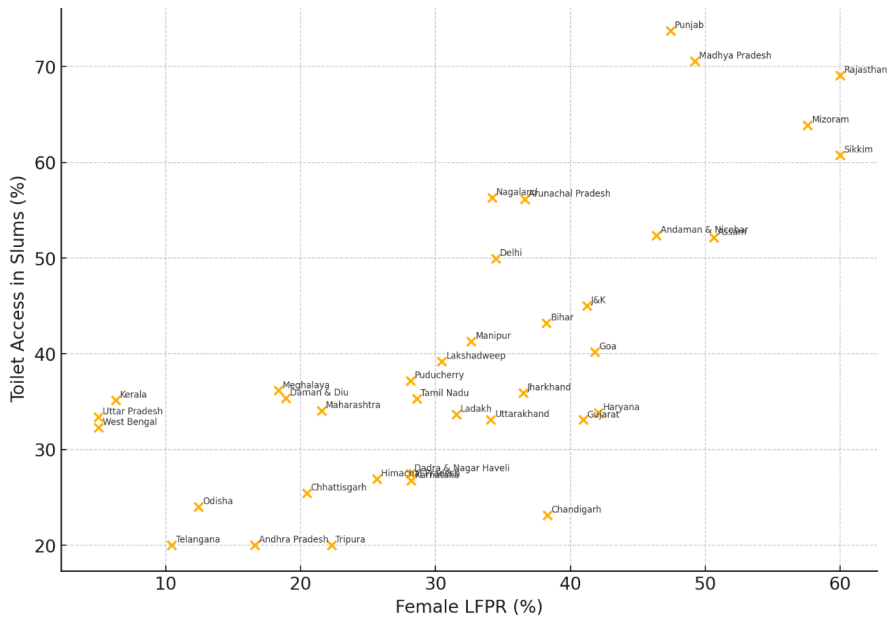
Based on PLFS 2023–24 and Census 2011 slum microdata, Figure 1 presents the state-level relationship between informal employment (PLFS 2023–24) and the Socio-Economic Slum Deprivation Index (SE-SDI) constructed from Census 2011 slum data. States such as Bihar, Jharkhand, Uttar Pradesh, Odisha and Chhattisgarh combine relatively high levels of informal employment with higher slum deprivation, indicating that labour-market vulnerability and inadequate urban living conditions frequently coexist. However, the figure should be interpreted as a descriptive structural association rather than evidence of a direct causal relationship.

Figure 1: Informal Work vs Slum Deprivation (All States)



The contrasting experiences of states such as Goa, Mizoram and Madhya Pradesh suggest that labour-market outcomes are shaped by the interaction between labour demand and labour supply. Differences in industrial structure, employment opportunities, skill composition, migration patterns, urbanisation and state capacity influence both the quality of employment and access to housing and basic urban services. Consequently, lower slum deprivation in these states reflects distinct developmental pathways rather than a single “healthy labour market” model. Figure 1 therefore highlights how variations in labour-market structure correspond with different patterns of urban deprivation across states.

Figure 2: Female LFPR vs Toilet Access (All States)



ability to participate in paid work Bihar, Uttar Pradesh, and Odisha fall in the extremely low-FLFPR and the toilet access is also low. It reveals slow participation of women in labour force followed by serious livelihood constraints for women; they face more severe sanitation challenges. In contrast, states like Tamil Nadu many northeastern states exhibit higher FLFPR along with high slum toilet access.

Figure 3: Wages vs Housing Quality (All States)

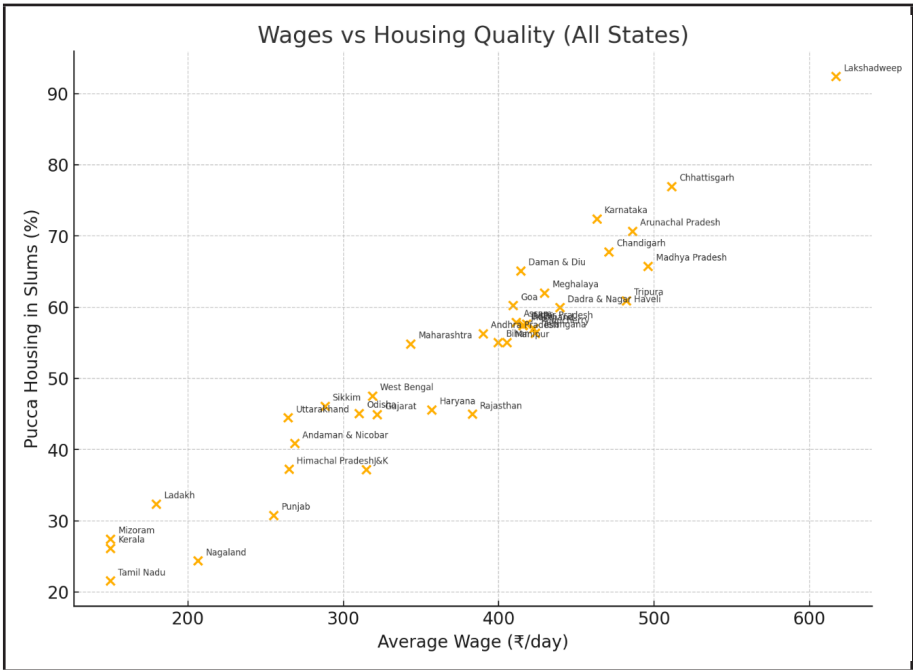


Figure 3 shows that higher wages enable better housing capability. States with higher daily wages such as Karnataka, Arunachal Pradesh and Chandigarh shows the highest percentages of pucca housing in slum areas. States with low wage conditions like Bihar, Uttar Pradesh, and Punjab consistently show weak housing conditions like katcha or semi-pucca structures. This figure becomes an outlier of how income influences the living standards in slum areas such as housing and confirms the capability approach explanation.

Figure 4: Sate-wise Socio-economic Slum Deprivation Index(SE-SDI)

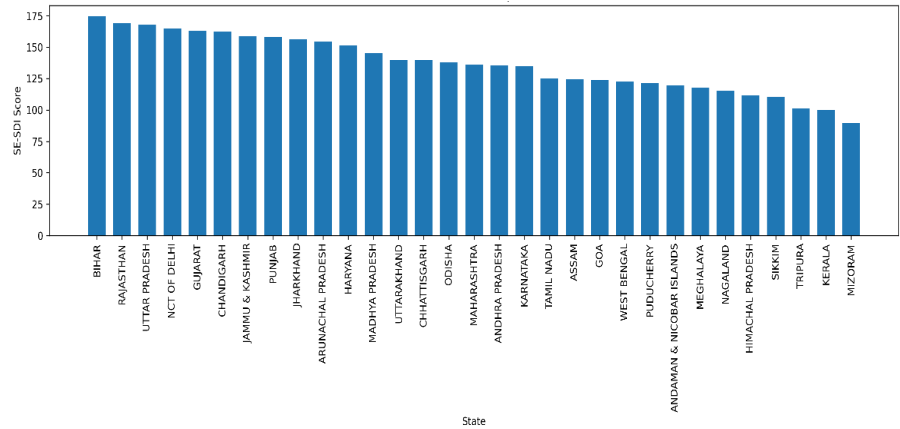


Figure 4 presents the state-wise ranking of the Socio-Economic Slum Deprivation Index (SE-SDI), with higher scores indicating greater deprivation across housing quality, sanitation, drinking water, drainage and overcrowding. States such as Bihar, Uttar Pradesh and Rajasthan occupy the highest deprivation category, reflecting persistent deficits in basic urban services and the concentration of socio-economically vulnerable populations in slum settlements. In contrast, states including Kerala, Tamil Nadu, Maharashtra and Goa record comparatively lower levels of slum deprivation, indicating relatively better access to housing and urban infrastructure.

However, these contrasting outcomes should not be interpreted as arising from a common developmental pathway. The comparatively lower deprivation observed in several North-Eastern states may partly reflect lower urban density and relatively greater availability of land, which reduces pressure on informal settlements. By contrast, states such as Kerala and Tamil Nadu have achieved better outcomes through higher human development, stronger local governance, sustained public investment in housing, sanitation and urban services, and relatively better social welfare systems. Figure 4, therefore demonstrates that slum deprivation is context-specific, and effective policy interventions must recognise the distinct demographic, institutional and spatial conditions that shape urban inequality across states rather than adopting a uniform national approach. Same figure is summarised in **Table 2**

Table 2

Deprivation Category	Representative States	SE-SDI Range
Very High	Bihar, Rajasthan, Uttar Pradesh	168–174
High	NCT of Delhi, Gujarat, Chandigarh	156–165
Moderate	Arunachal Pradesh, Haryana, Madhya Pradesh	135–155
Low	Karnataka, Tamil Nadu, Assam	121–135
Very Low	Andaman & Nicobar Islands, Meghalaya, Nagaland	90–120

Figure 5: Female Informal Employment vs Female LFPR in Slums (State-wise)

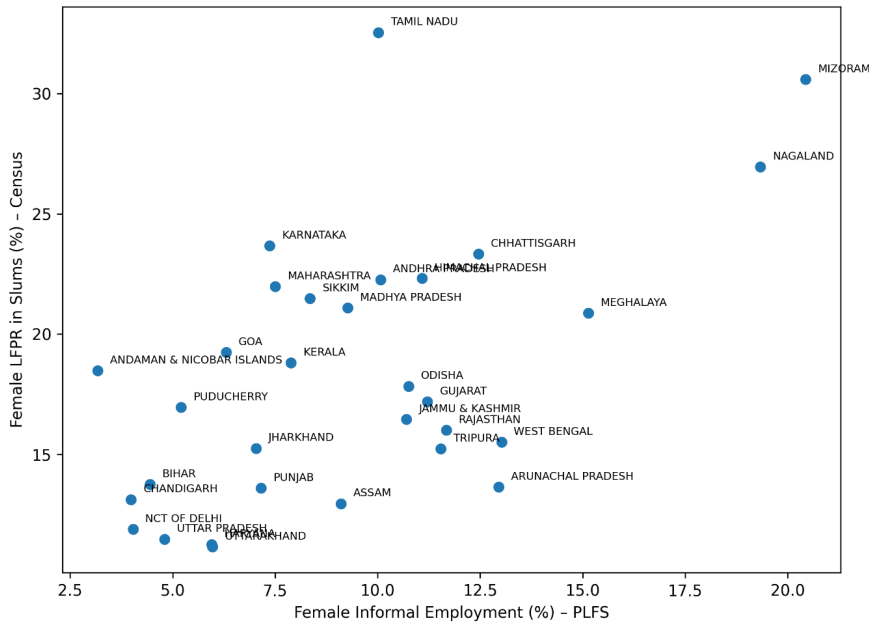


Figure 5 compares Female Labour Force Participation Rate (FLFPR) and female informal employment across Indian states to illustrate the gendered structure of urban labour markets. The figure shows considerable interstate variation in both indicators. States such as Bihar and Uttar Pradesh are characterised by low female labour-force participation, while women who do participate are predominantly engaged in informal employment. This suggests that labour-market exclusion and employment informality are distinct but interconnected dimensions of gender inequality. In contrast, states such as Kerala and Meghalaya exhibit relatively higher female labour-force participation alongside moderate levels of informal employment, reflecting different institutional, educational and social conditions that facilitate women’s entry into paid work.

Drawing on feminist labour literature, women’s participation in the labour force is influenced by multiple structural factors, including time poverty, unpaid care responsibilities, educational attainment, mobility, safety, social norms and the availability of decent employment opportunities. Therefore, Figure 5 is interpreted as a descriptive state-level comparison rather than evidence that informality alone determines women’s participation or withdrawal from the labour market.

Figure 6:

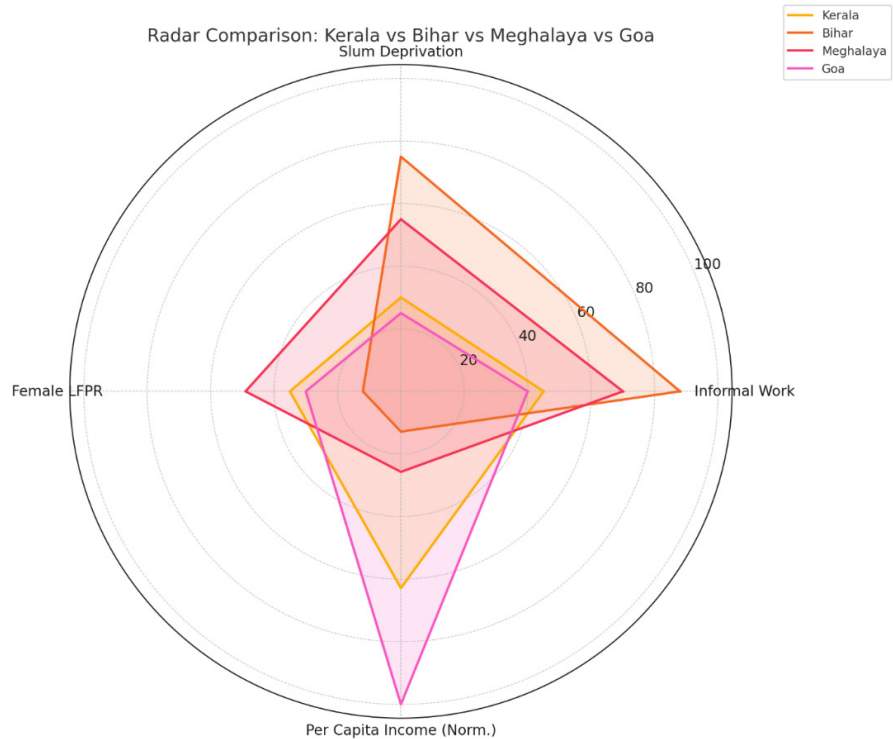


Figure 6 highlights the contrasting socio-economic profiles of Kerala, Bihar, Meghalaya, and Goa. The aim of this diagram is to provide a zone wise profile of slum position of India. It combines informal work, slum deprivation, female labour force participation, and per-capita income. These states represent distinct developmental planning structure in India.

Kerala presents a relatively balanced development profile, characterised by lower labour-market informality, moderate slum deprivation, comparatively higher female labour-force participation, and high per capita income. Rather than attributing these outcomes to literacy alone, Kerala’s experience is better understood through its higher human development, reflected in strong investments in education, healthcare, social welfare, and public services. These institutional and social advantages have expanded economic capabilities and improved access to housing and basic urban amenities, contributing to comparatively lower levels of slum deprivation despite continuing labour-market challenges.

Bihar, in contrast, exhibits high labour-market informality, severe slum deprivation and one of the lowest per capita incomes among Indian states. However, its low female

labour-force participation should be interpreted within a broader structural context rather than as a direct consequence of poverty alone. Women's participation in paid work is influenced by multiple factors, including educational attainment, unpaid care responsibilities, patriarchal social norms, limited mobility, employment opportunities and the availability of decent work. Bihar's position across these dimensions suggests that slum deprivation reflects the intersection of economic vulnerability, unequal labour markets and gendered social relations, rather than a single capability deficit

In Meghalaya, despite moderate informality and moderate slum deprivation, it exhibits high female labour participation. This is largely due to the fact that a large proportion of Meghalaya's economy is dependent on subsistence agriculture, petty trade, and market vending where women's participation is higher. Moreover, since inheritance runs through daughters as Khasis, Jaintias and Garos are matrilineal societies, women remain as the custodian of property and this also facilitates their economic engagement. On the other hand, the per-capita income remains modest which reflects that women labour force participation is mainly in low-income occupations as mentioned above.

Goa presents a distinct development profile characterised by low labour-market informality, very low slum deprivation and one of the highest per capita incomes among Indian states. However, its moderate female labour-force participation suggests that economic prosperity alone does not automatically produce gender-inclusive labour markets. Rather than interpreting Goa through a single indicator, the findings highlight the need for a holistic framework in which slum deprivation is understood as the outcome of interacting structural factors, including income levels, employment quality, public infrastructure, urban governance and gendered social norms. Thus, differences in slum deprivation across states reflect not only variations in economic growth but also the extent to which development is translated into equitable access to employment, housing and basic urban services.

Figure 7: Male vs Female Work Participation in Slums (State-wise)

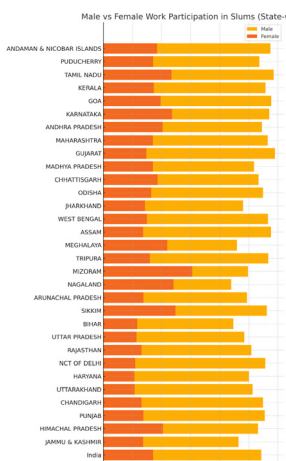


Figure 7 shows a comparison of male and female work participation rates across states. It reveals a pronounced and persistent gender gap in slum labour markets. In every state, male work participation substantially exceeds that of females, indicating the structural exclusion of women from paid employment within slum settlements. The gap is particularly wide in northern and western states as compared to southern states. Overall, from this figure we can conclude that gendered labour disadvantage in urban slums is not merely a function of regional poverty but is also connected to local labour structures and social norms like care burden.

Discussion

This study examined the structural determinants of slum deprivation in India. The findings strengthen the foundational arguments of scholars in urban sociology, labour studies, and development theory. It emphasise on the premise that urban poverty must be conceptualised as a structurally produced condition rather than infrastructural deficit (Bremman, 1996; Castells & Portes, 1989; Davis, 2006). With the help of data represented in figure, we will be able to answer our research question with much authenticity.

RQ1: Labour Market Vulnerability and Slum Deprivation

The evidences obtained from the data demonstrate the state-level labour market informality in the informal settlements of India. It is the central driver of the structural deficit which causes slum deprivation in India. **Figure 1** represents states with high informal employment like Uttar Pradesh, Bihar, West Bengal. Most of the people whomigrate from rural areas to urban centres are in need of other sources of income when they face agricultural distress. They resort to occupations such as casual labour and local vendors and are often forced to make slums as their home with poor standard of living. On the other hand, states with relatively lower work informality have better living conditions. This pattern empirically supports Bremman's characterisation of informality. A workforce labour often characterised as 'footloose labour' which are disconnected from income security, welfare entitlements, and moreover a political voice.

From an urban sociological perspective, these findings are consistent with Nandini Gooptu's analysis of the urban poor as economically productive yet institutionally marginal, whereby informal workers contribute significantly to the urban economy while remaining excluded from labour protections and social security (Gooptu, 2001). They also resonate with Kalyan Sanyal's conception of the postcolonial surplus population, which argues that populations excluded from the formal economy are not absorbed into capitalist production but are instead managed through informal and survival-oriented economic arrangements (Sanyal, 2007). Within this framework, slums function as low-cost spaces of labour reproduction, enabling the survival of surplus populations while simultaneously serving as a governance mechanism through which the state accommodates, rather than eliminates, urban informality.

The ranked deprivation patterns (Figures 4& 6) further show that deprivation clusters regionally, reinforcing Wacquant's notion of advanced marginality in urban space. Indian urban scholars such as Janaki Nair and Ananya Roy similarly argue that informality is 'produced', and it is not a product of governance failure. Through this way state manages labour and population while controlling the power of inclusion and exclusion. From the above discussion we can conclude that labour market informalities is a key mechanism through which socio-economic inequality in Indian cities is reproduced.

RQ2: Economic Capability and Multidimensional Deprivation

Taking forward the labour market vulnerability, the combined evidence from Figures 2,3 and 4 demonstrates that how it translates into economic capability deprivation. It is the core mechanism through which multidimensional slum deprivation is produced across Indian states. The figures show how economic capability deprivation restricts the conversion of income into functioning's like toilet access (**Fig2**), housing access (**Fig3**), etc. States that rank poorly on economic capability indicators reflected in low work participation, weak income security also exhibits high deprivation across housing quality, sanitation. This pattern aligns closely with Amartya Sen's capability approach, which conceptualises poverty not only on the indicator of low income but also as the deprivation of minimal dignified life.

Scholars such as Amartya Sen (1999) and Jean Drèze (1999) argue that material deprivation persists when economic resources and capabilities do not translate into effective access to essential services. This relationship is reflected in the present study, where states with lower per capita income generally exhibit higher levels of slum deprivation. High-deprivation states such as Bihar, Uttar Pradesh, and Jharkhand combine relatively low per capita income with poorer housing, sanitation, and basic urban services, suggesting that limited economic capability constrains households' ability to secure improved living conditions (Figure 4; Figure 6). Sanyal's notion of surplus populations which highlights how large segments of slum residents remain excluded from accumulation processes that could enhance their living standards. Figures 4 and 6 further reveal that deprivation is multidimensional rather than sector-specific, supporting UNDP's human development framework, which means the deprivation consist of indicators like health, sanitation, living standards, etc. Similar approach is explained through Alkire-Foster's multidimensional poverty approach, which emphasise the interdependence of economic, social, and infrastructural deprivations.

Indian scholars such as Kundu and Mukhopadhyay, similarly show that without stable livelihoods, slum households will suffer from infrastructural deficits even when urban growth is high. From these figures we can conclude that economic capability deprivation acts as the foundational reason for multidimensional slum deprivation, confirming that improvements in housing and services cannot be achieved independently of labour stability, income security, and enhancement in human capital. Government schemes like NULM must shift to wage enhancing livelihood strategies.

RQ3: Gendered Slum Deprivation

Learning from foundational issues in slums in the form of labour market vulnerability and economic capability deprivation, we can also see that the relationship is not socially neutral in nature. **Fig 7**, clearly demonstrates the sorry state of women in terms of labour force participation rate compared to men, indicating structural exclusion of women from paid employment. Drawing on Naila Kabeer's (1999) framework, the women labour experience disadvantage in lower wages and concentration in unpaid work which undermines women's agency in household decision making. **Figure 5** and **table 1**, further demonstrates that high levels of informal employment do not translate into higher female participation in slums. In states such as Bihar, the exclusion of women from work even starts before the informality exist supporting Breman's (1996; 2013) argument that informal labour regimes are selectively exclusionary and Gooptu's (2001) analysis of malebiased labour absorption in urban economies.

Figure 2 showing the Toilet access Vs Female LFPR supports feminist political economy perspectives (Hartmann, 1979; Mies, 1986) which explains how women's concentration in low-paid or invisible work weakens their bargaining power over housing and basic amenities which further translates into health issues due to lack of sanitation. Indian feminist scholars such as Agarwal (1994) and Rege (1998) have further added that the economic marginalisation of women is a product of caste, kinship, and patriarchal, which seems to intensify in context of slums because of low level of literacy. Overall, the evidence shows that gendered marginalisation of women in slums is not a residual outcome of poverty but a structurally produced consequence of gendered labour market exclusion under informal urbanisation.

Conclusion and Policy Implications

This study demonstrates that slum deprivation in India is not a residual outcome of urban poverty alone. It finds its root in the informal labour market condition prevalent in India, which further translates into economic capability deprivation. This produces a peculiar disadvantage for women. States with growing urban economy and distressed agricultural sector induce people to migrate to metropolitan cities for employment to maintain basic living. These migrants often engage in informal employment opportunities in urban metropolitan centres and slums serves as the shadow cities for these people. The persistence of migrant settlements in slums in India is mainly due to the fact that these workers settled in slums create the space for cheap labour market for rapid and unplanned urbanisation policies. The inequality in income structure and low wage persistence due to weak bargaining power disconnects work from income security and welfare entitlements. The deprivation in economic capability further compounds this process, as insecure and low-return employment constrain households' ability to convert labour effort into improvements in their living conditions. The analysis also reflects how women's exclusion from stable and high paid work translates directly into higher gendered slum deprivation. They have lower access to toilets and sanitation, their bargaining power in the household is negligible and the structural deficit in labour market still persists.

Notwithstanding India's rapid increase in its GDP growth rate and with a focus on Viksit Bharat by 2047, these findings carry clear policy implications. First, slum improvement policies need to be integrated with labour market interventions. The slums of India do not qualify as stand-alone infrastructure problem in urban areas and metropolitan centres. Schemes such as Pradhan Mantri Awas Yojana (PMAY-U) and Swachh Bharat Mission (SBM-U) address physical deficits and therefore their impact is likely to remain limited in high-informality states. This needs to be accompanied by measures that provide stable livelihoods options. Strengthening employment security could directly enhance households' economic capabilities and their capacity to sustain improved living conditions both across rural and urban spaces.

Second, addressing informal labour vulnerability requires a spatially integrated policy framework. Better linkages between slum populations and social protection schemes such as e-Shram portal, Employees' State Insurance (ESI) for informal workers and Jan Dhan Aadhaar Mobile (JAM) linked benefits. Integrated approach also necessitate upgrading the slums for better solid waste management and climate resilient infrastructure for a humane living condition. Skill upgradation and certification through PM Kaushal Vikas Yojana is one way of addressing issues of wage employment for workforce residing in slum areas, converting slums as sites of public investment for supply of skilled worker in urban labour market with opportunities to enjoy decent wages and access to basic living conditions.

Third, addressing gender inequality requires explicitly gender-responsive urban labour policies that expand women's access to diverse and market-linked livelihood opportunities. Programmes such as the National Urban Livelihoods Mission (NULM) and its Self-Help Group (SHG) components need reorientation and move beyond traditional home-based occupations and support women's participation in the wider urban economy through skill development, entrepreneurship and enterprise linkages. Schemes like PMKVY 4.0, can expand coverage for women in these settlements to access training in sectors such as digital services, e-commerce, healthcare support, logistics, retail, electronics assembly, food processing, renewable energy, beauty and wellness, and other emerging service and manufacturing occupations. Equally important is reducing the care burden that constrains women's labour-force participation. Investments in affordable childcare through Mission Shakti, Anganwadi services and community childcare facilities in slum settlements can address issues of women's health and nutrition and also child health and nutrition issues which remain as a major challenge in urban areas.

A uniform national template for addressing the precarities of slum cannot address spatial and locational differences across slums in various urban and metropolitan centres. States with high level of informality and deprivation may require targeted and spatially differentiated intervention combining livelihood security, gender inclusion and informal labour market reforms. India's urban growth is accompanied with existing cities metros expanding at a fast pace together with the growth of shadow cities. The Viksit Bharat 2047 for an inclusive growth need to address these critical dimension

of urbanisation and growing concerns of slum settlement in urban and metropolitan centres which holds the reservoir hub for supply of informal workers across the Indian urban spaces.

References

- Agarwal, B. (1994). *A field of one's own: Gender and land rights in South Asia*. Cambridge University Press.
- Agarwal, B. (1997). "Bargaining" and gender relations: Within and beyond the household. *Feminist Economics*, 3(1), 1–51. <https://doi.org/10.1080/135457097338799>
- Alkire, S., & Foster, J. (2011). Counting and multidimensional poverty measurement. *Journal of Public Economics*, 95(7–8), 476–487. <https://doi.org/10.1016/j.jpubeco.2010.11.006>
- Alkire, S., Roche, J. M., Santos, M. E., Seth, S., & Sumner, A. (2015). *Multidimensional poverty measurement and analysis*. Oxford University Press.
- Breman, J. (1996). *Footloose labour: Working in India's informal economy*. Cambridge University Press.
- Breman, J. (2013). *At work in the informal economy of India: A perspective from the bottom up*. Oxford University Press.
- Castells, M. (1977). *The urban question: A Marxist Approach*. MIT Press.
- Castells, M., & Portes, A. (1989). World underneath: The origins, dynamics, and effects of the informal economy. In A. Portes, M. Castells, & L. A. Benton (Eds.), *The informal economy: Studies in advanced and less developed countries* (pp. 11–37). Johns Hopkins University Press.
- Chatterjee, P. (2004). *The politics of the governed: Reflections on popular politics in most of the world*. Columbia University Press.
- Davis, M. (2006). *Planet of slums*. Verso.
- Drèze, J., & Sen, A. (2002). *India: Development and participation*. Oxford University Press.
- Drèze, J., & Sen, A. (2013). *An uncertain glory: India and its contradictions*. Princeton University Press.
- Federici, S. (2012). *Revolution at point zero: Housework, reproduction, and feminist struggle*. PM Press.
- Gooptu, N. (2001). *The politics of the urban poor in early twentieth-century India*. Cambridge University Press.
- Government of India. (2011). *Census of India 2011: Slum population tables*. Office of the Registrar General & Census Commissioner, India.
- Government of India. (2024). *Periodic Labour Force Survey (PLFS): Annual report 2023–24*. Ministry of Statistics and Programme Implementation.
- Hartmann, H. (1979). The unhappy marriage of Marxism and feminism: Towards a more progressive union. *Capital & Class*, 3(2), 1–33. <https://doi.org/10.1177/030981687900800102>
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and Change*, 30(3), 435–464. <https://doi.org/10.1111/1467-7660.00125>

- Kabeer, N. (2016). Gender equality, economic growth, and women's agency: The "endless variety" and "monotonous similarity" of patriarchal constraints. *Feminist Economics*, 22(1), 295–321. <https://doi.org/10.1080/13545701.2015.1090009>
- Kundu, A. (2009). Urbanisation and migration: An analysis of trends, patterns and policies in Asia. *Human Development Research Paper*, UNDP.
- Lefebvre, H. (1991). *The production of space* (D. Nicholson-Smith, Trans.). Blackwell. (Original work published 1974)
- Mies, M. (1986). *Patriarchy and accumulation on a world scale: Women in the international division of labour*. Zed Books.
- Mukhopadhyay, A. (2017). Exclusion and informalisation in urban labour markets in India. *Economic and Political Weekly*, 52(24), 38–45.
- Nair, J. (2005). *The promise of the metropolis: Bangalore's twentieth century*. Oxford University Press.
- Roy, A. (2005). Urban informality: Toward an epistemology of planning. *Journal of the American Planning Association*, 71(2), 147–158. <https://doi.org/10.1080/01944360508976689>
- Roy, A. (2011). Slumdog cities: Rethinking subaltern urbanism. *International Journal of Urban and Regional Research*, 35(2), 223–238. <https://doi.org/10.1111/j.1468-2427.2011.01051.x>
- Sanyal, K. (2007). *Rethinking capitalist development: Primitive accumulation, governmentality and post-colonial capitalism*. Routledge.
- Sen, A. (1999). *Development as freedom*. Oxford University Press.
- UN-Habitat. (2003). *The challenge of slums: Global report on human settlements 2003*. Earthscan.
- Wacquant, L. (2008). *Urban outcasts: A comparative sociology of advanced marginality*. Polity Press.