



Socioeconomic Conditions Impacting Quality of Life and Work of Construction Workers; Mediated by Poor Governance

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Abstract: *This study looks at the numerous challenges faced by workers in the construction industry, having a rub-off on their quality of life and work. The hazardous working conditions have increased the risk of overload stress and labour exhaustion for construction workers. This study aims to identify and analyze the difficulties construction workers face in organized and unorganized industries face. With this goal in mind, a questionnaire was developed, and interviews were conducted to gather information. By identifying pertinent areas for future research, this study not only helps the method's widespread application in construction labour management but also enhances the method's efficacy and efficiency. Consequently, this study adds to both the body of knowledge and the practice of the welfare of construction workers. The findings collaborate with other literature published in this field of study. Finally, serious efforts are required by the government to mitigate the pain of migrant construction workers and for their social and economic progress.*

Keywords: *Discrimination, Health & Safety, Legal Challenges, Migrant workers, Social Dynamics, Victimization.*

1. INTRODUCTION :

A positive attitude reflects safer behavior. Many workplace accidents and mishaps, particularly on construction sites, resulted from workers' poor adherence to work procedures due to workload and stress. Employers must understand that workers are crucial to the success of the project development. According to Lingard and Rawlinson (1997), risky behavior by workers accounts for close to 80% of construction accident deaths.

(Citra, 2015) Employment in the unorganized sector in the construction business, lacks social protections and has no obvious employer-employee connections. These individuals have no permanent jobs and work on a sporadic, contract basis; they are migrant laborers who make do with whatever talents they have. (Rose et al., 2021) explains that the construction industry has a well-known danger of accidents, injuries, and fatalities, particularly for migrant or non-national workers who make up a sizable portion of the workforce. Monitoring workers' dangerous economic, social, health, political, legal, and safety behaviors on construction sites is essential and crucial for project managers or safety managers (Guo et al., 2014). A pleasant and secure workplace is a viable strategy for controlling economic, social, health, and safety (ESHS) behaviors on the job site. This, however, mostly relies on manual observation and recording, which limits its widespread implementation in the construction sector because it not only takes a lot of time and money but also makes it impossible to observe a whole building site or all personnel (Guo et al., 2016). The Government of



India, Ministry of Labour and Employment (2009) advocated automation and implementation of technology to monitor construction employees' behavior on construction sites to boost management effectiveness and efficiency.

Examples of technologies used in the industry include wearable sensors and motion-capturing devices, which are driving progress at the site and worker productivity. The first is timely and sensitive but interferes with workers' regular work or operations. The latter often entails using cameras to capture photos of workers' behavior and actions before identifying harmful activities by contrasting the collected images with the images in databases of risky behaviors (Zhang & Fang 2013). Building construction can be improved so that it is in better condition for the employees by considering their understanding of and perceptions of safety, health, legal, political, and their working environment (Guo et al., 2017). Wearable sensors and motion capture are some technologies now being used in research. The first is urgent and delicate, but it obstructs normal tasks or business activities for construction workers. The latter frequently comprises utilizing cameras to record videos of employees' actions before identifying harmful habits by comparing the captured video to footage from databases of dangerous behaviors (Zhang & Fang 2013). The Safety and Health in Construction Convention, 1988 (No. 167), as well as the Safety and Health in Construction Recommendation, 1988 (No. 175), are put into practice following the recommendations set forth by this code. To protect the health and safety of workers, the provisions of this code should be viewed as the minimum standards (ILO 2017a).

Construction workers are particularly susceptible to temperature extremes, dust, and unforeseen mishaps in a variety of climatic and seasonal work environments, thus, employers need to protect them. Unfortunately, most construction companies lack adequate rules and compensation to protect workers' Health and Safety of workers on construction sites with harsh environmental circumstances (Choudhry, 2014). Most of the literature research on this subject focuses on the population of outdoor workers generally rather than on construction workers who are exposed to extreme heat, sunlight, and dust for prolonged periods. This article aims to identify and categorize construction workers' social, physical, political, and mental health problems in humid, hostile, unhygienic conditions. Prior studies have demonstrated that minor occupational injuries and significant accidents occur regardless of heart rate, despite heart rate being a marker of physical tiredness and respiratory problems (Ben-Alon & Sacks, 2017). Numerous studies have identified the foundation for successful injury control programs as a strong management commitment to safety, including the status of safety officers within the organization, worker training, regular communication between management and workers, general housekeeping, and a stable workforce.

	NIC Name	Main workers								
		Total			Rural			Urban		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
		1	2	3	4	5	6	7	8	9
INDIA	Construction of buildings	11965055	10784544	1180511	5552446	5101644	450802	6412609	5682900	729709
INDIA	Construction of roads and railways	1137505	904334	233171	748270	588147	160123	389235	316187	73048
INDIA	Construction of utility projects	277621	226404	51217	158941	120304	38637	118680	106100	12580
INDIA	Construction of other civil engineering projects	746331	633574	112757	301428	246574	54854	444903	387000	57903

Table 1

Source Census of India 2011

	NIC name	Marginal worker								
		Total			Rural			Urban		
		Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
		10	11	12	13	14	15	16	17	18
INDIA	Construction of buildings	3316188	2748602	567586	2093785	1737088	356697	1222403	1011514	210889



INDIA	Construction of roads and railways	1071325	554316	517009	925539	487401	438138	145786	66915	78871
INDIA	Construction of utility projects	159044	59180	99864	136251	45120	91131	22793	14060	8733
INDIA	Construction of other civil engineering projects	625735	281702	344033	520688	201942	318746	105047	79760	25287

Table-2

Census of India 2011

Table 1 and 2 helps us to understand the split up of rural and urban employment as per the government census of 2021.

Destination	Family Composition	Migrant Worker Households		Migrant Workers	
		With Children	Without Children	With Children	Without Children
Rural	Working Adult: Both Gender	58.50%	10.50%	72.60%	10.10%
	Working Adult: Only Male	1.30%	8.75	1.30%	4.10%
	Working Adult: Only Female	16.30%	2.00%	8.80%	1.70%
	No Working Adult	1.40%	1.30%	0.80%	0.60%
Urban	Working Adult: Both Gender	60.30%	12.00%	61.40%	13.90%
	Working Adult: Only Male	2.40%	19.20%	2.50%	16.60%
	Working Adult: Only Female	2.20%	2.50%	2.30%	2.20%
	No Working Adult	0.60%	0.70%	0.60%	0.50%

Table 3- Family Composition of Migrant Construction Worker Source-Source- NSSO 2012

Although more men than women work as migrants in the construction business, there are a significant women participation. According to Table 3, workers migrating for work with children were higher in both rural and urban areas. Migrant workers are more vulnerable to exploitation since they frequently enter the labour force at the lowest level feasible, which puts their safety at work in grave danger (Oswald et al., 2020).

However, evidence suggests that construction subcontracting has increased globally over the past 20 to 30 years (ILO, 2001). The three main goals of these frameworks are to "strengthen policy and legislation, build stakeholder capacity, and provide services to migrant workers through Migrant Worker Resource Centres" (ILO, 2015a). The Construction Industry Development Council, which the Indian government and the construction industry jointly established, and the National Institute of Construction Management and Research are just two of the many initiatives being carried out globally to increase the productivity of construction workers. The building industry has also grown its efforts to improve sustainability. Consistent and ongoing attempts to enhance the skill of the workers have been made as a result of raised awareness about safety and quality. As automation and technology become more commonplace, the construction sector has consistently tried to teach and develop its employees. However, much more work needs to be done if the industry is to take advantage of future growth prospects.

The Governing Body of the International Labour Office summoned the General Conference of the International Labour Organisation to Geneva for its Seventy-fifth Session on June 1, 1988. The General Conference noted the relevant international labour conventions and recommendations, in particular the occupational safety and health convention and recommendation, 1981, 1985, as well as the safety and health in construction convention, 1988, under preventive and protective measures Articles 13 to 34 cover a variety of topics, such as workplace safety, scaffolding and ladders, transportation, earthmoving and material handling, equipment plant, machinery, equipment and hand tools, excavations, shafts, earthworks, underground works and tunnels, structural frames and formwork, lighting, electricity, explosives,



personal protective equipment and protective clothing, health risks, fire precautions, reporting of accidents and diseases, first aid and welfare activities, etc. (ILO 2015 b).

Examining the political, legal, and safe environment, seen as a subset of the total organizational climate, is one way to find characteristics that might discriminate between businesses with high or low injury rates (Zhang & Fang 2013). Although trust, cohesion, pressure, innovation, and fairness are among the components of this measure, political and legal perceptions of the organization in which workers are employed have also been discovered (Li et al., 2021). Safety training has drawn increased attention in the safety climate module, and some studies have demonstrated that various forms of safety training improve workers' knowledge (Abbas et al., 2018; Ahmed, 2019). Similar to how perceived control affects perceived control, safety training affects safety consciousness (Ajayi et al., 2021; Al-Bayati, 2021). The correlations between training and safety attitude are inconsistent, though.

Previous research revealed that workplace safety climate measurements were taken in several industrial sectors, including the construction industry. The findings of this study can be applied to broaden the method's use in the construction sector as well as to investigate the method's applicability further. The format of this essay is as follows. The issue of interest is first provided, including a brief introduction and literature review, followed by a description of the experiments and data collection methods used to create and distribute a questionnaire survey to people working in the construction sector to gather additional and recent information data. (Paul, 2016) also states that the current wage level is insufficient to justify the physically demanding work required by the construction industry, also lack of professional advancement would deter many from joining. The majority of young workers do not

(Krishnan et al., 2022) states eight agreements have been deemed "essential" to the ILO's efforts to uphold workers' rights by its Governing Body. The conventions that have been signed to protect labour include the Equal Remuneration Convention of 1951 (No.100), the Discrimination Convention of 1951 (No.100), the Freedom of Association and Protection of the Right to Organise Convention of 1948 (No.87), the Right to Organise and Collective Bargaining Convention of 1949 (No.98), the Forced Labour Convention of 1930 (No.29), and the Abolition of Forced Labour Convention of 1957 (No.105).

2. Literature Review :

Contrary to other industrial settings where lead exposure may occur, the construction environment is characterized by a wide range of exposure conditions, even during a single workday. Additionally, partially or wholly enclosing specific operations due to the emphasis on environmental protection can expose workers to significantly higher exposure levels inside the containment structures (Dillane, and Balanay. 2020). The unique characteristics of the construction environment can restrict or make it more challenging to employ conventional industrial hygiene procedures to control exposure, increasing the need for personal protective equipment. Because construction projects are frequently short-lived, factors that lead to excessive physical, social, legal, and political issues may not be discovered until after the project is finished or the specific tasks performed have changed (Gauer and Meyers 2019a).

It may take a while and a significant financial investment to develop, research, and implement a proactive safety culture at every level of the organization. According to certain studies, those who receive safety training have a more conscientious attitude toward Safety (Basaga et al., 2018). At the same time, other research revealed that changing workers' attitudes toward safety through training is mainly ineffective (Basahel, 2021; Chaswa et al., 2020). However, it is worthy of comparison to the priceless health and lives of people. Once it is successful, the organization will reap the benefits of competitive advantage, quality, dependability, and profitability. Many authors argued that workers' safety and health are not a luxury but a need. Many construction organizations have recently understood how crucial it is to build a strong safety culture since it can lower construction costs and improve long-term operational efficiency (Beker et al. 2018a).

Unfortunately, many lack the knowledge to develop a safety culture consistent with national or social norms. Both humanitarian issues and safety as fundamental principle are related to safety culture. It is essential to consider the interactions between people's actions, attitudes, perceptions, and the scenario or environment at work. Many individuals can find work in the construction business; however, these professions frequently lack job security, and working conditions differ significantly worldwide (ILO, 2015c). The sector must be encouraged to grow and produce more to support fair labour conditions and environmentally friendly construction methods. However, the crisis has resulted in declining revenue and increasing project delivery challenges.



3. Objective of the study :

- The study helps to understand the impact of socioeconomic conditions of construction workers on Quality of life and Quality of work life.

3.1. Conceptual framework :

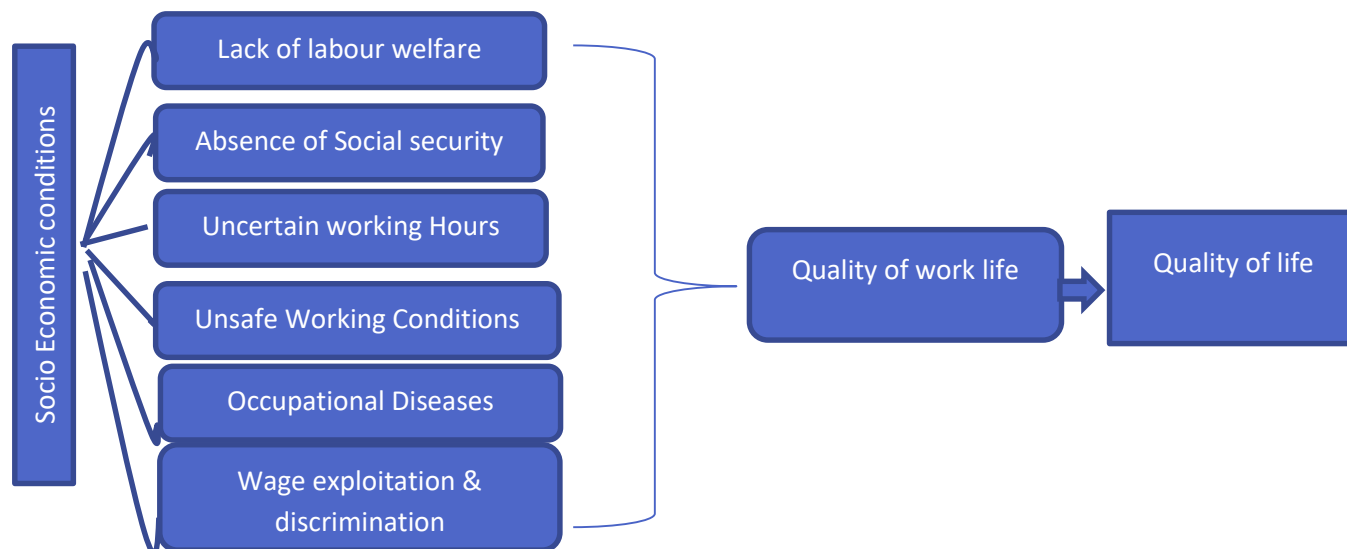


Figure 1 Conceptual framework

4. Worker Challenges in the Sector

India is developing economically and has a vast population; industrialization is crucial. The second-largest employer in India, the construction sector employs about 51 million people and makes up about 9% of its GDP. (Poorani, Krishnan, 2023) states that an average of 8% of Tamil Nadu's revenue is contributed to nation development by all industries. Were as construction industry contributes 7.16% of the GDP of India.

Additionally, it directly or indirectly generates more than 45 million employees. By 2022, the construction industry in India is projected to increase its employment from the current level of about 60 million to 76 million. In the ensuing years, 16 million extra jobs will be generated. Regardless of the areas in which they operate, construction enterprises will need to rely increasingly on the young workforce (India Today, 2020). However, the construction sector is one of the most hazardous occupations due to the high health risks of dust, noise, chemicals, physical handling, vibrating machinery, oversized loads, and a lack of safety expertise (Karthick et al., 2022a). The Building and Other Construction Employees (Regulation of Employment and Working Conditions) Act of 1996, enacted by Parliament, ensures that construction workers have access to welfare, health, and safety protections.

It is common, especially regarding physical health and safety; it is known that skin type affects the risk of developing skin cancer or becoming sunburned. Another significant issue for construction workers is low back pain. Contractors offer no health services at the workplace; these people are kept in various positions that are incredibly detrimental to their musculoskeletal systems (Karthick et al. 2022b). The health of the workforce is being negatively impacted by a variety of hazardous working situations, environmental stressors, a lack of personal protective equipment (PPE), prolonged maintenance of harmful working postures, a lack of awareness of health risks, poor hygiene practices, etc. (Moda et al. 2019a). Their bad health is also caused by several social issues, including poverty, a poor food, different communicable diseases, inadequate sanitation, a lack of education, underpaid, etc. (Liu et al., 2021a). Stronger, more widespread family relationships Given that migrant workers may hold different safety values and beliefs, it is evident that culture significantly impacts workers' safety.

4.1 Social Challenges

The second-largest employer of women after agriculture, the construction industry disproportionately affects women who work there. The most frequent issues that female construction workers faced at work were (i) a lack of restrooms



(80%), (ii) a lack of potable water (70%), (iii) the physically taxing nature of the work (67%), (iv) long working hours (60%) and (v) other complex issues like working in extreme weather, the lack of child care facilities (46%) and sexual advances (8%) (srikrishna, 2017). In general, only a tiny percentage of women work in the global construction industry as compared to other sectors owing to the nature of the work and working conditions.

Social support is an effective way for workers to deal with the stress and anxiety associated with their jobs and can come from co-workers, management, family, and friends (Hooley et al., 2016). Social support has been shown in numerous studies to be beneficial in assisting people in coping with natural catastrophes and infectious diseases. When people experience health-related stress, social support is thought to have a favorable impact (Dozois & Rnic, 2019). The interpersonal process of social support can reduce trauma symptoms after a disaster like the pandemic, including self-blame. Social support assists workers in the construction business to feel dependable and supported in the wake of the recent epidemic, mainly when working in remote locations (Mc Alonan, 2007).

4.2 Political and Legal Challenges

The construction project is significantly impacted by environmental issues like safety, public perception, legal acceptability, political ramifications, and social effects (Wang, 2011). Political forces, which refer to the impact of governmental policies on the projects, are encountered during construction projects (Moda et al. 2019b). For instance, a decrease in investment levels and the availability of financing may impact labour market productivity. The primary function of politics in construction risk management has not yet been established within construction companies. Political factors will heavily impact construction risk management. The economy and finances of construction firms are influenced not only by the activities of the world economy but also by the availability of resources to carry out the task, which includes economic competition, political and legal compliance at many levels surrounding the appointment of all parties participating in building projects (Beker et al. 2018b)

Similar to this, other rules control worker health and Safety in India. This law can be divided into two groups: those in effect before the four new labour codes were passed and those still in development. The former group includes the Factories Act of 1948, while the latter category consists of the Occupational Safety, Health, and Working Conditions Code of 2020 (PRS,2023).

	Number of Construction Workers(Million)	Number of Registered Workers Million		Ratio (%)	Diff (4-2)	% Change
	2017-2018	2017	2019	(3/2)	(4-2)	(6/3)
1	2	3	4	5	6	7
Tamil Nadu	4.43	2.79	2.83	63	0	1.3

Table4- Total Number of Registered Workers

Source -PLFS (2019)

The total number of workers listed in Table 4 is 4.43 million as of 2018, and the number of registered workers was 2.83 million as of 2019. This clearly shows more migrant workers in the unorganized sector lack essential protection of law concerning their employment and social security. (Krishnan, Sumathi 2021 a) The unorganized sector employs a large workforce of 36 million of India's 49 crore people. Only a small portion of the unorganized sector workers are covered by social security programs like employment guarantees, social insurance, etc. Social security initiatives hardly ever cover the economically and racially underprivileged classes. The contract workers assert that besides paying them only the minimum wages mandated by law, the contractors exploit them through victimization.

4.3 Health and Safety Challenges

In many developing countries, poor occupational safety, health, and hygiene protection, a lack of accurate data and information on workers dispersed across construction sites, an inability to solve such issues at work sites, and a lack of social support at the time of injury or morbidity are all issues that endanger the health and life of construction workers.



Construction employees accept work in potentially hazardous and unclean conditions due to a competitive workplace and a lack of government controls (Peyman et al., 2015a) (Borup, 2017) states when exposed to inorganic dust, construction workers were found to be dramatically elevated risk. A comparable pattern was discovered for "any airborne exposure at the construction sites."

Cramping, edema, rash, and heat exhaustion are potential signs and symptoms of occupational and work-related stress in workers, which can affect construction workers (Acharya et al. 2018a; Karthick et al. 2022c). Muscle spasms in the hands, foot, or stomach are symptoms of cramps connected to construction, especially during physical exertion (Liu et al., 2021b). They are brought on by a loss of fluids, salts, or both or by decreased fluid intake. They may cause agonizing agony even if they are not hazardous. Generalized weakness, profuse perspiration, lightheadedness, and physical weariness are other signs and symptoms (Lee et al. 2018; uri'c et al. 2022). Body rash from excessive sweating happens when sweat ducts are blocked, preventing sweat from reaching the skin's surface. Symptoms include red areas, pain, and swelling. It could appear as little red blisters. They also suffer from the need for proper waste disposal, safe drinking water, safe sewage disposal, and ventilation in crowded living spaces. Ignoring these issues can cause infectious diseases to spread among workers and put their health at risk (Peyman et al., 2015b). No focused attention is paid to addressing these health issues of workers deployed at construction sites.

A dangerous consequence of strenuous duties in hot conditions is work stroke; left untreated; it can cause organ damage, a coma, and even death (Arbury et al. 2016; Gauer and Meyers 2019b). In hot, humid, or dry weather, dehydrated workers are more prone to develop chronic kidney disease (Acharya et al. 2018b; Tseng et al. 2020a). Workplace safety, transportation, earthmoving and material handling, equipment plant, machinery, equipment and hand tools, shafts, earthworks, underground works, tunnels, structural frames and formwork, and electricity are all clearly outlined in the safety and health in the construction convention, 1988, under preventive and protective measures for workers (Articles 13 to 34) (ILO, 2017). Workers may experience breathing problems, stomach problems, and diarrhea when the hepatic organ is damaged during high-pressure tasks, which is a significant cause for concern (Beker et al. 2018c).

Reduced mental performance, mental fatigue, anxiety, and loss of concentration are also observed in workers exposed to high temperatures (Tseng et al. 2020b), in addition to increased irritability, wrath, bewilderment, emotional stress, and despair. High pressure affects not only people but also construction projects because it can increase the number of accidents and delay project completion owing to workers' reduced productivity due to their weakened physical and mental capacities (Beker et al. 2018d; Tseng et al. 2020c). Reduced visual perception, delayed reactions, diminished mental awareness, and associative learning may all contribute to increased fatal accidents (Lee et al. 2018b). Individuals experience worry and tension due to their dread of accidents. Many people will feel uncomfortable, including working long hours at home and restricted from moving about. Additionally, several research has revealed that many psychological problems might be exacerbated by construction workers (ILO, 2015). Different restrictions and isolationist policies were implemented by many nations, which made people feel more stressed.

According to Moda et al. (2019c), anxiety is a natural preventive reaction to impending peril. Anxiety can also be a response when confronted with novel circumstances and big changes in the future. The construction sector (both residential and non-residential) can be constructed, renovated, maintained, demolished, and work on civil engineering projects like roads and utility systems are also included in the construction sector's activities under the occupational safety and health convention and Recommendation 1981. As a result, the sector's activity can significantly affect how much money is made and how much poverty is reduced. Its labor-intensive character and solid connections with other economic sectors account for its substantial potential for employment generation.

5. Work-Life Balance :

Due to the differences in task needs, construction workgroups have asymmetrical WLB. Policymakers and practitioners realized the urgent need for developing successful WLB interventions as significant government policies and organizational wellbeing initiatives were introduced to address the ongoing problem of WLB in the construction sector. (Bashir et al.,2020), states the construction business, implementing WLB measures boosts organizational effectiveness, reduces absenteeism, and boosts employee satisfaction. (Apraku et al., 2020) Due to the nature of the labour and the culture surrounding long hours, the construction industry is among the most demanding. Therefore, to increase employee productivity, construction organizations must implement WLB policies. Creating and executing WLB regulations will also reduce the risk to certain health workers. WLB policy ideas can help workers better juggle work and family



obligations, improve their wellbeing, and benefit the organization. (Yasuhiro et al., 2019) According to this argument, there was a high correlation between WLB and mental health issues, so poor WLB might lead to role conflict among employees and increase mental anguish. WLB is crucial to the construction industry's productivity and employees' wellbeing.

6. Legal Framework :

Ministry of Labour (2023) states an "unorganized worker" is a home-based employee, a self-employed person, or a wage worker in the unorganized sector under the Unorganised Workers' Social Security Act of 2008. A worker in the organized sector who is not covered by one of the Acts listed in Schedule II of the Act is also included. Minister in Charge of Labour and Employment, 2023 The Indian government established the Pradhan Mantri Shram Yogi Maandhan (PM-SYM) pension system for unorganized employees to give them security as they age. This encourages financial inclusion, fights poverty, encourages saving, and advances the economy; however, people in need are yet to be covered to establish the legislation's credentials and the political class's intent.

An essential piece of law, the Inter-State Migrant Act of 1979, was created in India to safeguard the rights and interests of interstate migrant workers; this piece of legislation has also not delivered in its objectives like the Social Security Act for want of political will. While it promises the regulation of the working conditions, guarantees workers their just compensation, and looks out for their wellbeing. (Krishnan and Raman, 2021) In the densely populated metropolis, migrant laborers felt extremely vulnerable and lacked the social and cultural capital to thrive. According to (Krishnan, Poorani, 2022), most workers left their hometowns for a job; they were depressed and under stress. Workers who had moved were concerned about their new lifestyle, children's schooling, and other obligations while moving places in pursuit of a livelihood.

The Contract Labour (Regulation and Abolition) Act of 1970 aims to end contract worker exploitation and enhance working conditions (Padhi, 2021 a). As required by Chapter II, Section 3(1) of the Act mandates the contractor to be registered and permits them to hire contract workers subject to providing suitable working conditions, pay, and benefits. Additionally, it provides for the welfare of contract workers and aids in preventing their exploitation. The Construction Workers' Welfare Board, established under subsection (1) of section 18, is instrumental in advancing the welfare of construction workers and enhancing their quality of life and working environment (Chief Labour and Employment Ministry, 2023).

Article 43 of the Indian Constitution is a guiding principle of governmental action, according to Bakshi (2021). The Constitution of India commands the State to ensure that all workers, whether in agriculture, industry, or any other sector, receive fair salaries and good working conditions that enable them to maintain a respectable living level. According to industrial safety and health (2023), Minimum Wages Act 1948 (central Act XI OF1948), workers in construction site must be provided with a minimum of Rs 400 per day for a better standard of living.

Padhi (2021 b), ACT Chapter VI, Section (51 to 66), Labour and industrial law sets minimum standards for working conditions and requires employers to comply with these standards. The law aims to protect workers from exploitation and treat them fairly and with dignity.

7. Methodology:

The field study was conducted across 11 construction project sites involving 350 workers. The questionnaire was administered in a simple random sample method. Workers were handed over the questionnaire, explained the objective of the survey, and requested them to answer the questions freely and fairly and answered all their queries and doubts before they embarked on the survey. The inputs collected from the workers through interviews were further collaborated by observations on the ground. The data was transferred to SPSS, and the reliability validity tests were performed.

7. 1 Key Research Questions

- 1.0 Poor working conditions for construction workers have a significant impact on their life and social life
- 2.0 The health, hygiene, and wages of workers in the industry are far from desirable for a decent living
- 3.0 Lack of social security benefits and job security adversely impact the quality of life and livelihood.
- 4.0 The lack of adequate government controls in the industry is impacting labour welfare and job satisfaction
- 5.0 Migrant workers, contract labour, and temporary employment is impacting the socioeconomic status of the labour in the industry



The questionnaire and interviews covered a wide range of questions to solicit the response of labour working in the organized and unorganized segments. Most employers were corporate, small and medium entrepreneurs, managing medium to small residential or commercial projects. The workers were mainly immigrants and came from north India or adjoining states. A minimal number of them moved from within the same state.

Questions	Bengal	Orissa	Bihar	UP	MP	JH	CG	AP	TN	Others
Do you get paid a fair wage	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
Age group	28-45	28-45	28-45	28-45	28-45	28-45	28-45	28-45	28-45	28-45
Life span at work	3yrs	3yrs	3yrs	3yrs	3yrs	3yrs	3yrs	3yrs	3yrs	3yrs
Children education	14%	8%	22%	31%	46%	51%	33%	76%	84%	92%
Spouse working at site	5%	5%	0	0	0	0	0	10	10	10
Workers Population %	10.60%	6%	29%	29%	5.42%	5.42%	5.14%	5.70%	2.60%	1.71%
Married with family staying	8	6	5	5	5	5	5	30	45	34
Unmarried	45	43	35	34	28	22	23	20	12	14
Leave	6Days	6Days	6Days	6Days	6Days	6Days	6Days	6Days	6Days	6Days
Hours of work	12HRS	12HRS	12HRS	12HRS	12HRS	12HRS	12HRS	12HRS	12HRS	12HRS
Are you provided housing at the site	yes	yes	yes	Yes	yes	yes	yes	yes	yes	yes
Is your job secure	project-based	project-based	project-based	project-based	project-based	project-based	project-based	project-based	project-based	project-based
Provision for Food	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Work conditions	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Hazards at work	YES	YES	YES	YES	YES	YES	YES	NO	NO	YES
Provision for Rest and canteen	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Hygiene	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Poor
Health support	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided
Social Security Benefits	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided
Safety and Accident protection	adequate	adequate	adequate	Adequate	adequate	adequate	adequate	adequate	adequate	adequate
Tools and safety gear	adequate	adequate	adequate	Adequate	adequate	adequate	adequate	adequate	adequate	adequate
Bonded labour and contractor Issues	High	High	High	High	High	High	High	High	High	High
QOL	poor	poor	poor	poor	poor	poor	poor	poor	poor	poor
QWL	average	Average	average	average	average	average	average	average	average	average
Interactions with Owners/Promoter	No	No	No	No	No	No	No	No	No	No

Table- 5

Table 5 depicts the demographic profile of the workers and the nature of issues faced by the migrant workers

	Builders	Nos	Bengal	Orissa	Bihar	UP	M P	J H	CG	AP	TN	Others
Kancheepuram and Chengalpet District	PROJECT Site 1	45	3	4	5	9	2	6	8	3	3	2
	Project Site 2	32	2	2	10	10	1	1	1	1	1	3
	Project Site 3	66	13	1	23	20	2	2	2	1	1	1
	Project Site 4	33	3	2	11	10	0	0	0	4	3	0
	Project Site 5	12	1	1	4	4	1	1	0	0	0	0
	Project Site 6	35	3	3	4	4	4	8	6	5	2	0



	Total	223										
Chennai	Project Site 7	34	0	0	23	11	1	-	-	-	-	0
	Project Site 8	12	0	0	7	5		-	-	-	-	-
	Project Site 9	11	0	0	3	3	0	0	0	4	1	0
	Project Site 10	8	0	0	3	3	0	0	0	2	0	0
	Project Site 11	62	12	8	8	22	4	3	2	3	0	0
	Total	127										
	Total	350	37	21	101	101	19	1	18	20	9	6

Table- 6

A total of 350 workers were interviewed across 11 project sites over nine months as per table 6 in two cities, Bangalore and Chennai, Kancheepuram and Chengelpet. Project site-wise, migrant workers interviewed is depicted in Table 5.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.868	0.864	10

Table-7

Table 7 Reliability statistics help to measure internal consistency for the variable. It is a crucial statistical metric in research because it ensures the data is dependable and consistent, which is necessary for drawing meaningful conclusions and forecasting the future. Cronbach's Alpha arrived is 0.868, which is highly reliable. After that, other tests relevant to test the key questions were performed.

Inter-Item Correlation Matrix

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Q1	1	0.612	0.354	0.633	0.536	0.593	0.578	0.432	0.609	0.742
Q2	0.516	1	0.339	0.776	0.544	0.691	0.566	0.336	0.729	0.533
Q3	0.349	0.339	1	0.521	0.709	0.345	0.388	0.565	0.289	0.662
Q4	0.533	0.706	0.621	1	0.444	0.805	0.753	0.575	-0.018	0.437
Q5	-0.036	0.644	0.509	-0.044	1	0.175	0.164	0.167	0.305	0.632
Q6	0.593	0.691	0.745	0.805	0.775	1	0.549	-0.194	0.001	0.572
Q7	0.478	0.616	0.388	0.53	0.164	0.549	1	0.752	0.436	0.522
Q8	-0.07	0.036	0.421	0.075	0.667	-0.094	0.752	1	0.325	0.451
Q9	0.709	0.429	0.589	-0.028	0.205	0.501	0.336	0.325	1	0.319
Q10	0.242	0.523	0.362	0.37	0.232	0.672	0.522	0.451	0.319	1

Table 8

Table 8 The inter-term correlation matrix unequivocally illustrates the relationship and linkage between the numerous components and the survey questions and the correlation between the various study topics. The value above 0.5 indicates that the items were correlated to a great extent. The values arrived enabled us to express the strength of the relationship between the question. i.e., socioeconomic situation of the workplace impacts the quality of life and quality of work life of the workers.



8. Limitations of the study :

The study was conducted in the cities of Bangalore (Karnataka), Kancheepuram, Chengalpet and Chennai (all three areas in a radius of 25 kms in Tamil Nadu). It involved leading builders and did not capture other states in the country or construction sites that are stand-alone and scattered across the geography. The study used a simple random sample based on the approachable workers at the construction sites.

8.1 Areas for future research

The study could also cover construction sites involving small number of workers and engaged in small or medium projects. Further research can be done to probe other dimensions not covered in this study.

8.2 Key Research Questions Answered

From the field survey and the analysis of the inputs collected from the ground, it is safely assumed that the working conditions of the construction workers are significantly impacting life and their socioeconomic conditions. The health and hygiene conditions are pathetic and affect their motivation and morale. Lack of social security support exposes them to job losses, income loss, and inability to seek medical treatment. Lack of adequate government control impacts statutory compliance and blatant violation of labour laws. Long work hours and lack of welfare measures make this industry unattractive for employment. Extensive use of contract labour and migrant labour is going unaddressed and employers are taking advantage of cheap labour without providing job security and hiring them on low wages.

9. Conclusion :

The study highlights the agony and plight of workers in the construction industry. Most of them have left their villages looking for better life and livelihood. Most workers were engaged in agriculture before migrating to cities for work in construction sites. They secured accommodation at work and worked relentlessly for minimum wages and poor working conditions. They mainly left their families behind to earn wages to support their families. The field study revealed the ground realities where exploitation of unorganized labour is rampant in the hands of influential business houses or entrepreneurs. Lack of social security, job protection, and safeguards for health and hygiene are serious aspects that need consideration by all stakeholders. The numerous occupational

Contract labour, seasonal labour and women's workforce have all been exploited over the years due to their socioeconomic conditions, illiteracy, and poverty. This situation has not improved significantly due to the country's social and political environment (Krishnan and Sumathi, 2021b). The socioeconomic conditions of the poor and marginalized rural migrant workers seriously threaten the country's economy, growth, and well-being of the working class. This aspect needs the top priority of all stakeholders to improve the workers' quality of life and work. The study brings novelty by capturing the multidimensional elements of migrant workers seeking employment in the unorganised segment at the cost of basic amenities for health, hygiene, safety and welfare just to have a hand to mouth existence.

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