

Workplace Safety and Employment Contracts among Unorganized Workers at NLC in Cuddalore District of Tamilnadu

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Abstract

This study examines how safety regulations are applied differently in a large public sector organization in India, Neyveli Lignite Corporation Limited (NLC), and how easy it is for different types of workers to obtain employment contracts. To determine how job type affects working conditions, data were collected from 300 workers, including permanent/organized, contract/unorganized, and daily wage workers, using a mixed methods design. The findings show differences: contract and daily wage workers lack these protections and are not guaranteed legal employment, whereas permanent employees are protected by formal written contracts and consistent safety enforcement. More than half of daily wage workers and nearly half of contract workers claim that safety regulations are either poorly or not at all enforced. The majority of them rely on formal or informal agreements without formal contracts. Since informal workers are still employed by formal institutions, the lack of safety and legal protection for these workers demonstrates how inadequate India's public sector employment model is. The study makes it abundantly evident that universal contractual formalization and standardized safety enforcement are desperately needed to safeguard workers' rights, guarantee equitable working conditions, and uphold the moral integrity of publicly traded corporations. In conclusion, labor conditions for permanent employees at NLC are comparatively safe and controlled. However, because there are no formal employment contracts and safety regulations are poorly enforced, a sizable portion

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of the workforce particularly those who work on contracts or for daily wages remains extremely vulnerable. We must address these issues in order to create a safer, more equitable, and welcoming workplace.

Key words : Neyveli Lignite Corporation (NLC), unorganized workers, workplace safety, employment contracts, labor informality.

Neyveli Lignite Corporation, the most significant open-pit mining company in Asia, is located about 200 kilometers south of Chennai, the Tamil Nadu capital. It is one of Central Public Sector's largest and most profitable companies. On November 14, 1956, Pandit Jawaharlal Nehru, the architect of independent India and the country's first prime minister, dedicated the Neyveli Lignite Corporation Limited, popularly known by its acronym NLC, to support the Southern Indian economy and generate employment opportunities there¹. On July 30, 1959, NLC was converted from a private limited company under the Companies Act of 1956 to a public limited company, and the Registrar of Companies changed that name to Neyveli Lignite Corporation Limited. A long-standing success story, NLC is a NAVRATNA Government of India Enterprise administratively overseen by the Ministry of Coal and a leading supplier of India's energy security⁸.

The majority of India's lignite reserves are found in the states of Tamil Nadu (32892.92 MT), Puducherry (416.61 MT), Rajasthan (4835.29 MT), Gujarat (2722.05 MT), Jammu & Kashmir (27.55 MT), and others (11.44 MT). The existence of lignite in the aforementioned states has been investigated in a number of stages. More than 82% of the country's lignite reserves are found in Tamil Nadu. Three of the nineteen lignite blocks have

been located in Tamil Nadu and Pondicherry; Mines I, II, and IA are presently operational. NLC currently runs three open-pit mines with an annual capacity of 28.5 million tonnes of lignite and three pit head thermal power plants with a combined capacity of 2490 MW⁶.

Workers without official contracts, benefits, or job security are considered unorganized. Since NLC is a significant public sector organization, there is a difference between its organized and unorganized workforce. Unorganized workers may experience financial instability in a structured setting such as NLC. The issue here is that these employees may be marginalized despite their contributions to the business. They don't have social security, decent pay, or job security. Economic vulnerability results from this.

Previous research concentrated on unorganized sectors in general rather than public sector organizations like NLC. This is a gap. By examining how systemic elements within NLC affect the workers' financial situation, the study could address that. Additionally, laws such as the Unorganized Workers' Social Security Act of 2008, exist, but implementation is lacking. The study on the economic status of unorganised workers at Neyveli Lignite Corporation Limited (NLC) is imperative to address a critical void in understanding how informality persists within India's formal public-sector enterprises. This

research tried to assess the socioeconomic conditions (income, employment stability, access to social security) of unorganised workers in NLC. Secondly the study identified the key economic challenges faced by these workers.

Review of Literature :

Sengar, *et al.*,¹¹ Analysing The Socio-Economic Conditions and Challenges Faced By Domestic Women Helpers In India's Informal Labour Market. This paper investigates the socio-economic conditions of domestic helpers within India's informal labor market, where an estimated 4.5 million workers, primarily women from marginalized communities, operate. Despite their significant contributions to household economies, these workers face numerous challenges, including lack of legal recognition, poor working conditions, low wages, and limited access to social security. The socio-demographic profile reveals that these domestic workers are predominantly young women, with a significant number lacking formal education. Most earn between Rs 6,000 and Rs 8,000, often working long hours without adequate time off. The paper concludes with recommendations for legal recognition, awareness campaigns, and the establishment of support networks to empower domestic workers in India.

Dr, Ramachandran. (2024). "Go Green Model"-A Study on HRM practices in NLC India Ltd., Neyveli. The present research paper emphasis on 'Go Green' concept application in Human Resource Management in Neyveli Lignite Corporation (NLC) India Ltd. Neyveli. It is significant and need of the hour that public enterprise with the status of

'Navaratna' has come under the umbrella of Technology Inclusion system in all its functions to rationalize their organizational growth and development through employee efficiency and up skill practices in their operations. Finally, the study concluded that the firm strictly following of Go Green practices in all aspects, as a result, employees demonstrate green behaviour leading to green organizational outcomes. At the corporate level, the firm benefits from cost advantages and improve financial performance. The firm's also enjoy a positive brand image of a green employer, attract talented worker, create a green culture environment and achieve their sustainability goals. If the above steps are followed correctly, there is no doubt that NLC India Neyveli will be the leading company in the world in the future.

Objectives of the Study :

- To assess the workplace safety enforcement among different categories of workers.
- To compare safety practices between organized, contractual, and daily wage laborers.

Research methodology :

To examine the economic status of unorganized workers at Neyveli Lignite Corporation Limited (NLC), the study uses a mixed-methods sequential explanatory design, using quantitative and qualitative techniques to achieve both breadth and depth of analysis. Phase 1 of this design uses quantitative methods to map economic and demographic trends, and Phase 2 uses qualitative methods to contextualize these findings through institutional dynamics and lived experiences. The study addresses the

multifaceted nature of labor rights, socioeconomic inequality, and informality by combining data from surveys, interviews, and secondary sources to ensure methodological rigor.

Methodology :

A pilot study was carried out using a purposively selected sample of 25 people from NLC's corporate office and lignite mines, representing a range of gender, caste, and occupational roles (10 organized workers and 15 unorganized workers). This initial stage sought to identify any ambiguities or practical difficulties in data collection while evaluating the questionnaire's clarity, relevance, and cultural sensitivity. During cognitive interviews, participants explained how they understood survey questions and pointed out terms that needed to be simplified (for example, "social security" was rephrased as "benefits like health insurance or pensions"). Critical gaps were identified by feedback, such as the need to clarify Likert-scale anchors (*e.g.*, defining "job security" contextually) and include caste-specific discrimination scenarios. Additionally, employees recommended including questions about access to union representation and workplace safety, which were not included in the first draft. The questionnaire was reorganized into shorter, thematic sections with optional anonymity for sensitive subjects due to logistical insights, such as the average survey completion time (25–30 minutes) and discomfort with direct questions about wages. The instrument's validity was improved by the pilot study's iterative improvements, which were informed by participant feedback. This ensured that the instrument reflected the lived realities of NLC's workforce while upholding methodological rigor for the primary study.

Method of selection :

The study is centered on administering structured surveys across key operational sites of Neyveli Lignite Corporation Limited (NLCL), specifically targeting the Corporate Office and the three major mining zones- Mine I, Mine IA, and Mine II. The survey design is methodologically grounded in a stratified random sampling framework to ensure a representative understanding of the workforce dynamics, encompassing both the organized and unorganized sectors within NLCL's operational ecosystem. A total sample of 300 workers was selected, comprising 255 from the unorganized sector and 45 from the organized sector. This intentional overrepresentation of unorganized workers through disproportionate stratified sampling was adopted to address the limited availability of reliable population data for this segment, which remains largely undocumented.

Sampling Design :

The stratification process was rigorously developed to reflect key demographic and occupational variables, including gender, caste, age group, and job function (*e.g.*, mining, maintenance, administrative support). Such stratification helps to mitigate sampling bias and enhances the analytical depth by enabling disaggregated insights across social and professional strata. For the organized sector, official records from the NLCL Annual Report 2023–24 indicate a total workforce of 10,362 employees, of which 9,512 are male and 850 are female. This data enabled precise stratification for this group, thereby facilitating statistically valid inferences.

In contrast, the unorganised workforce presents a more complex challenge. According to the National Commission for Enterprises in the Unorganised Sector (NCEUS), approximately 92% of India's total workforce, including a substantial share within organised enterprises, is employed informally—lacking formal contracts, job security, and access to social protection measures. Given the absence of reliable workforce enumeration for unorganised workers at NLCL, the study employs disproportionate sampling to ensure adequate coverage of this elusive yet significant segment. This approach not only enhances the representativeness of the study but also allows for comparative analysis between formal and informal employment conditions within NLCL's operations.

Through this sampling strategy, the study aims to produce a nuanced understanding of labour dynamics, workplace vulnerabilities, and the differentiated impact of employment structures on various demographic groups within both formal and informal settings.

The survey instrument operationalises variables through closed-ended questions, Likert scales, and categorical classifications (*e.g.*, income brackets, job contract types). Variables like income stability, access to social security, and economic vulnerability are quantified using composite indices derived from validated labour economics frameworks. For instance, financial precarity is measured through self-reported indicators such as debt levels, savings habits, and frequency of wage delays.

The results from both workplace safety and employment contract data show

that non-permanent workers, especially those who work on contracts or for daily wages, are doubly at risk. These groups not only have to deal with uneven or poor enforcement of safety standards, but they also don't have the legal security and safeguards that come with formal written contracts. This shows that there is an urgent need for policy changes to make sure that all types of workers at NLC follow the same safety rules and follow the same hiring standards.

1. *Socio-Demographic and Employment Characteristics :*

There are significant differences among the three groups of employees at NLC (totaling 300 workers): those with permanent positions, those with contracts, and those who are paid daily. These differences are linked to their social backgrounds, demographic traits, and the specifics of the work they do. The majority of the permanent staff members have been employed by the organization for a considerable amount of time, specifically 35 out of 45 individuals have worked there for more than seven years.

However, the majority of workers on contract usually have a relatively small amount of experience, generally between four and six years. Conversely, daily wage workers typically possess only one to three years of experience, which suggests a higher turnover rate or that these workers are new to the field. The age distribution reveals that a significant portion of the workforce falls within the 36 to 45 age range, with 150 individuals, mainly in temporary contract and daily wage positions. This indicates a notable presence of middle-aged individuals in roles that are not permanent. The

subsequent age bracket, 26 to 35, accounts for 100 workers engaged in a range of job categories. Educational attainment varies considerably among workers, depending on their employment type. In permanent roles, 78 individuals possess a graduate-level education or higher, while in temporary roles, 142 workers have a secondary school education or higher. Those with less formal education, such as individuals with no schooling or only primary school education, are more likely to be employed as daily wage workers. The type of position held is closely associated with an individual's employment status.

The vast majority of permanent employees, 42 out of 45, are directly employed by NLC. On the other hand, many of the

contractual workers, 184 out of 201, are employed by external organizations. Intriguingly, a substantial number of daily wage workers (41 out of 42) report uncertainty regarding their employment status. This might suggest informal hiring practices or a lack of clarity regarding their employment arrangements. Examining the gender distribution, the majority of the workforce is male, comprising 270 out of 300 individuals. The representation of women in the workforce is limited, and they are exclusively employed in permanent or temporary roles. No women are employed as daily wage laborers. This observation points to the potential existence of disparities in job opportunities and access based on gender within NLC's employment structure.

Table-1. Socio-Demographic and Employment Characteristics by Employment Type at NLC (N = 300)

Variable	Category	Permanent/ Organized	Contractual/ Unorganized	Daily Wage Laborer	Total
Age Group	1–3 years	3	61	7	71
	4–6 years	7	96	7	110
	7+ years	35	22	3	60
	18–25	1	9	0	10
	26–35	18	57	25	100
	36–45	10	107	33	150
	46–55	16	24	0	40
Education	No formal	0	7	13	20
	Primary	0	15	13	28
	Secondary s	0	119	25	142
	Diploma/ITI	2	25	3	30
	Graduate or higher	43	31	4	78
Employment Status	Direct by NLC	42	13	3	58
	Subcontracted	3	184	14	201
	Unsure	0	0	41	42
Gender	Male	24	190	58	270
	Female	21	7	0	30

2. *Standards for safety at work :*

The ways that the National Labor Committee makes sure people are safe at work changes a lot based on what kind of worker they are. The majority of workers with steady, structured jobs (29 out of 45) say that, for the most part, the rules to keep them safe are followed, but not always. Just 10 people say the rules aren't always enforced in the same way, and only 6 say that when safety rules are broken, it's often ignored. It's worth mentioning that not one of the workers with permanent jobs says that safety rules are always followed or never followed. This may mean that most of the people in this group do their best to follow safety rules.

However, the situation is a lot worse for those workers who aren't part of a union or have an official work agreement. Many of

these workers (93 out of 197) say that safety rules are hardly ever enforced, and 76 workers say that the rules are sometimes enforced or not enforced at all. Only a very small number of people (8) believe that the rules to keep them safe at work are strongly enforced. These numbers show that there are issues with how the safety of a large part of the workforce is watched and enforced. Workers who get paid by the day seem to be in the most danger. Seven of these workers out of fifty-eight said that there were no safety steps taken at all, and twenty-nine said that breaking safety rules rarely led to any punishment. Only one of these workers said that all of the safety rules were followed. This suggests that workers paid daily don't really focus on being safe while working, most likely because they're employed informally and don't have any organized way to make sure they are safe.

Table-2. Enforcement of Workplace Safety Standards

	Workplace safety standards are poorly enforced.					Total
	Not enforced at all- no visible safety measures in place	Rarely enforced- safety violations are common and ignored	Sometimes enforced – inconsistent compliance or follow-up	Mostly enforced- occasional lapses but generally followed	Fully enforced- strong adherence to all safety protocols	
Permanent/ Organized Worker	0	6	10	29	0	45
Contractual/ Unorganized Worker	7	93	76	13	8	197
Daily Wage Laborer	7	29	18	3	1	58
Total	14	128	104	45	9	300

3. Availability of Written Employment Contracts :

The details regarding employment contracts make it even clearer how different groups of workers are in terms of job stability and official status. All full-time and organized employees possess detailed written agreements that include particular terms and signatures. This indicates that they adhere to the standards of formal employment and enjoy legal protections effectively. For those who are not part of a union or lack contracts, the situation becomes trickier. While 32 individuals have complete written agreements, the majority, which is 173 out of 197, have agreements that are less formal. For instance, 85 people have written terms that are informal, and 88 possess incomplete written contracts. This variation suggests that individuals do not consistently comply with the standards for formal employment, potentially causing uncertainty regarding their rights and responsibilities. Workers earning

daily wages find themselves in the most vulnerable circumstances. Fifty out of fifty-eight depend solely on oral agreements, and eight of them don't have any contract or agreement whatsoever. None of these individuals possess any written records. As they lack formal employment, these workers are highly susceptible to exploitation, including wage theft, and they do not receive benefits or legal protections.

The results clearly show that all worker categories have poor workplace safety enforcement. Only nine employees claimed that safety procedures are completely followed, but a sizable portion of respondents (128 out of 300) said that safety requirements are infrequently enforced. The majority of permanent or unionized workers report that safety regulations are largely upheld, which results in relatively improved safety compliance. Conversely, 47% of contractual and unorganized workers believe that enforcement is infrequent,

Table-3. Availability of Written Employment Contract

	written employment contract					Total
	Not contract at all; no verbal or written agreement	Verbal agreement only; no written documentation	Informal written terms (e.g., email or message exchange)	Partial written agreement (some duties or salary terms)	Fully written contract with clear terms and signatures	
Permanent/ Organized Worker	0	0	0	0	45	45
Contractual/ Unorganized Worker	0	0	85	88	32	197
Daily Wage Laborer	8	50	0	0	0	58
Total	8	50	85	88	77	300

4. *Enforcement of Workplace Safety Standards :*

Table-4. Enforcement of Workplace Safety Standards

	Workplace safety standards are poorly enforced.					Total
	Not enforced at all- no visible safety measures in place	Rarely enforced- safety violations are common and ignored	Sometimes enforced – inconsistent compliance or follow-up	Mostly enforced- occasional lapses but generally followed	Fully enforced -strong adherence to all safety protocols	
Permanent/ Organized Worker	0	6	10	29	0	45
Contractual/ Unorganized Worker	7	93	76	13	8	197
Daily Wage Laborer	7	29	18	3	1	58
Total	14	128	104	45	9	300

which results in the worst safety circumstances. Only one respondent reported complete safety compliance, and daily wage workers also report serious safety disregard. Overall, the results point to the need for stricter safety laws and oversight procedures by indicating that safety enforcement is unequal and noticeably weaker in the unorganized sector.

Examining how the NLC implements safety measures at work and provides access to job contracts illustrates that working environments vary greatly based on the job type. These variations reveal more significant inequalities between organized and unorganized labor groups, which greatly influence worker safety, legal rights, and overall wellbeing. Workers who have permanent and organized positions are far more likely to see workplace safety rules enforced compared to those in

temporary or daily wage jobs. Nearly two-thirds of permanent workers report that safety guidelines are mostly adhered to, and none claim they are completely ignored. This suggests that permanent employees would benefit from stricter regulations and accountability measures within their organizations. In contrast, those on contracts and working for daily wages do not consistently experience the same enforcement level. A concerning percentage of these workers 47% on contracts and 50% on daily wages report that safety regulations are either not followed or only followed occasionally. This discrepancy indicates that safety standards are failing to protect the most at-risk workers, increasing their chances of facing accidents and dangers at work.

The differences in access to and the types of employment contracts make it clear

that protections for workers are not equal. All full-time staff have formal contracts that outline their rights and job stability. Meanwhile, most contract workers operate under incomplete or informal agreements, with only a few possessing full written contracts. The situation is particularly poor for daily wage earners, with 86% relying on verbal agreements or lacking any agreement at all. Without written contracts, these workers have no means to settle pay disputes or contest dismissals. This also reflects larger issues related to informality and insufficient recognition by institutions.

Findings

The research shows that there is a considerable link between how formal a job is and how well safety rules are followed. Workers who have formal contracts, especially permanent employees, are more likely to say that safety rules are being followed. On the other hand, workers who don't have contracts, especially daily wage workers, are more likely to say that safety rules are not being followed. This shows that there is a problem with the system that leaves informal or unstable workers out of the safeguards that are usually given to people who work in more formal settings. The lack of formal job links may make it less likely that employers and regulators will make sure that safety laws are followed.

These results show that the working conditions of contract and daily wage workers need to be looked at right now. We need policy changes right away to make sure all workers, no matter what their job classification is, follow the same safety rules. Also, it should be a top

priority to get more workers, especially those in the unorganized sector, to sign formal written contracts. This will strengthen legal protection, lower exploitation, and make jobs more secure overall. Interventions must also include making labor inspections stronger, punishing safety violations, and requiring employers to keep records of their contracts.

In conclusion, permanent workers at NLC have relatively safe and regulated working conditions. However, a large part of the workforce, especially those who work on contracts or for daily wages, is still very vulnerable because safety standards are not enforced well and there are no formal employment contracts. To make the workplace safer, fairer, and more welcoming, we need to fix these problems.

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