

## **BUILDING LIVES BEYOND BUILDINGS: “A COMPILED STUDY ON SOCIAL SECURITY ACCESS, OCCUPATIONAL HEALTH RISKS, AND RETIREMENT PLANNING OF CONSTRUCTION WORKERS IN DREAM CITY MUMBAI, INDIA”**

**Dr. Varsha Vaswani**

*Lecturer, Smt. Chandibai Himathmal Mansukhani Junior College, Ulhasnagar -421003.*

### **Abstract**

This study examines the paradox of Mumbai, India's developing global metropolis, where construction workers continue to face labor precarity despite the city's fast infrastructural boom. The study examines social security access, occupational health concerns, and retirement readiness in the unorganized construction sector using secondary data from PLFS, ILO, BOCW Welfare Board, RBI, and CAG reports (2019–2025). Results show that welfare funds are severely underutilized, that safety breaches are a major cause of accidents, and that poor earnings and financial illiteracy are the main causes of low pension participation. According to the report, advances in micro-pensions, integrated databases, and technology-enabled welfare mobility are essential for equitable growth in the global knowledge economy.

**Infographic Abstract:** The move from urban expansion to informal labor → welfare shortfalls and safety issues, such as → pension exclusion. Highlights < 15% of workers have pension coverage → 73% of workers are unregistered, → 26.3% have access to social funds. Micropension programs + Digital BOCW, + e-Shram = Important policy solutions.

**Keywords:** Safety, financial literacy, construction workers.

► *Corresponding Author: Dr. Varsha Vaswani*

### **1. Introduction**

The informal sector comprises 98% of these workers, many of whom lack documentation for welfare access and receive little support. Despite available funds in Cess, they remain mostly unused. Workers endure low wages, poor living conditions, and a high rate of unreported accidents, particularly impacting women, who often earn less than their male counterparts. Major issues include exploitation by contractors, wage theft, and a lack of essential services at work sites.

### Hierarchy of Construction Workforce

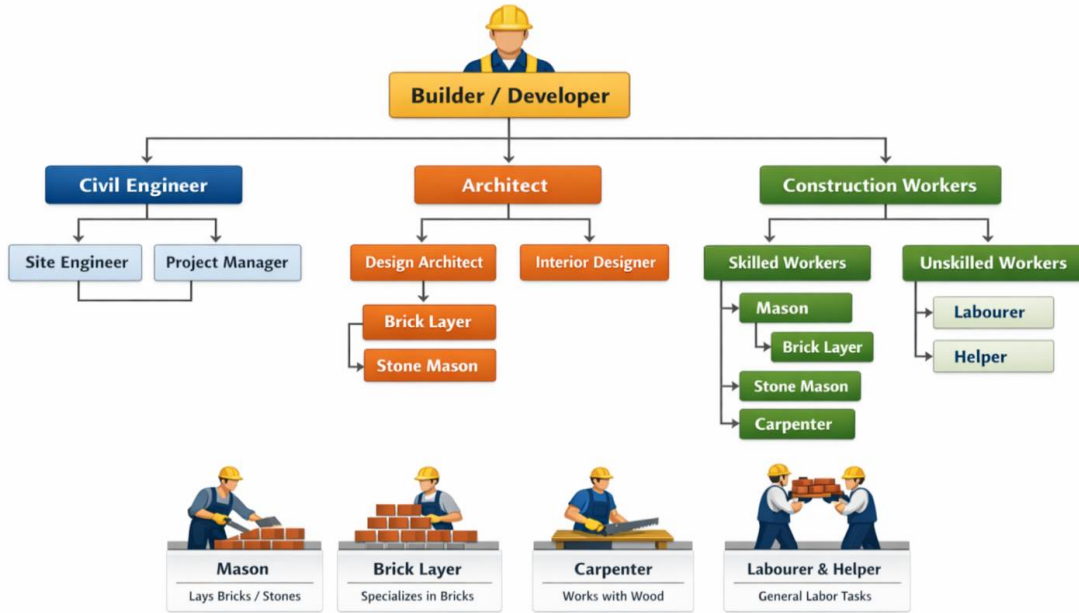


Fig1: Types of Hierarchy of Construction Workers

Construction workers in Mumbai and India, constituting 13% of the workforce by 2022-23, face severe hardships due to informal employment.



Predominantly migrant laborers, they work in harsh conditions with long hours and inadequate meals. Based on economic survey Construction workforce in India 2024-25 that India's 40% of people are in construction work, With reference to fig 2 Maharashtra has most of the construction workers reported injuries in the past couple of years , primarily due to falls and objects. Health issues are prevalent, with 71.5% suffering from musculoskeletal problems. Social security measures are inadequate, with unutilized funds. The Code on Social Security, 2020 aims to improve protections through EPFO and ESI initiatives

## **2. Statement of Problem**

Mumbai's construction industry employs 35-40% out of 71 to 85 millions approximately of its workforce as construction workers, who primarily work on a contractual or daily-wage basis. These workers are vulnerable due to limited social security, high health and safety risks, and inadequate retirement planning. Existing welfare schemes are often poorly implemented, creating economic insecurity for these essential contributors to urban development. This situation necessitates a focused study on the challenges faced by construction workers in Mumbai, particularly concerning housing initiatives.

## **3. Review of Literature**

Over 90% of construction workers in India are informal, according to national surveys PLFS ( Periodic Labour Force Survey 2023–24). Due to problems with documentation, immigration status, and ignorance, BOCW Welfare Board registration is still below potential in Maharashtra (CAG, 2022). According to research, plan availability does not equate to effective coverage (Mahadevia & Shah, 2019).

In India, construction ranks among the three most hazardous jobs, as noted by the Labour Bureau (2021). The ILO reports prevalent dangers including heat stress, respiratory conditions, musculoskeletal issues, and accidents. Mumbai's construction sites exacerbate these risks due to space constraints and tight project timelines (ILO, 2023).

Furthermore, literature highlights a lack of retirement planning among informal workers, particularly in construction, where irregular income and financial illiteracy limit their access to pension schemes like the Atal Pension Yojana (RBI, 2024; NCEUS, 2019).

Existing literature reveals a stark contradiction in India's construction sector: urban infrastructure is expanding rapidly while labor conditions remain dire. Knight Frank (2023) and reports from the Comptroller and Auditor General (CAG) indicate that construction employs over 71 million laborers, with 80% being unskilled and engaged in informal work. Most of these workers are migrants facing systemic vulnerabilities, including unsafe working conditions, low wages, and lack of access to social security. Inadequate regulation enforcement and worker mobility hinder safety and social protection. This situation underscores the urgent need for reforms to improve the welfare and safety of construction workers amid India's infrastructure growth.

## **4. Objectives of Study**

- 1) To compile the assessment of the level of social security coverage among Mumbai's and Navi Mumbai construction workers.
- 2) To examine accident patterns and occupational health hazards in the construction industry.
- 3) To evaluate construction workers' access to retirement planning, old-age security measures, financial awareness, and wage rates in accordance with the labor act.

### 5. Research Questions

- 1) What proportion of construction workers in Mumbai and Navi Mumbai have social security benefits registered with the BOCW Welfare Board?
- 2) What are the most frequent occupational hazards and accident patterns among construction workers in Maharashtra?
- 3) How accessible are retirement plans and pension plans, financial literacy and how do wage levels affect workers' ability to make long-term plans?

### 6. Research Approaches

Research techniques include descriptive and analytical research using secondary data, especially from sources like the Periodic Labor Force Survey (PLFS) from 2019 to 2024, the International Labour Organization (ILO) India, the Maharashtra BOCW Welfare Board, the Labour Bureau, and ESIC. The analytical method includes trend analysis, cross-year comparisons, statistical correlational inference, and policy impact interpretation.

### 7. Analysis of Data & interpretations

*RQ1 examines the enrollment percentage of construction workers in Mumbai and Navi Mumbai with the BOCW Welfare Board for social security benefits within the period of 2020–2025.*

#### a. Construction Workers in Mumbai–Navi Mumbai & Maharashtra

Table 1: Social Security Coverage (BOCW-Building and Other Construction Workers (Regulation of Employment and Conditions of Service Act, 1996 Board Registrations)

Indicator	Value	Notes & Source
Active registered construction workers	37,00,000	Estimated active members with benefits access via Maharashtra BOCW Welfare Board.
Pending renewals	16,00,000	Workers needing annual renewal before re-accessing benefits.
Official registration fee (nominal)	₹1	Fee reduced to increase accessibility; mobile camps established to assist.
Exploitation by agents (unofficial)	Up to ₹1,000	Workers still pay high unofficial charges despite low official fees.
Gaps in registration (unregistered)	73% of workers unregistered (2017–22)	A performance audit shows most workers were not registered due to poor compliance.
Welfare fund utilisation (2017–22)	26.3% utilised	Only ₹4,253.8 Cr of ₹16,151.8 Cr available welfare funds were spent.

Table 2: Causes of Registration Enrollment

Indicator	Data / Status
Major projects underway	Airport, Bullet Train, 7 Metro lines, 400 km road concretisation
Total construction workers (India)	71 million (2023)
Share of unskilled workers	80%
Migrant worker share	Majority from UP, Bihar, WB, AP, Telangana, Karnataka, Maharashtra districts
Average age of entry	18–20 years

Minimum wage (prescribed)	₹7,000–8,000/month
Actual wages paid	₹3,500–4,000/month
Workers off official records	80%
BOCW cess	1% of project cost
Registered workers (2024)	13.31 lakh
Workers linked to schemes	20.28 lakh
Total welfare disbursed	₹598.09 crore
Compensation for accidental death	₹5 lakh + ₹10,000 rites + ₹24,000/year (5 years)
Common safety violations	No helmets, harnesses, gloves, training
Notable accidents (2023)	Virar wall collapse; Samruddhi Expressway girder collapse; electrocutions
Compensation delays	4+ months in mass casualty cases
Retirement benefit	One-time assistance (age ≥51)
Key barriers	Migration, documentation, annual renewal, lack of awareness

**Interpretation of RQ1** Despite high nominal registration numbers, there are still large gaps, and only a small percentage of people receive full benefits from social security because of board funds. The percentage of people without active social security coverage is approximately 26.3%. Access to this coverage is statistically linked to increased registrations, both active and renewed, highlighting issues of underutilization and renewal failures.

**RQ2: Occupational Health & Safety Risk** In Navi Mumbai, particularly in Wagle Estate and Kannamwar Nagar, alongside Thane, there is a troubling trend of construction-related fatalities driven by inadequate safety measures. Incidents such as a young worker's fatal fall in Thane and the death of a carpenter in Vikhroli, attributed to contractor negligence, highlight this issue. Furthermore, additional cases in Andheri and Matunga reflect ongoing dangers in the construction sector

Table 3: Causes of Occupational Health & Safety Risk

Location	Type of Incident	Age / WorkerRoe	Cause
Thane (Wagle Estate)	Fatal fall from height	Age of 23 years -old labourer	Lack of safety belt, protection
Vikhroli (Kannamwar Nagar)	Fall from 3rd floor	Age of 47 Years -old carpenter	No protective barriers
Vikhroli (Other site)	Fall through opening shaft	Age of 20 Years-old worker	Unsafe opening, no netting
Andheri	Head injury by falling sandbag	Age of 50 Years-old labourer	No safety netting
Matunga	Crushed by hoist lift	Age of 19Years --old worker	Equipment hazard & lack of guard
Metro - 9 Sites till FY 2025	Fall from >20m	Age of 42-Years -old supervisor	Fall from height

**Interpretation of RQ2** In response to safety failures, the Mumbai Metropolitan Region Development Authority (MMRDA) has imposed penalties, but affected families still face challenges with compensation. The Bombay High Court emphasizes the need for strict safety standards in high-rise construction, highlighting accountability and workers' rights to life. Despite frequent accidents attributed to safety lapses, enforcement weaknesses persist, and increased regulatory focus has not yet translated into improved safety outcomes.

**RQ3 Causes to lack of access Retirement & Pension planning**

Table 4: Access of Construction Workers Retirement & Pension planning

RQ3	Indicator / Data Point	Factual Evidence / Data
Construction workers' access to retirement/pension plans is limited due to low wages and poor financial literacy.	Availability of Government Pension Schemes	<i>Pradhan Mantri Shram Yogi Maandhan (PM-SYM)</i> offers a minimum assured pension of ₹3,000 per month after age 60 for eligible unorganised workers, including construction workers, with a small monthly contribution (₹55–₹200 depending on age).
	Requirement for worker contribution	Workers must contribute monthly premiums to receive pension, but inconsistent incomes make it difficult.
	New E-shram pension provision status	Under the e-Shram Card linked pension, the government provides ₹3,000/month pension for registered workers after age 60.
	State pension proposal for construction workers	Maharashtra Labour Dept proposes ₹12,000 annual pension for registered construction workers aged 60+, improving old-age protection locally.
Lower financial literacy among informal workers reduces pension participation.	Awareness & financial literacy barriers	Informal workers often lack awareness of pension options like PM-SYM and APY, and have limited digital access for enrolment.
Wage levels constrain ability to contribute to pension schemes.	Informal wages & irregular employment	Workers in informal sectors typically have irregular, low incomes, making consistent pension premium contributions difficult and lowering effective uptake.
	Informal sector pension coverage gap	Only an estimated around 14% of informal workers participate in pension products like APY or PM-SYM, leaving most uncovered due to wage & access barriers.

### **Interpretation of RQ3**

Construction workers continue to have limited access to effective retirement planning, mostly because of inconsistent pay, low financial literacy, and ignorance. The Code on Wages (2019) stipulates minimum pay requirements; nonetheless, World salaries reports a median income of around 9,975 INR, which represents a substantial wage disparity of 40–50% compared to Maharashtra's minimum wage of ₹15,000–₹18,000. Less than 15% of these workers join in pension or long-term savings programs, with migratory workers having much larger obstacles. This emphasizes how critical it is to have pay security and focused financial education.

### **8. Conclusion**

Construction workers in Mumbai continue to face systemic exclusion from social security, elevated occupational health risks, and inadequate retirement preparedness. Despite multiple policy frameworks, implementation gaps persist. Addressing these issues requires coordinated welfare delivery, strengthened enforcement, and inclusive financial security mechanisms. Ensuring dignified livelihoods beyond active working years is essential for sustainable urban development.

### **9. Discussion**

The results show that while the objective behind the policy is clear, its implementation is nonetheless disjointed. Mumbai's construction workers experience long-term financial instability, administrative isolation, and health neglect. Welfare systems run in isolation, minimizing cumulative impact. The findings are consistent with national and international research that highlights structural informality as the central problem.

### **10. Suggestions**

- a. Aadhaar and migrant databases are connected to universal and portable BOCW registration.
- b. Big , branded construction sites are priorities of the Initiatives to conduct occupational health audits through free medical camp, provision of good meals and financial awareness.
- c. Expansion of contributory retirement plans and micro-pensions designed for unorganized workers.
- d. Initiatives for financial literacy and awareness run by NGOs and labor unions, builders , Contractors, Government .
- e. Health, insurance, and pension databases are integrated for easy access.
- f. Invest in Human Resources to get perfect Viksit Bharat goals
- g. The government should mandate all builders and contractors to offer safety training, financial literacy, and retirement planning for construction workers, while Educational centers could introduce biennial financial literacy courses to boost the lifestyle and awareness of informal and construction workers.
- h. There should be provisions in RERA for construction workers retirement plans, PF benefits awareness and financial literacy to improve lifestyle

### **11. Limitations of Study**

Micro-level behavioral analysis is limited by reliance on secondary data. Official statistics may be under reported as a result of informal employment

## **12. Future Scope of Study**

Also future scope for further study via primary sources to streamline the government, builders and Contractors that invest in Human Resources to get perfect Viksit Bharat goals.

**Declaration:** The author of study utilized verified secondary data from reliable sources covering from year 2019-2025, with research conceptualization in September, 2025 & subsequent data survey Conducted.

## **13. References**

1. International Labour Organization. (2023). *Safety and health in construction in South Asia*. ILO India.
2. Mahadevia, D., & Shah, S. (2019). Informality and social protection in urban India. *Economic and Political Weekly*, 54(28), 55–63.
3. Ministry of Labour & Employment. (2024). *BOCW welfare implementation report*. Government of India.
4. NITI Aayog. (2023). *Social security for informal workers in India*. Government of India.
5. Reserve Bank of India. (2024). *Household finance and pension coverage report*. RBI.
6. Hindustan Times. (2025, March 6). *Contractor booked for negligence after worker's fatal fall at Thane construction site*. Hindustan Times.
7. Free Press Journal. (2025, December 4). *47-year-old labourer dies after fall at Vikhroli construction site; contractor booked for negligence*. Free Press Journal.
8. Free Press Journal. (2025, September 11). *Two young workers die in separate accidents at Vikhroli construction site; FIRs registered*. Free Press Journal.
9. Times of India. (2025, August 20). *Laborer dies after accident at Andheri construction site; negligence charge*. Times of India.
10. Free Press Journal. (2025, November 17). *19-year-old worker crushed to death at Matunga construction site*. Free Press Journal.
11. Times of India. (2025, November 30). *37-year-old labourer falls to death in Vikhroli; contractor booked*. Times of India.
12. Bombay High Court mandate (2025). *Safety protocols for high-rise construction following fatal incidents*.
13. Government of Maharashtra. (2025). *Building and Other Construction Workers Rules, 2007*.
14. CAG of India. (2025). *Welfare of building and other construction workers audit report*.
15. Ministry of Finance/PIB -Economic Survey 2024-25
16. Economic Survey 2024-25 (India Budget) / Women Leadership Center
17. Equipment Times / Industry reports
18. MahaBOCW (Maharashtra Government Official Site)
19. IES / Cess Working Paper (Skill Gap)Economic Times/Industry Report (EPC sector)
20. <https://www.business-standard.com/economy/news/pension-scheme-for-unorganised-sector-logs-5-mn-subscribers-in-5-years-124042800487>
21. <https://ddnews.gov.in/en/pm-sym-govts-pension-scheme-for-unorganised-workers-ensuring-social-security/>
22. <https://worldsalaries.com/>