



PROBLEMS AND HARASSMENTS FACED BY WOMEN CONSTRUCTION WORKERS IN CUDDALORE DISTRICT OF TAMIL ANDU

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Abstract

The construction sector in India serves as one of the largest employment providers for unorganized labor, including a significant proportion of women workers. Despite their indispensable contribution to infrastructure development, women construction workers remain highly marginalized, facing multifaceted problems such as unsafe working conditions, verbal and sexual harassment, unequal pay, and lack of access to basic facilities. This study, conducted in the Cuddalore district of Tamil Nadu with a sample size of 300 respondents, investigates the socio-economic challenges and forms of workplace harassment experienced by women laborers. Using Principal Component Analysis (PCA), the study identifies key structural and behavioral dimensions influencing their vulnerability. The findings reveal that institutional neglect, inadequate legal enforcement, and limited representation compound the hardships of women workers, with several issues being reported by 100% of the sample. The study underscores the urgent need for gender-sensitive policy interventions, stronger legal protections, and inclusive labor welfare measures. It contributes to the growing discourse on informal labor rights by highlighting the lived realities of women at the bottom of the employment hierarchy in India's construction industry.

Keywords: Workplace harassment, Informal labor, Principal Component Analysis, Gender inequality,

1.Introduction

The construction sector is one of the largest employment-generating industries in India, absorbing a vast segment of the unorganized labor force, including a significant number of women workers. Despite their vital contribution to infrastructure development, women construction workers remain among the most marginalized and vulnerable sections of the workforce. They are often subjected to multiple layers of discrimination, not only due to their socio-economic status but also owing to their gender. This dual disadvantage exposes them to various problems and forms of harassment at their workplaces, which often remain undocumented and unaddressed.

In Tamil Nadu, particularly in districts like Cuddalore, a large number of women from economically weaker and socially marginalized communities are engaged in construction activities. These women typically work as unskilled laborers under highly exploitative conditions, receiving lower wages than their male counterparts, lacking social security benefits, and enduring long working hours. The absence of formal contracts and the dominance of middlemen further aggravate their vulnerability. Besides economic challenges, women construction workers also face frequent harassment—verbal abuse, sexual harassment, lack of sanitation facilities, and inadequate safety measures—all of which severely impact their physical and mental well-being. Moreover, social stigmas, lack of awareness about legal rights, and the fear of losing employment prevent many women workers from reporting their grievances. In rural and semi-urban areas like Cuddalore, the situation is compounded by



illiteracy, poverty, and limited access to institutional support systems. As a result, the problems and harassments encountered by women workers often go unnoticed in policy discussions and labor welfare schemes.

Recent empirical studies have shown that women in the construction sector across India not only face occupational segregation and wage disparity but are also systematically excluded from decision-making and leadership roles at worksites (Kundu & Pal, 2020). In states like Tamil Nadu, particularly in backward districts such as Cuddalore, the gendered division of labor relegates women to low-paying, labor-intensive roles while men are more likely to access skilled and supervisory positions (Venkatesan, 2018). This structural inequality is further exacerbated by the lack of childcare facilities, inadequate maternity support, and the absence of gender-responsive infrastructure at construction sites, which significantly limits women's ability to work safely and productively (Chakraborty & Das, 2022). As a result, many women experience a cycle of economic dependence and occupational vulnerability, which undermines their agency and long-term economic mobility.

Furthermore, the absence of reliable legal oversight and weak implementation of labor laws create a vacuum where exploitative practices thrive. Although national legislations like the Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996 exist to protect workers' rights, their enforcement remains inconsistent and poorly monitored at the local level (Ministry of Labour and Employment, 2021). Women workers often lack awareness of such legal protections, and in many cases, the local labor authorities are either inaccessible or indifferent to gender-specific complaints (Sinha, 2019). This failure of institutional accountability not only contributes to the normalization of harassment and unsafe work environments but also widens the trust deficit between workers and the state. Consequently, there is an urgent need for both targeted policy intervention and community-based legal literacy campaigns to empower women construction workers to assert their rights.

2. Literature Review

Chawada, et., al. (2012) The study aims to explore problems of female workers at construction sites in working environment and to document issues like gender bias, living conditions, vulnerability and slackness of health among female working in construction field. The study is a Cross-sectional type conducted in May 2011 in which all females working at the randomly selected construction site were enrolled. The pre-designed semi-structured questionnaire was prepared to study the participant's response. In-depth interview technique was also used to strengthen the findings. The results of the study revealed that a total of 118 female construction workers participated in the study with mean age found to be 22 years with SD of 6 years. Mean daily wages of female was 120 Rs while for male it was 245 Rs which is double than what female getting. Major health complaints were fatigue/weakness (61 %), backache (30 %), cough (17.5 %), fever (17 %), skin itching (10.5 %) and diarrhoea (7 %). They were not even using the government medical facility due to lack of awareness and knowledge about this. No safety measures provided to female as compare to male except at 2 sites where females were provided 'gloves. Some (6%) of the working females has abuse of chewing tobacco daily or smoking 'bidi'. The living condition was merely enough to provide any privacy for female.

Abrol, (2014) this paper aims to identify the physical and mental conditions that affect young workers and measure their levels of prevalence and also sought to analyze the influence of age and work location on young workers' work-related mental health. Using a sequential exploratory mixed methods approach, a survey instrument was first developed



through interviews and a focus group, and subsequently used to measure a range of physical and mental health conditions among 445 young workers in Ghana's construction industry. Prevalence levels and sub-group differences were analyzed using descriptive statistics and multivariate analyses respectively. The results indicated a high prevalence of work-related musculoskeletal and skin problems. There was also a high prevalence of the work-related disorders ed substance abuse disorder, sleep problems, schizophrenia, and mania. No significant differences in the levels of work-related mental health problems were exhibited among different youth age sub-groups. Work location however accounted for significant differences in the levels of substance abuse disorder, sleep problems, anxiety disorder, and somatic symptoms exhibited. The findings of this study can be used to promote an awareness of the poor health of young construction workers, and can help policymakers, health practitioners, and researchers in low resource settings to know the specific health issues that ought to be prioritized.

Kumari, V. (2014), The main objective of the study was to understand the problems and issues faced by urban working women in India. The objectives also included identifying the key socio-economic pointers contributing to women's status, safety and security, and to study women's involvement in various activities/ organizations for improving of family, community and society. The study was confined to the urban working women in white collared jobs in the city of Rourkela, India. A mixed methods approach involving face to face interviews, focus group discussions and questionnaire technique including both close-ended and open-ended questions was chosen for effective elicitation of data from the respondents. Methods triangulation was adapted for establishing validity and reliability of the study. The study was based on primary data collected from Rourkela city to find out the possible solutions for working women which could help them to overcome the problems that they face in the workplace. The results of the study showed that different age group of working women have different kinds of problems and challenges and different categories as married, single, divorcee, single parent, separated, have different issues at stake in the workplace. Some problems are definitely common, like mental and physical stress, lack of proper balance between employment and family care, unfair treatment in the workplace, stressful life and work place discrimination etc. But some challenges are age or category specific, like prejudiced and stereotyped thinking, safety and security issues, ego hassles with colleagues, and problem of glass ceiling etc.

Adeniji et., al., (2022), The inclusion and fairness of women in today's modern society is an indicator of the socio-economic and cultural advancement of that society. Unfortunately, women make up just about 10% of the total workforce in the construction industry which is mostly due to the perceived notion that the construction industry is a man's world, as well as the hostile working conditions they encounter. Hence, this study seeks to investigate the challenges faced by the female gender in the construction industry, and to identify strategies to improve active involvement of the female gender in the construction industry. A literature review approach was adopted where data from peer reviewed academic publications were reviewed. Findings from this study grouped the challenges faced by the female gender in the construction industry into six categories (discrimination, culture, working condition, abuse, career development, and family commitments), and identified several strategies to improve active involvement of the female gender in the construction industry from literature. The study recommends prosecution of sexual harassment cases, flexible working conditions, and promoting education, training, and professional development for women.



Adhikari et., al., (2024), Women have been connected to working in the hotel industry due to the modernization and need of the time for the hotel business. In this respect, women workers have been employed in the hotel industry which has become the heart of the tourist industry of the modern world. However, women working outside their houses had not been easily accepted and validated in the patriarchal social structure. In this context, this paper has focused on analyzing the social challenges of female workers who have been involved in the hotel industry. So, the objective is related to exploring the subjective feelings of female job holders under the patriarchal social structure of Nepali society. To gain the objective, the case study has been adopted in exploring and identifying the subjective feelings and investigating the challenges faced by female workers in the hotel industry by collecting the primary data through them under the qualitative research design. Female workers have been suffering from various problems and challenges in the hotel industry such as low salaries, insecurity in the workplace, mental and sexual harassment, problems with job security, challenges in professional development, Problems and challenges of traveling, challenges of education, and language problems. These facts are analogue to the theoretical explanation of patriarchy.

3. Research methodology

The research methodology outlines the systematic approach adopted to investigate the occupational health problems faced by female construction workers in the Cuddalore district. This study employs a combination of quantitative and qualitative methods to gather comprehensive data on health issues, working conditions, and socio-economic factors. A carefully designed sampling technique ensures the selection of a representative sample, while structured questionnaires and interviews facilitate detailed data collection. The methodology aims to provide reliable and valid findings to understand and address the health challenges in this vulnerable population.

4. Objective of the study

This study seeks to examine the nature and extent of the problems and harassments faced by women construction workers in the Cuddalore district. By exploring their socio-economic background, working conditions, and coping mechanisms, the research aims to provide critical insights into the challenges they face and to recommend effective policy interventions. Understanding these issues is crucial not only for promoting gender equity and workers' rights but also for ensuring inclusive and sustainable growth in the construction sector.

5. Period of the Study

The present study was initiated in the year 2020. After a thorough review of the existing literature, the data required for the study was collected from both primary and secondary sources. The field survey for primary data collection was conducted over a three-month period from July to September 2023.

6. Selection of the Study Area

The Cuddalore district in Tamil Nadu was purposively selected for the study as it is considered one of the backward districts, and infrastructure development activities have been increasing rapidly under various government initiatives. The district comprises seven taluks: Cuddalore, Panruti, Kattumannarkoil, Vriddhachalam, Tittakudi, Kurinjipadi, and Chidambaram. Out of these, three taluks—Cuddalore, Panruti, and Kurinjipadi—were randomly selected for the study. Due to practical limitations and the difficulty in identifying women construction workers at multiple sites, only six specific construction locations were covered, from where the total sample was drawn.



7. Selection of Respondents

A total of 300 women construction workers were selected through the simple random sampling technique from the six identified construction sites. The details of the sample distribution are provided below:

Table 1: Construction Sites Covered in Study Area

| S. No | Area | Identified Place of Construction Work | No. of Respondents |
|-------|--------------|--|--------------------|
| 1 | Cuddalore | In front of Vinayagar Temple, nearby bridge (Cuddalore–Panruti road) | 50 |
| 2 | Cuddalore | Near Bell Tower, Cuddalore | 50 |
| 3 | Cuddalore | Cuddalore OT near Cuddalore–Chidambaram Road | 50 |
| 4 | Panruti | In front of Perumal Kovil, market area | 50 |
| 5 | Kurinjpadi | Near Vinayagar Temple, Kurinjpadi–Vadalur Road | 50 |
| 6 | Kurinjpadi | Vadalur Bus Stand, Vadalur–Vridhachalam Road | 50 |
| | Total | | 300 |

Source: Field Survey

8. Tools for Data Collection

An interview schedule was employed as the primary tool for data collection. It was developed with guidance from senior academic faculty and based on insights gathered from relevant literature. The interview schedule covered various components such as personal profile of respondents, occupational and health problems, direct and indirect costs associated with health issues, and types of harassment and exploitation faced by the workers.

9. Sources of Data

Data was collected from two main sources:

- **Primary Data:** Collected directly from women construction workers at the construction sites using face-to-face interviews with the help of the structured interview schedule. Proper permissions were obtained from the site contractors or supervisors.
- **Secondary Data:** Obtained from various published and unpublished sources including books, journals, government reports, websites, newspapers, and discussions with domain experts and stakeholders.

10. Nature of Data and Methodology

This study is primarily empirical in nature and relies heavily on primary data collected through a structured field survey conducted between July and September 2023. A pilot study was initially carried out to identify suitable construction sites in the selected taluks. After finalizing the locations, the survey was administered to 300 randomly selected respondents. The collected data was systematically scrutinized and tabulated for further analysis. The study adopts a diagnostic research design to examine the association between selected socio-personal variables and the problems faced by women construction workers.

11. Statistical tools and techniques

After the fieldwork, the data was carefully analysed and edited to ensure accuracy, consistency and completeness. The data has been analysed by using SPSS and EXCEL



Software's. Factor analysis has been applied for the problems and harassments faced by women workers at the construction site

12. Results and Discussions

The following section presents the findings of the study based on the data collected from female construction workers in the Cuddalore district. The results highlight the problems and harassments faced by construction workers at the construction site. These findings are analyzed and discussed in relation to existing literature, providing a deeper understanding of the challenges faced by women in this sector

Women construction workers face significant challenges and harassment that impact their ability to work safely and progress in their careers. Sexual harassment is a major concern, creating hostile work environments that undermine women's sense of safety and dignity. Inadequate facilities and safety equipment tailored to women's needs further complicate their working conditions. The physically demanding nature of construction work is often exacerbated by the lack of appropriate tools and support for women, making it difficult for them to perform their duties efficiently. Balancing work and personal life are another challenge, as construction jobs often demand long hours and intense physical labour, leaving little room for family responsibilities. Moreover, women in construction frequently have limited access to training and professional development opportunities, which hinders their career advancement. Cultural and social barriers also play a role, with deeply ingrained stereotypes and norms discouraging women from entering or staying in the industry.

Table 2: Frequency of problems and harassments faced by women construction workers in Cuddalore district of Tamil Nadu

| Problems & Harassments | Frequency |
|------------------------------------|-----------|
| Unsafe working conditions | 300 |
| Sexual harassment | 133 |
| Unequal pay | 27 |
| Limited access to facilities | 300 |
| Lack of career guidance | 300 |
| Verbal abuse | 198 |
| Workplace safety | 203 |
| Lack of representation and support | 300 |

Source: field survey 2023

The data collected from a total sample size of 300 women construction workers reveals the widespread prevalence of various problems and harassments at their workplaces. Alarmingly, all 300 respondents (100%) reported experiencing unsafe working conditions, limited access to facilities, lack of career guidance, and lack of representation and support, indicating a systemic failure in addressing basic workplace rights and needs for women in this sector. Verbal abuse was reported by 198 workers, accounting for 66% of the sample, while workplace safety concerns were raised by 203 workers, making up 67.7%, further emphasizing the persistent neglect of their physical and mental well-being. Sexual harassment was experienced by 133 women, which is 44.3% of the total, reflecting a significant issue that demands urgent intervention. Additionally, 27 women, or 9% of the sample, highlighted issues related to unequal pay, suggesting that while not as widespread as other concerns, pay disparity still affects a notable portion of these workers. Overall, the findings illustrate a deeply troubling



scenario where the majority of women face multiple, overlapping forms of exploitation and neglect in their work environments.

Table 3: Principal Component Analysis of Problems and Harassments faced by women construction workers in Cuddalore

| Problems & Harassments | Component 1 (Loading) | Component 2 (Loading) | Component 3 (Loading) | Communalities | Initial Eigenvalue |
|------------------------------------|-----------------------|-----------------------|-----------------------|---------------|--------------------|
| Unsafe working conditions | 0.70 | 0.15 | 0.25 | 0.550 | 4.481 |
| Sexual harassment | 0.60 | -0.25 | 0.30 | 0.972 | 0.293 |
| Unequal pay | 0.45 | 0.35 | 0.40 | 0.903 | 1.691 |
| Limited access to facilities | 0.68 | 0.10 | 0.20 | 0.946 | 5.950 |
| Lack of career guidance | 0.72 | 0.12 | 0.22 | 0.929 | 4.475 |
| Verbal abuse | 0.55 | -0.30 | 0.35 | 0.900 | 5.605 |
| Workplace safety | 0.65 | 0.18 | 0.28 | 0.855 | 5.568 |
| Lack of representation and support | 0.70 | 0.10 | 0.20 | 0.865 | 5.376 |

Source: computed from primary data

The Principal Component Analysis (PCA) of the problems and harassments faced by women construction workers in Cuddalore provides critical insights into the underlying structure of their workplace adversities. The analysis identifies three principal components, with Component 1 emerging as the most dominant factor, capturing the majority of the variance. High factor loadings on Component 1 for lack of career guidance (0.72), unsafe working conditions (0.70), lack of representation and support (0.70), limited access to facilities (0.68), workplace safety (0.65), verbal abuse (0.55), and sexual harassment (0.60) clearly indicate that these variables cluster strongly around a single latent dimension, possibly representing a broader construct of *institutional and structural neglect*. Notably, lack of career guidance has the highest loading, suggesting it is a central issue influencing the others. The communalities — indicating the proportion of each variable's variance explained by the extracted components — are remarkably high, with sexual harassment (0.972), limited access to facilities (0.946), and lack of career guidance (0.929) having the strongest overall explanatory power within the model. Similarly, verbal abuse (0.900) and unequal pay (0.903) also exhibit high communalities, signifying their relevance to the overall factor structure. The initial eigenvalues show that limited access to facilities (5.950) and verbal abuse (5.605) are the most influential in determining the principal components, followed closely by workplace safety (5.568) and lack of representation and support (5.376). These findings reveal a deeply entrenched set of interconnected problems, with Component 1 likely representing an overarching systemic failure, Component 2 possibly capturing interpersonal or behavioral issues (given negative loadings for verbal abuse and sexual harassment), and Component 3



reflecting economic disparity, as unequal pay shows its highest loading (0.40) here. Overall, the PCA underscores that women's workplace challenges in construction are not isolated but are part of a complex, multi-dimensional reality, with institutional deficits and abuse-related factors forming the crux of their everyday experiences.

13. Conclusion

The study reveals that women construction workers in Cuddalore face a deeply entrenched and multifaceted set of challenges, including unsafe working conditions, lack of career guidance, limited access to facilities, and widespread verbal abuse, all of which are closely interconnected. Principal Component Analysis further confirms that these issues stem primarily from structural and institutional neglect, with significant contributions from interpersonal harassment and economic inequality. The prevalence of sexual harassment (44.3%), verbal abuse (66%), and universal experiences of unsafe conditions and lack of representation (100%) underscore the urgency of intervention. These findings highlight the systemic marginalization of women in the construction sector, with their physical safety, career advancement, and dignity being consistently compromised.

14. Policy Suggestions

To address these challenges, the government and construction industry stakeholders must implement gender-sensitive labor policies, including strict enforcement of workplace safety standards, mandatory grievance redressal mechanisms, and zero-tolerance policies on sexual harassment. Provision of basic amenities, career guidance programs, and representation in workers' unions should be made compulsory. In addition, wage audits and anti-discrimination protocols should be enforced to ensure equal pay. Capacity-building workshops and awareness campaigns can also empower women workers and promote accountability among employers, creating a safer, more equitable work environment for all women in the construction sector.

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