CHAPTER II

REVIEW OF LITERATURE

2.1 INTRODUCTION

This chapter analyses the views and main findings of different authors on the socio economic conditions of construction workers and health status of construction workers. The study of related literature implies locating, reading and evaluating reports of casual observation and opinions that are related to the individual’s planned research work. Further, the concepts used in the present study have been discussed.

2.2 REVIEW OF LITERATURE

There are many studies in India and abroad on construction workers. This review of literature aims to show the need for the study of socio economic conditions of construction workers and the ways to improve socio economic conditions of construction workers in the present Indian context.

Vaid K.N. and Gurdial Singh (1966)\(^1\) studied the problems of contract labourers in the construction industry a little clearly. Their concentration on Kota, an industrial centre in Rajasthan, a thorough analysis of the primary data was made by them, as far as the wage structure and the working conditions of construction workers pertaining to the organised sector.

Jan Wittrock (1967). Studied on "reducing Seasonal Unemployment in the construction Industry – Methods of stabilising construction Activity and Employee Income". The author presents a brilliant discussion of the structure of the industry, seasonal pattern of unemployment, the benefits of eliminating seasonal fluctuations, the technical aspects of winter construction and the pattern of remuneration to labourers. A number of recommendations were also made for the betterment of construction workers. The author has proposed suitable training courses for the potential job seekers.

Pandey S.M. and Johri C.K. (1970) have investigated the management of construction labour in selected chemical plants in India in the year 1970. Their main analysis was about workers engaged in the organised sector and also about the legislative protections available for construction labourers and the cases of violations and abuses.

Jeneva ILO (1972) An outstanding study was "Employment, Incomes and Equality - A strategy for Increasing Productive Employment in Kenya". In the study the frustration of unemployed job seekers, poverty level and low productivity were analysed. The several possible solutions also were offered. The report dealt with the then prevailing situation in the construction sector and made suitable recommendations

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for the future. It was a pioneering study with economic importance, and social relevance.

**Pandey S.M. and John (1972)** had undertaken a study on the employment relationships in the building industry in Delhi in 1972. The National Building Organisation had sponsored that study. It was mainly about the employment of workers in the building industry in and around New Delhi. The nature of employment in the building industry, labour supply, their mobility income, debt conditions and the issues relating to the recruitment, working conditions and training of construction labourers were studied by them. Further, the mode of wage payment, procedure for grievance redressel and settlement of disputes were also considered by them. It was a study based on primary data and sound inferences were drawn on strong theoretical bases. These authors had stressed the organised and permanent nature of workers and compared their comfortable conditions with a few not so much comfortable conditions of other types of labour. They have dealt with socioeconomic aspects and legal protection provisions. The role of government and labour welfare were discussed in deta.

**Giri V.V. (1972)**, the Former President of India was a Champion of trade-unionism and labour welfare. He had undertaken many studies of immense value and wisdom carefully. His excellent theoretical understanding coupled with empirical evidences were inherent in his studies and reports which won him reputed status literature relating to labour problems, policies and welfare. A noteworthy publication came from his masterly pen in 1972 entitled "Labour Problems in Indian Industry". In

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5 Pandey SM and John, Employment Relationship in Building Industry — A Study in New Delhi, (New Delhi: Shri Ram Centre for Industrial Relations and Human Resources, 1972, p.98.
his outstanding work he has evaluated the efficiency of trade union efforts and bi-
lateral agreements as prevailed in countries like Great Britain, France, the Netherlands, Belgium, Newzeland, Australia, Canada and India. The study was path-breaking in the sense that it was almost a pioneering comment on contemporary conflicts and harmonies relating to the labour. It paved the way for further exploration of knowledge in this direction.

**Dimitri and Germidios A (1974).** Studied on "Labour Conditions and Industrial Relations in the Building Industry in Mexico". This study has analysed the role of labour in building industry, the relation between the social partners in the industry and the labour market in the building industry. A realistic approach to the question of labour problems also is made. A qualitative analysis of labour in the building sector is made with a touch of throughness. The theoretical frame work offered by this study seems to be highly useful for future investigations.

**Bose R and Swadesh** (1975) studied the problems of the construction workers under the title some aspects of unskilled labour markets for civil constructions in India: "Observations based on field investigations". The above paper represented the first attempt in India at examining the aspect of substitution of labour and equipment in civil construction. Civil construction is highly seasonal in character. The problems of

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migrant labour are also studied. Investigations were held in Madhya Pradesh and also in Tamil Nadu.

Papola and K.K. subramanian K.K.\(^9\) in (1975). They have studied in their work the problem of labour mobility also in a local labour market. The job related problems were given due ice by these authors.

Sinha and Ranade(1975)\(^{10}\) have under taken a study of women construction workers, one in Delhi covering nine construction sites and one in Bihar covering two major Government Projects. This study tried to throw light on the socio-demographic characteristics of women labourers, the system of recruitment, working conditions, type of work and wage rates, health, living and welfare facilities and their economic conditions. It is about the women workers in the organised construction sector. It has pointed out the fact that many of the welfare measures have not been implemented properly and efficiently.'

Palvia, CM. and Jaganathan V. (1978)\(^{11}\) made a study of the problems of employment of building construction labour in Kaval towns of Uttar Pradesh. It was an effective socio-economic survey of the working and living conditions of labour in the building sector. They have analysed the labour laws, unionisation, the formation of labour co-operatives and welfare levels of workers.

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\(^9\) Papola and K.K. Subramanian, Wage Structure and labour Mobility in a Local labour market. (Ahamedabad Sardar Patel institute of Economic and Social Research, 1973)p.53


Subramanian K.K., Veena D.R. and K. Parikh Bhanumathi (1979)\textsuperscript{12}. Studied about the construction labour market around Ahmadabad. The study covered one thousand workers in sixty four construction work sites. Much light was thrown on various types of construction activities, categories of workers, conditions of work, income and expenditure pattern, socio-economic characteristics and levels of living of construction labourers. A leading finding was that more than fifty per cent of the workers are in the organised sectors receiving monthly wages with permanent employment. A few cases of abuse and misuse of construction labour and their wages by contractors were also reported. This was a new area in which the possible rate of exploitation was also brought to limelights. They were able to establish that what was applicable to Ahmadabad could be easily applied to certain other urban centres also. A high degree of similarity was found between major construction areas with contractual arrangements.

Deo K.P. and Rao G.N. (1979)\textsuperscript{13} had undertaken a study of labour conditions and industrial relations in the building industry of Pune. They attempted an analysis of labour migration, methods of recruitment and wage fixations, working conditions and employment relationships. They tried to point out the workers perception of jobs and migration by them to Gulf countries. It was revealed that the desire and willingness to migrate to foreign countries were more among the skilled than among the unskilled labourers. The main reasons for it was the fact that skilled labour force was scarce. Nearly seventy eight per cent of the building workers secured jobs directly without any


agent. A certain degree of labour exploitation based on wage discrimination was discovered by them. The non-implementation of the minimum wages act in many cases was also found. The total absence of collective bargaining was one of the reasons for such a state of affairs. Very favourable recommendations were made by them.

**Loveridge R. and Mok A.L. (1979)**\(^{14}\) studied the skills and services of workers in several areas and framed some sound theories of labour market segmentation in 1979.

**Guha S.N Thakurta (1980)**\(^{15}\) has undertaken a study of contract labour construction industry at Tripura in 1980. The main concentration of this study was mostly on the conditions of employment, wage determination in un-organised sectors, labour welfare and social security measures. The scope of this study was confined just to road construction workers. The problem of non-implementation of welfare measures by the construction agencies was reported.

**Stretton (1981)**\(^{16}\) in "The Building Industry and Urbanisation in Third World Countries - A Phillipine Case Study". A model consisting of the structure of the industry, the migratory nature of workers and skill-formation among construction labourers was built. In this study, the precarious nature of employment in the building industry was aptly highlighted. A few hypotheses were also tested brilliantly.


Saxena (1981) 17 has studied the problems of Indian labour in the context of social welfare. He has analysed the general problems and particular issues pertaining to Indian labour and the imbalances and imperfections witnessed in the area of achieving optimality norms of social welfare. He has rightly come out with the finding that most of the State Governments have chosen to show a step motherly treatment towards the un-organised labourers and the labourers employed in tiny, privately owned units of production and trade. However he could not come out with suitable remedial measures which enjoy practical feasibility and social acceptability.

Deshpande L.K.. (1985)18 has studied the segmentation of labour market in Bombay, in his case study, he has tested many empirical cases and analysed the potentials of ups in labour markets. The social factors which influence the process of determination of wages have been explained. This study enjoys a strong theoretical foundation.

Alan Stretton, A.W. (1985)19 another labour expert, has made a study titled "Circular Migration, Segmented Labour Markets and Efficiency in 1985". He has made very useful suggestions for the correction of imperfections noticed in segmented labour markets from the angle of circular migration. A modest comparison of the labour markets of Manila and Port Moresby was made therein. The author shows the trend in segmentation factor. He discusses certain variates to competitive forces. The author attempts to build a new model suitable to be applied to situations where a 'closed labour

market leads to better market efficiency. He has made use of a random sampling technique to investigate the problem in the right perspective and present a few rational solutions.

Mitra A. and Mukhopathyay S.,(1989), in their study have examined the pattern of labour absorption in the class one cities of India (cities with a population of one lakh and more) in 1981 and compared the same to the situation in 1971. According to them, the construction industry has staked a larger claim over the average work force of the urban centres in 1981 as compared to 1971. Another finding was that the rate of increase in female construction workers was higher than that of male work force. This was mainly due to the higher migration rate of rural women seeking construction employment in the urban areas.

Pandu Reddy. R has come out with an article on construction workers and stated that the construction labourers are more migratory in character than factory workers. Such workers do not generally work in any project from its beginning to its completion. They leave in the middle. Reasons are many. A small dislike for the contractor or their work at their firms in their villages or just for the sake of a change are the general powerful causes. Another main reason was the disturbances made by the local labourers. Above all, the construction workers are not able to have employment on all days in the cities. The women workers in particular, to all types of tough jobs like breaking the bricks and stones and carrying them to higher altitudes and mixing cement sand and stones. Such risky jobs are not proportionately paid.

Sivakumar M.S, Yap Kioe Sheng and Karl Weber\textsuperscript{22} conducted a case study of the recruitment pattern and employment practices in construction industry in Bangalore (South India) in the late 1990s. They have observed that the construction activities in the study area have increased rapidly providing vast opportunities for construction labourers in and around Bangalore city. They have highlighted the sufferings undergone by the construction workers and the unfavourable tactics adopted by contractors and their agents. A noteworthy feature highlighted the work was the migratory nature of rural workers towards the urban areas with employment potentials. It is pointed out that the labour welfare legislation has not been promptly enforced.

Arumugam, P and James Paul, P(1995)\textsuperscript{23} have made a study about the nature of organisation of construction workers in Coimbatore and their problems. According to them, segmentation of labourers on the basis of community or caste plays an evil role. Most of the workers are illiterate or and less educated. They lack adequate awareness of the ongoing process of changes in the field and they feel shy to fight for their rights. Consequently, the degree of exploitation was considerable. Another useful finding was that except the C.P.I, and C.P.M. (Political Parties) no other political party has given serious thought and attention to the welfare of the construction workers of the area. The upliftment of the construction workers has virtually remained a cry in wilderness. Above all, the most disturbing point was the total indifference on the part of Central and State Governments, towards the implementation of welfare laws and


measures. Victimisation, retrenchment, and partial unemployment have become common.

Kilbert C.J and Coble R.J (1995) clarified the relationship, and overlap among protection and environmental problems. The study was based on the experience in the USA, but the problems discussed are very generic in nature. The authors recommended integrating safety and environment methods and combination of OSHA and EPA. The study assumes that a single agency dealing with a well defined area will be more effective than several agencies with overlapping issues and responsibilities. The authors also suggested that the service provider should be provided with a bid package that clearly identifies the responsibilities of contractor and owner for safety and environment requirements was further, they suggested that legal duties must be clearly communicated to the potential bidder at the time of invitation to bid. The suggestion is that in many cases the contractors are not aware of their implicit legal responsibilities in relation to health and safety issues.

Young’s (1995) argued that, the role of site engineers is to improve safety at sites. In order to acquire completely general project goals of better value, reduced costs and lower risk, engineer on the frontline must take the lead in implementing inventive, yet practical approaches that strategically incorporated safety concerns into the project management development.

Ashoka Chandra et. al., (1998)\textsuperscript{26} have worked on labour, employment and human development in South Asia in the light of globalisation and economic reforms. They have analysed new dimensions relating to labour market, employment and poverty a little seriously and extensively. After tracing the fast development of the theories of labour, they have discussed the trends of changes in labour market and employment. The labour conditions in several countries like Pakistan, Nepal, Bangladesh and Sri Lanka are compared with those of India. Issues relating to labour productivity, wage disparity and increasing female work participation have been examined with objectivity and clarity. The impact of social and political institutions has also been highlighted. The dichotomy of organised and unorganised segments is explained with its repercussions. A few solutions for the recent challenges presented by the policy of liberalisation have been advanced.

Becker G.S (1998)\textsuperscript{27} developed a model for analyzing the political competition among special groups between tax payers and subsidized agents. They corrected the paternalistic theory by claiming that the government favors the more political powerful groups. It is concluded that the political equilibrium is more likely to be influenced by the efficiency of each group in exerting political pressure over the paternalistic side of the government.


\textsuperscript{27} Becker G.S, 'A theory of competition among pressure groups for political influence', the quarterly journal of economics 1998.
Mulligan C.B and Sala-I-Martin’s (1999)\textsuperscript{28} comment that, first applied the notion “single – mindedness” to social security, which assumed while workers care about a large variety of issues, relevant to their different occupations and industries, non workers are more united in their political action. Generally speaking, the preferences of groups and their ability to focus on the consumption of goods or issues, enable them to achieve great political power and eventually to obtain the most favourable policy.

Koehn. E and Reddy.S (1999)\textsuperscript{29} in his article points out that the construction industry is labour-intensive, particularly in developing countries, it involves more workers per activity on site. Typically, 2-10 times as many workers per activity are utilized compared with developed countries.

Pravin Sinha (2001)\textsuperscript{30} indicates that construction industry is the second largest industry in India next to agriculture, which is the largest single employer of the Indian workforce. As the employment relations in the sector are of informal nature the same is grouped under the Unorganized Sector of the Indian economy. The unorganized Sector employs over 90% of the workforce, yet they remain ignored by the State administrative machinery, jurisprudence and the unions. The opening up of the Indian economy has led to the influx of not only foreign players but also foreign capital. This

has led to rapid development activities in all spheres. Consequently, one observes construction works are being undertaken, both by institutions [government and private] and individuals. The construction sector has also witnessed introduction of new technology, with object to reduce the project completion period. These developments have placed new demands on the construction workers. The trade union of construction workers too has had a positive effect on the creation of employment through coordination with employers and up-gradation of skills and better management of construction sites. The national federation of construction labour, for example, through its organizational efforts has positively influenced the workers’ eagerness to go for skill development and thus enhancing the pace of construction work as also their earning levels.

Toole T and Sokol (2002) recommend that to prevent health hazards at work, all possible sources should be identified before commencement of construction work. Hazards at construction site may come from hazardous substances used onsite and also environmental variables may create additional risks as heat and noise. Most construction accidents result from basic root causes such as lack of proper training, deficient enforcement of safety, unsafe site conditions, not using the safety equipment that was provided and a poor attitude towards safety.

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Kannan K.P (2002)\textsuperscript{32} examines the evolution of the welfare funds for informal sector workers in the state of Kerala in India. The paper finds that welfare fund model of collective care arrangements for the informal sector in Kerala showed considerable innovation in its design and organization, its functioning is embedded in the bureaucratic system giving rise to a number of problems. The model offers a minimum of social security to the informal sector workers who are unprotected. The ever-increasing demand for more and more welfare funds for each and every sub-sector of the informal sector can be viewed as a desperate reaction of the workers for measures of social security in an unprotected labour market. A long history of mobilization and organization and poor policies of the governments in power, the working and living conditions of an average worker in the informal unorganized sector in Kerala are perceptibly better than those of two/three decades ago. One of the biggest challenges facing Kerala is the problem of unemployment. Reducing unemployment and enhancing the social security cover to the majority of the people are two crucial issues that a liberalized economy will have to face. The welfare fund model of Kerala provides useful pointers to alleviating the problem of insecurity among the workers in the informal sector.

Krishnamurthy V. and Nair R.P. (2003)\textsuperscript{33} focus on the welfare fund for construction workers, which commenced in November 1994 and provided a range of welfare measures such as benefits for fatal and nonfatal accidents as well as grants for


education, marriage and funerals. Manual workers over the age of 15 can register with the Board and pay 25 rupees as an insurance premium to cover accidental death or disability. In practice, however, workers are registered through their trade unions but the level of registration is low - 18% of two million workers in the sector. Of the 90,000 members identified in a survey conducted under the study, only 200 had received any monetary benefit from their membership. Employers pay 0.3 % of each construction contract to the welfare fund but compliance is a problem and the benefits are too small to make a difference to living conditions. The study recommends that the contribution rate can be increased to 1% if the following two conditions are met 1) there is in-depth study done on the reasons for the large current surplus of the fund and 2) there is a clear plan about how the current surplus and the increased future resources will be used for greater coverage and improved benefits. It concludes that there is a need for the various welfare funds to operate on a more uniform basis and that consideration should be given to achieving a greater degree of integration under one single Board.

**Bureau of Labour Statistics (BLS) (2004)**

US department of labour the construction industry stands out from other employments as having one of the highest worker injury and fatality rates. Construction comprises a very small percentage of the overall workforce. Yet, the incidence rate of nonfatal injuries and illnesses exceeds that of many other industries. The construction industry has the more fatalities than any other industry.

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John C.P (2004) argues that the large gaps existing between the rich and the poor, and organized and unorganized workers have led in several countries to attempts at providing social and economic security to the poor and to the unorganized sectors. In Kerala, the introduction of modern techniques of production and growth of capitalist production relations had important implications for traditional crafts as well as craftsmen in Kerala. The social security system among craftsmen was embedded in the craft and caste traditions and practices. The customs and practices of the craft as well as of caste groups were eroded in the processes of change that transformed caste-based occupational traditions and the social structure itself.

Sharma A.M. (2006) United Nation Development Programme (UNDP) states that for most people, a feeling of insecurity arises more from worries about daily life (like will they and their families have enough to eat or will they lose their job?) than from the dread of a cataclysmic world event.

Venti (2006) argued that, the sophisticated consumers, who are aware that they have self control problems, are able to overcome these problems by engaging in commitment mechanisms that regulate their actions. One can commit oneself by cutting up credit card to prevent overspending. Moreover, social organizations, governments or financial institutions are able to improve welfare by providing similar self control

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safeguards. Under such circumstance it intuitively seems that a paternalistic government could improve the welfare of the society by enforcing the myopic individuals to savings programs such as compulsory employer pension, mortgage payment plans and public pensions that are perhaps the most effective saving devices. These mechanisms usually have one thing in common i.e, restrict short-term spending. Pension system is considered as a good method to discipline the individuals who have self control problems to save.

_Sakthivel S, Pinaki Joddar (2006)_\textsuperscript{38} advocate that, India’s workforce comprises nearly 92 per cent in the unorganised segment, with the entire farm sector falling under the informal category, while only one-fifth of the non-farm workers are found in the organised segment. Estimates suggest that in the non-farm sectors, as we move up the income ladder, the share of the informal sector gradually declines. However, as far as the agricultural sector is concerned, irrespective of economic class, the share of the unorganised workforce remains flat. Further analysis reveals that the coverage of social security schemes has been extremely sparse among the economically and socially vulnerable sections. The pro-rich, pro-capital policy of the present regime is reflected in the recent downward revision of the interest rate to the subscribers of provident fund. Further, the move towards defined contributory schemes away from defined benefit schemes of pension funds is fraught with danger. Therefore, we argue that given the poor affordability and lack of an institutional mechanism, any design of social security that relies heavily on a contributory basis is bound to fail dismally. the coverage of social security schemes has been largely against economically and socially

\textsuperscript{38} Sakthivel S, Pinaki Joddar, 'Unorganised Sector Workforce in India Trends, Patterns and Social Security Coverage’, Economic and Political Weekly May 27, 2006.
vulnerable sections. While regular workers are largely covered by the provident fund regime, the ever increasing army of casual and contract workers, even in the organised sector appear to have been discriminated against, not to speak of the entire self-employed, which accounts for a significant proportion of India’s workforce.

Stout et al. (2006)\(^{39}\) point out that, in the National Institute for Occupational Safety and Health Science (NIOSHS) blog that research to practice programme 2006, conducted by NIOSH mentioned construction workers suffer from injury, disability and death from workplace incidents.

Kwong-leung Tang and Chau-Kiu Cheung (2007)\(^{40}\) conducted a survey of 1240 welfare recipients in Hong Kong to investigate the effectiveness of various measures for raising the recipient’s work motivation and diminishing their welfare dependency. The measures examined include the Intensive Employment Assistance Project (IEAP), Community Work (CW) program and disregarded earnings arrangements. Findings reveal the effectiveness of these measures. Particularly, help received from services of the IEAP was the principal factor in the effectiveness of the IEAP and IEAP was effective for welfare recipients who were older or less skilled. The findings thus offer support to the generality of the claim about the effectiveness of welfare to work program.


Shobha Mishra and Manju Bhagat (2007)\textsuperscript{41} in the article pointed out that labour welfare activities in an industrialized society have far reaching impact not only on the workforce but also all facets of human resources. Labour welfare includes all such activities but also ensures improvement in spiritual and emotional quotient. It comprises long term and short term goal toward building a human society.

Adems D. Plessis, Gumbie, A and Willis (2007)\textsuperscript{42} reported that, among the construction workers, welding goggles and shields can be used to prevent eye damage that might be caused by bright lights and heat as well as from arc welding and also added that head injuries could be caused by activities such as falling objects, spillage and debris from conveyer belts, electric shocks and head bumping.

Fiona Murie (2007)\textsuperscript{43} indicates that International health and safety standards to protect construction workers are already in effect but are often ignored by managements. Conforming to these standards and implementing other measures described by the author could substantially reduce the high incidences of injuries, illnesses, and fatalities arising from work in this industry. Sustainable development in construction includes a clear and strong component prevention of risks to the safety and health of the workforce. The recent ILO guidelines on Safety and Health Management Systems, as well as the Global Reporting Initiative and an ever growing number of voluntary corporate social responsibility systems are integrating management of occupational health into business management systems in all sectors. Health and safety

\textsuperscript{41} Sobha Mishra and Dr. Manju Bhagat, ‘Principles for successful implementation of labour welfare activities’, policy theory to functional theory, 2007.


at work is very clearly a development issue, and there should be close cooperation between governments, employers and workers for prevention.

Dhas A.C & Helen M. (2008)\textsuperscript{44} pointed out that the unorganised workers account for about 93 per cent of the total workforce and there is a steady growth in it over the years in India. It is argued that India had a long tradition of informal social security and social assistance system directed particularly towards the more vulnerable sections of the society but underwent steady and inevitable erosion. The social security initiatives of the Centre, States and NGOs implemented during the past indicated that the needs are much more than the supports provided and the efforts must be targeted and vast enough to cover the growing unorganised workers. It is argued that the major security needs of the unorganised workers are food security, nutritional security, health security, housing security, employment security, income security, life and accident security, and old age security. India has a long tradition of social security and social assistance system directed particularly towards the more vulnerable sections of society. The institution of self sufficient village communities, the system of common property resources, and the system of joint families and the practice of making endowments for religious and charitable institutions provided the required social security and assistance to the needy and the poor of the nation.

\textsuperscript{44} Dhas A.C & Helen M., ‘Social Security for Unorganised Workers in India’, the American College, Madurai, Lady Doak College, Madurai, 2008.
Binoy Joseph, Joseph Injodey and Raju Varghese (2009)\(^45\) in the article point out that the structure of welfare state rests on it social security fabric. Government, employers and trade unions have done a lot to promote the betterment of workers’ conditions.

Basu K (2009)\(^46\) mentioned some of the health problems in his study on work site injuries in female construction laborers included, severe muscular pain, intestinal problems, fever, cough and cold, pain and more serious ailments like pneumonia, tuberculosis and leprosy.

Indian Labour Organization (ILO 2009)\(^47\) survey found that 165 out of every 1000 workers are injured in the construction sector. Construction work is featured by high labour turnover, constantly changing work being carried out simultaneously. All these factors caused by temporary nature of the job create a high-risk environment.

Shaikh Mehmood Hassan and Shaukat Ali (2010)\(^48\) reveal that unorganized sector is the main characteristic of Indian economy covering maximum hands working towards its growth. This sector accounts for more than ninety percent share in the economy against the organized sector. This sector lacks formal relationship between the employer and the employed, security and regularity of payment, stability of job or


employment, deprivation and devaluation of real cost of the labour. It includes Contract labour including construction workers, casual labour, labour employed in small scale industry, handloom/power loom workers, beedi and cigar workers, employees in shops and commercial establishments, sweepers and scavengers, tribal labour and all others who are unprotected. They have constraints such as casual nature of employment, ignorance and illiteracy, small size of establishments with low capital investment per person employed, scattered nature of establishments etc. Many acts have been brought into force to provide protection to the labour of this sector. Various bills have been passed for the welfare of labour of this sector from time to time. But either the implementation is not proper or large groups of workers are unaware of it.

Sabarirajan A., Meharajan T. and Arun B. (2010) point out that the textile industry is one among the important industries in India for earning Foreign Exchange and giving employment to lakhs of workers. Because of being a highly labour intensive industry it needs to concentrate more in the area of employee welfare. In this study they select Salem district in Tamil Nadu for identifying various methods and also to identify the effectiveness of the methods. The study shows that 15% of the employees are highly satisfied with their welfare measures, 39% of the employees have average satisfaction with their labour welfare measures and 16% of them are highly dissatisfied. Welfare measures play an important role in employee satisfaction and it results in improved quality of work life.

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Nazhat Parveen and Patil N.H. (2010)\textsuperscript{50} viewed that women are playing a dominant role in certain aspects in the informal sector such as agriculture, construction etc. Women construction workers are exploited because they are socially backward, unorganized, uninformed and poor. Women and children are paid wages at comparatively low rates as compared to men. A system of bondage exists and gets extended from one generation to another. There is a need for a unified legislation on construction workers that must provide an independent enforcement authority for its enforcement at state as well as district level. There is also the need on the part of the government to enforce strict legislations pertaining to the life and security of the women construction workers such as providing safety at the workplaces and subscribing to insurance policies of these workers. Construction workers should also be screened for health before the work commencement.

Beena Narayan (2010)\textsuperscript{51} in the research paper states that construction workers and unorganized sector workers are most vulnerable in India. The relationship between employer and employee is temporary and their working hours are uncertain. Basic amenities and welfare facilities provided to these workers are inadequate. In the case of construction workers 72\% have a choice for private hospitals, 14\% have choice for government hospitals and 14\% are aware about ESI hospital. By interviews with the construction workers it was understood that only limited first aid is available at the worksite. Larger construction companies follow rules regulating care for the workers. In the case of smaller construction sites no such rules for labour are followed.


Construction workers are rarely paid any compensation. From the 153 construction workers surveyed 76% (117) accepted that there is no compensation for sickness or loss and 7% (10) workers accepted that some compensation is paid. In case of death some compensation is paid from the contractor’s side while 17% (26) workers are unaware of the compensation policy. The paper concludes that ESIC can play an active role with the help of the media, non-government organizations, educational institutions and corporate groups so that unorganized sector workers get proper advantage of social security schemes.

Faisal Fasih, (2010)\(^{52}\) recommended that International commitments and constitutional obligations bind the government to provide social security benefits to all citizens. Social security may be protective or promotional. The former seeks to give protection against the contingencies of life (such as sickness and old age), which may reduce the earning capacity of an individual; whereas the latter demands pro-active action for raising the standard of living. In India, only about 7% of all the workers are entitled to most of the benefits of the social security laws and the rest belonging to the unorganized category are not provided adequate coverage and if covered, the laws and schemes are often not implemented. Besides, ambiguities in policies, flaws in the laws and relatively low investment in the social security schemes add insults to injury. This prima facie contravenes the constitutional goals in general and the equality clause in particular. Unorganized workers are compelled to spend out of their meager income for all contingencies and remain helpless in their old age. We must not view ill-health or malnutrition as a contingency, but a continuing certainty of life for which protection

must be arranged. Ill-health or malnutrition is not viewed as contingency but a continuing certainty of life and therefore we must appreciate social security as a system to provide overall security for a person in the family and work place. It must include the measures designed to ensure that all citizens meet their basic needs like adequate nutrition, shelter, health care and clean water supply, guarantee of work and adequate and fair wages, protection during child birth, child care, illness, disability, death, unemployment, widowhood and old age benefits etc. The idea shall be to create a set up where all the people could maintain an adequate standard of living consistent with social norms.

Swapna P. and Samuyelu N., (2011) argue that India being a welfare state wedded to the philosophy of socialistic pattern of society, it is imperative to have a contented workforce, enjoying a reasonable standard of living with adequate facilities and provisions for their wellbeing. In spite of all the modern technology and all the system of controls coming into widespread use, human power still remains the most important factor in the production process. If people do not want to work, it is impossible for any organization to attain its goals. So labour welfare and social security are the major aspects of national programmes towards improving the production of the industry, condition of the worker and income of the society.

Subramanian Chokalingam and Sornakumar (2011)\textsuperscript{54} specified that, workers’ safety in the construction industries has been strong in recent years. The poor safety record of the construction industries is due to several factors such as complexity of the work or system, risk, nature of work, management style, safety knowledge and commitment and personal behaviour. Construction industry in India has its own risks and challenges arising from changes which are intrinsic in construction. As most of the risks connected with a construction project cannot be eliminated, there is a need for an effective awareness system and screening system to manage all types of risks. The safety induction training will be helpful for the new worker to know the hazard in the work areas. The training will trigger their mind while doing some unsafe work. Safety induction training will change their action skill toward safe work culture.

Manzini, H. and Gwandure,C. (2011)\textsuperscript{55} argued that, welfare services can be used to secure the labour force by providing proper human conditions of work and living through minimizing the hazardous effect on the life of the workers and the members of their family.

Trivedi Ashish, Patel Yogesh, Pandit Nirej and Bhavsar Bharat (2011)\textsuperscript{56} recommended that occupational dermatitis is one of the common hazards among construction workers, most commonly due to exposure to cement and other materials.


\textsuperscript{56} Trivedi Ashish, Patel Yogesh, Pandit Nirej and Bhavsar Bharat, ‘Prevalence of Skin morbidity among construction site workers working at Vadodara’, health line ISSN 2229-337X , Volume 2, Issue 1, January-Jun 2011.
like paints and resins used at construction sites. Proper engineering control measures should be the first target for prevention of the hazard. It should be implemented for the construction site workers to reduce the burden of skin diseases. All the workers should be provided with the appropriate personal protective equipment at the work place. Awareness programme related to workplace hazards for the regular usage and maintenance of PPE should be carried out at regular intervals.

Nithin Prasad R.S, Vittal Rao K. and Nagesha H.N (2011)\(^57\) in their article aimed to ascertain the awareness of the welfare scheme, and the extent of their implementation. Data in respect of 189 respondents’ data have been collected and analyzed using statistical packages to ascertain the awareness and hurdles of the scheme. The outcome of the study shows that 92.5% out of 14 lakhs workers have been deprived of the benefits of the welfare scheme promoted by the Building and Other Construction Worker’s Welfare Board, Karnataka. Among the 189 respondents to the survey, only 24% have been aware of the welfare scheme. The major hurdles in extending the scheme in the form of legislation non-compliances have been recommended.

Pratibha Joshi; Promila Sharma; Thakur T.C. and Amit Khatter (2012)\(^58\) in their article argued that today construction line is an industry that requires working at ever-changing locations and work environments. In urban sectors of India increasing numbers of workers have taken up construction work as a means of immediate


employment, which provides cash earnings at the end of the day. The best way to protect workers against hazards is to control problems at the source. The problem regarding construction industry is not that the hazards and risks are unknown, but it is very difficult to accurately identify there in a constantly changing work environment. To prevent health hazards at work, all possible hazards that may be encountered should be identified in advance.

Sandipkar and Rajdep Mukherjee (2012) in the article state that the construction industry is mostly dominated by the players from the unorganized sector. In India from time immortal there has been very little attempt to give it an organized shape. It is undeniable that H.R practices play a pivotal role in shaping the construction industry for its rapid growth and development. There is not very much allegation against the organized group violating the standard labour norms in the country but in the unorganized sector allegations of violating the labour welfare abound. Unorganized sector comprises of more than 60% of the construction work in the country. So there is great need on the part of the Government to monitor the labour practices in the industry.

Guddy Tiwary and Gangopadhyay P.K (2012) argued that construction is one of the important industries employing a large number of people on its workforce. A wide range of activities are involved. Due to the advent of industrialization and recent developments, this industry is playing a pivotal role in construction of buildings, roads,

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bridges and so forth. The workers engaged in this industry are victims of different occupational disorders and psychosocial stresses. Their wages are also not adequate, making it difficult for them to run their families. The hazards include handling of different materials required for construction, and exposure to harsh environmental conditions like sun, rain and so on. On account of this, the adverse conditions cause psycho social strain. They are victims of headache, backache, joint pain, skin diseases, lung disorders and so on. Workers are mostly illiterate; it is desirable to impart health education to them, to apprise them of the ill effects of work and the remedial measures. Awareness programs and local group discussions are essential for improving the health status of these working communities.

Bharara K., Sandhu P. and Sindhu M. (2012)observe that incidents of work related injuries are very high among the female labourers engaged in construction industry, primarily the occupation being severely hazardous and women lacking training and required physical endurance for such strenuous jobs. Occurrence of diseases is due to hazards of the workplace like lot of dust, chemicals, and harsh climatic conditions, and lack of toilets. They have no drinking water facility and they carry heavy loads, they develop musculoskeletal disorders. The major recommendations of the study are that contractors at construction sites should ensure safety measures to reduce accidents and injuries, there should be provision of medical aid and ambulance for accident victims. Women should be provided with protective gadgets while at work tools and should be made women friendly.

Muninarayanappa M. Manjula Kumari S., (2012) point out that there are some studies on child labour, both in rural and urban areas. A child is part of the future of our country. Uneducated and unhealthy child cannot contribute to the democratic goal of the country. Besides, the scientific development of the human resources of a nation like ours including the backward state of Andhra Pradesh and Kurnool district can hardly be possible with the continuance of the menace of the child labour. Therefore, if at all we want our policies to work, we cannot and should not afford to have child labour. This should be realized and remembered by every parent and the policy-makers of the country keeping in view the interest of the child and for the well being of the country.

Anu Rai and Ashis Sankar (2012) suggest that the construction sector has the largest number of unorganized labourers in India next only to the agricultural sector and women form almost half the workforce as unskilled labourers with no occupational mobility. Construction industry attracts female workers. Poverty being the main cause, the worst affected are single and destitute women, with children to support. Men who come in as small boys, assist the masons for some years as helpers, finally, graduate as masons, some of whom later become contractors and move up the social ladder. It is also suggested that 20% of jobs on government construction sites should be reserved for women. There is inadequate information on the extent to which female construction workers are exposed to various health hazards at the workplace. In particular health

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research on female construction workers is desirable. Hence the female construction workers require empowerment and training to improve skill.

Dileep Kumar M (2012)\textsuperscript{64} advocates that modernization and industrialization have paved a good way to the construction industry. Small towns and cities become more urbanized and, the construction sector too has got a boost. Irrespective of occasional slumps in the economy or in construction works, the sector is going through a faster growth. Apart from old / traditional urban/ industrial centers, new industrial/urban centers have appeared on the map where construction works are going on in large scale. Expanding and fast growing construction sector and, in general, lack of greater employment opportunity elsewhere have drawn large number of workers to this sector. There are more than twenty million of construction workers in India at present. Cities, like Delhi alone have around more than six hundred thousand of them. Apart from metros other cities, like Jamnagar in Gujarat, Guwahati & Shillong in the North East are also expanding at a fast rate. The study indicates the plight of the construction labourers in Pune, district of Maharashtra state. Majority of construction labourers are migrants from different regions of Maharashtra. The construction sites have more than 100 labourers. The living conditions are so poor and the labourers are staying in tin sheeted and rubber sheeted houses. Some construction companies are making provision of accommodation facilities to the labourers. While the majority of labourers have to build temporary huts by themselves, near the site. The construction workers have no social security & benefits in terms of labour welfare measures & provisions. They don't have provisions like pension and insurance schemes, maternity

\textsuperscript{64} Dileep Kumar M. ‘Problems of Construction Labours: A Qualitative Research’, e journal, 2012.
leave, accident and death claims, concession loans and financial aid for children's
education and medical needs.

The Hindu newspaper on (July 7, 2012)\(^{65}\) reported that many schemes of the
Building and Other Construction Workers Welfare Board have not yet reached the
intended beneficiaries owing to lack of awareness among workers in the building and
construction sector in the State, Rs. 1,200 crore had been lying unutilized with the
board for quite some time and added that the registration of construction and other
building workers had remained comparatively low. Those working at construction sites
should voluntarily register their names with the Labour Department, 40,000 labourers
were involved in building construction but only 7,000 of them had registered their
name. The legal services authority was playing a major role in helping the board
implement its schemes. Legal awareness programmes would be launched in every
district and the first of its kind was held in Bellary recently. Identity cards would be
issued to labourers, and they could avail themselves of medical facilities for their
awards, scholarships and compensation.

The Hindu Newspaper on (June 11,2012)\(^{66}\) the district-level conference of
CITU-affiliated Tirupur District Construction Workers’ Federation has passed a
resolution seeking better social security and reiterated the need to improve the
functioning of the welfare board for them in the State. The construction workers raised
the concern that they were not getting many of the social and financial assistances. The
construction workers in the State were yet to be brought under the Provident Fund
scheme even though the respective welfare boards in Tripura and West Bengal had


managed to introduce the scheme for its members. The general complaint from the construction workers was that the functioning of the Tamil Nadu Construction Workers’ Welfare Board had been far from satisfactory. The disbursal of financial assistances under the existing schemes itself has been tardy on many occasions. Besides this, the board has generally not been sympathetic to the grievances of the workers pertaining to improvement of social security. The workers are demanding extension of education assistances to their children who wanted to pursue teacher's training and nursing courses as well as higher education through correspondence mode, and increase in the scale of assistance given to conduct marriages of their children. Pension for all women workers who attained the age of 50 years was another main requisition of the construction workers which was yet to be addressed. But these demands are not taken up favourably despite briefing the authorities concerned of the predicament of workers in the sector. The Federation was of the view that the welfare board in the State should be brought under Central Act so that of workers who died in harness could get solarium at higher slabs.

The Times of India on (July 18, 2012)\(^\text{67}\) reported that the labour welfare cess, calculated at 1% of construction cost, has failed to improve the condition of construction workers in Pune. Accident compensation and pension benefits for construction labourers and educational scholarships for their children, are lying unused with the government. There has been a delay in implementing the scheme, the local self-government bodies failed to transfer the funds to the state's coffers on time. The delay has resulted in slowing down the implementation of the scheme. The state government is lagging behind in implementing the schemes meant for construction

\(^{67}\) ‘State's welfare scheme for laborers fails to take off’ Pune, Times of India July 18, 2012.
workers, compared to states like Karnataka and Madhya Pradesh. The main hurdle in implementing the scheme is the limited manpower at the labour department and non-transfer of cess amount to the department by municipal corporations and councils. The Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996. The state government notified the act in 2007, but the actual collection started more than a year back. The 1% cess is being levied on all public and private construction projects having an outlay of more than Rs 10 lakh. The manpower problem at the labour department was hampering the registration work. A large number of workers come from states like Orissa and Rajasthan. Speaking to them is a problem as they don't understand Hindi or Marathi. Moreover, they refuse to talk to government officials, fearing it could lead to some legal action.

The Hindu newspaper dated (July 22, 2012)\(^\text{68}\) reported that the Labour Department officials in the district of Vijayawada are in a quandary with the introduction of National Pension Scheme (NPS)-Lite, a scheme aimed at extending the coverage of NPS to the weaker and economically disadvantaged sections of the society. The Labour Department has no data of the construction workers, who have registered to avail of the benefits provided under the Building and Other Construction Workers (Regulation of Employment and Conditions Service) Act, 1996. The department officials had registered 1.10 lakh people engaged in construction activity. The workers were issued identity cards etc. There was no consolidated data, sources say. The problem cropped up due to non-availability of software. The data from the districts were sent to the Board which has to consolidate and maintain the data. However, no such measures were taken. On the other hand, the Labour Department there also has no

copy of the data, sources. As the NPS-Lite, the worker in the age group of 18-50 would have to pay Rs.200, the Board would pay Rs.800 and the Central Government would contribute Rs.1,000 taking the total to Rs.2,000. It aims at building up a corpus sufficient enough to buy an annuity for their old age.

The Times of India, (Sep 8, 2012)\textsuperscript{69} reported that the collapse of a concrete slab at the under-construction Metro site in Mumbai, which killed one construction worker and injured 16 others raises crucial questions about the lack of safety measures for such workers across India. There are an estimated 8.5 million workers engaged in construction activities across the country. The work is largely informal and contract-based and many work on a migratory basis, flitting from one state to another as the work takes them. Labour boards in individual states are meant to register construction workers, but the boards in most states fail to do this for lack of staff and adequate resources. This means injuries and deaths remain invisible, unless they involve a high-profile project like the metro. At the core of this apathy, lies the shoddy implementation of a provision tucked away in the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act of 1996. The provision requires that all construction projects with budgets over 10 lakh pay a cess amounting to 1% of the construction cost to the labour welfare board. The money collected is meant to be used for welfare measures of workers besides creating a kitty for the compensation to those who suffer injuries or the kin of those killed. A public interest litigation filed in the Supreme Court in 2006 showed how states had collected less than 10 % of the sum they were required to. It has been over 15 years since the legislation.

\textsuperscript{69}‘How many deaths will it take for protection of construction workers’ Mumbai, Times of India, Sep 8, 2012.
was passed and such shoddy collections show a lack of will on the part of labour authorities and sheer in difference on the part of builders and contractors to safeguard the rights and dignity of workers.

The Hindu newspaper on (Sep 22, 2012)\(^7\)\(^0\) reported that spending of the corpus created out of collections from builders for the welfare of construction workers is poor. At one per cent of the cost of construction which was recovered as cess from builders, the State-level boards that were constituted under a special legislation collected a corpus of Rs. 7,057 crore but spent only Rs. 1,000 crore on the welfare of workers. Only 88.10 lakh out of 4.46 crore construction workers in the country were registered with the welfare boards in different States. State governments should realize the need to step up collection of cess from builders’ and spend the money on the welfare of construction labour. The boards should be mandated to perform functions such as providing immediate assistance to accident victims and paying pension to workers who completed 60 years of age.

The Hindu newspaper on (Oct 20, 2012)\(^7\)\(^1\) reported that the Centre for Indian Trade Union (CITU) has threatened to launch an indefinite stir across the State if the post of the Chief Executive Officer of the Karnataka State Building and Other Construction Workers’ Welfare Board is not filled. The board has become non-functional as the post of CEO has been vacant for the past three or four months. Hundreds of applications from each district submitted to the board by the poor construction workers to get different benefits are pending. Only two lakh of the 15 lakh workers have registered themselves with the board. A resolution was taken to hike the

\(^7\)\(^0\) ‘Poor spending on construction labour regretted’, Hyderabad, The Hindu Sep 22, 2012.

benefits to construction workers at a board meeting held on April 3, 2012 that was presided over by the Labour Minister. But nothing has happened since then.

**The Indian Express dated (Nov 2nd, 2012)** State unions welcome Cabinet amendment to labour law in Ahmedabad. The state’s major labour unions have welcomed the Union Cabinet’s nod to an amendment to a law concerning unorganised construction workers. The Cabinet scrapped a contentious rule that required workers to prove their having worked at construction sites for at least 90 days before becoming eligible for benefits provided by the Building and Other Construction Workers’ (BOCW) Act,1996. The amendment, which will be presented before Parliament for final implementation, has also made it mandatory for government agencies to transfer cess money - collected from builders and workers under the law - to a welfare board within one month. The Comptroller and Auditor General(CAG) had in this year’s audit report rapped the state government for having hoarded Rs 339 crore and not transferring it to a welfare board charged with disbursing the law’s welfare benefits. The union had demanded that registered unions be allowed to certify workers who have completed 90 days work at construction sites. The removal of the 90-day provision will pave the way for more registrations, but caution must also be exercised that non-construction workers do not get registered under this act. The most important amendment relates to doing away with the requirement of proof of working for 90 days. This is a welcome step. As no employer gives proof of employment, the workers were unable to get registered. It is hoped that doing away with this requirement will now allow tens of thousands of workers to register themselves.

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72 ‘State unions welcome Cabinet amendment to labour law’, Ahmadabad, Indian Express, NOV 2nd 2012.
Ashima Majumdar (2013)\(^3\) has conducted a study titled “Social Security System and the Informal Sector in India: A Review”. She says that India's social security system, whose origin dates back to 1947, carries little for the workers in the informal sector. However, over the years, a large majority of the Indian workforce has joined the informal sector. Lack of social security to this section of workers is a serious question mark on the productivity of the entire Indian economy.

Vidhya Soundararajan (2013)\(^4\) on the welfare schemes for the unorganized sector workers, she finds that Workers' registration rate and utilization of cess funds in the state construction welfare boards are extremely low in many states.

Alluri Balaji and Tulasi Das V. (2015)\(^5\) stated that that the nature of the house construction activity is seasonal, hence, worker engaged in house construction were unemployed in off season. It is therefore, essential to provide them a year-round employment. Building contractor and Government should do something positive in this regards. And provision for fair wages should be made for workers in the house construction. Government should take lead for the appointment of wage fixation committee for the workers working in construction sector to uplift the economic condition of the workers, and Care should be taken in implementation of various labour laws like, The Payment of Wage Act-1946, The Minimum Wages Act-1948,


\(^{5}\) Alluri Balaji and Dr. V. Tulasi Das (2015), Socio-Economic Conditions of House Construction workers in Vijayawada City. International Journal of Management and Social Sciences Research, Vol 4, No. 12, December 2015. ISSN: 2319-4421

2.3 RESEARCH GAP

A detailed literature review has been done to get a clear insight about the economic conditions of construction workers. Considerable research work has been done on work related to economic conditions of workers. There are very few studies focused on economic conditions of construction workers in Tirunelveli district. Hence, the researcher made an attempt to conduct a research on socio economic conditions of construction workers in Tirunelveli district. The present study is an attempt to make an in depth analysis of economic conditions of construction workers in Tirunelveli District.