

REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITERATURE

The literature relating to the current research work on “Poverty among the Construction Workers in the Informal Sector: A Comparative Analysis” are discussed in this chapter under the following heads

2.1 Informal Sector: Concept and Related Studies

2.2 Poverty: Concept and Related Studies

2.3 Studies on Construction

2.1 INFORMAL SECTOR: CONCEPT AND RELATED STUDIES

The celebrated two-sector model (Lewis, 1954) of ‘Labour Transfer’ of Lewis seemed to bear in mind a kind of informal sector in the background without specifically mentioning it. Popularizing the concept of dualism, this model maintains that the urban industrial sector expands to accommodate the rural migrants pouring into the cities without any corresponding drop in the agricultural output. Movement from the rural sector takes place at a constant real-wage rate and in response to a certain employment. The fact that there is no urban employment in the said model affirms the reinforcement of the urban organized sector by another, perhaps more predominant, to absorb greater numbers of rural labour. Subsequent elaboration along one direction of this basic model by Ranis and Fei (1961) and other amendments by Frank (1971) hence unearthed the succession of intermediate sector between the city and the countryside.

Reynolds (1969) hypothesizing surplus labour and integrated it into the development context has worked out a model, where the economy stands bifurcated into rural or agricultural and urban or industrial sector. The urban sector was then explicitly classified into two sub groups, namely the state sector and the trade service sector. The former is presented more as an organized group and the latter is described as the multitude of people whom one sees thronging the city streets, side walks and back alleys in the developing countries as the petty traders, street vendors, coolies and porters, the small artisans, messengers, barbers, shoe-shines boys and personal

servants (Reynolds, 1969). The opening up of the trade service sector can be perceived as the emergence of the informal sector.

Keith Hart (1971) in his empirical study of urban Ghana highlighted the existence of a variety of new income generating activities in trade and service categories in an urban economy. The study observed that most of these activities are concentrated in the 'unorganized' sector and as they are not covered by the existing data collecting machinery, they fall in to the 'unremunerated' sector. The workers engaged in them mainly work as self employed, as against the wage labourers in the 'enumerated' sector due to the inadequate opportunities in the formal sector on the one hand and lack of skills and experience of the new entrants on the other.

The International Labour Organization's Report on Kenya (1972) for the first time formally used the term 'informal sector'. The Report specified certain yardsticks, such as ease of entry, family ownership, and labour intensive methods of production and so on as the indicators of informal sector units. The necessity of giving a separate status to this sector was not only felt but also got under way. Hart (1973) perhaps appeared to be the first social scientist to have used the term informal sector in his seminal study examining urban employment in Ghana. Hart under pinned the heterogeneous nature of the activities performed by the informal sector in this world.

Keith Hart (1973) who gave initial currency to the concept of informal sector, distinguished formal from informal income opportunities, the latter encompassing all non- wage sources of income, whether legitimate or illegitimate. This distinction is essentially based on wage earning and self- employment.

According to John Weeks (1973) the distinction is based on "the organizational characteristics of exchange relationships and the position of economic activities vis-à-vis the state. The nature of exchange relationship is primarily a consequence of the economic insecurity of operation in the informal sector, which in turn, is a direct consequence of the latter's limited access to the resources of all types".

Earning differentials are also related to type of employment and castes, Radhakrishnan et. al., (1973) in their study of Ahmadabad observed that average

earning of factory workers are higher than the average earnings of office established workers, self-employed workers and casual workers.

Patel (1974), in his study on Ahmadabad, also concluded that average earnings of organized sector workers are higher than those of self-employed and casual workers in the informal sector. Study also observed significant differences in the average earnings between organized and unorganized sector workers.

Kennt King (1974) defined informal sector as follows: "Their informality derives from their being unrecognized in government employment statistics and operating in the main out of makeshift shelters on urban waste lands, road sides and forest fringes".

Dipak Mazumdar (1975) described informal sector as the 'unprotected' sector. He observed that employment in the formal sector is protected by the actions of trade unions and government, while the same is denied to the informal sector labour. Mazumdar has brought out the distinction more sharply by arguing that entry into the informal labour market is unrestricted, whereas in the formal sector labour market is restricted by artificially raised hiring standards, norms and procedures.

According to Mazumdar (1975), much of earning differentials between formal and informal sector can be explained by age, sex and educational characteristics of workers in the two sectors. He observed that informal sector workers in Brazil appear to be concentrated at either end of the age distribution span, have less education on average and more likely to be female than formal sector workers.

One of the most common parameters used to define an informal unit is the total number of workers employed in it. Mazumdar (1975), Aziz (1979), and Papola (1980) have characterized an informal sector unit in places like Delhi, Ahmadabad and Bangalore, as having less than two workers. Joshi and Joshi (1976) have defined such units in Bombay as those employing less than 25 workers. Souza and Takman (1976) stated that informal sector "comprises of all those engaged in domestic service, casual labour, the self-employed and employees of white collar, blue collar and family workers in the enterprises with a total staff of not more than four persons". It is said

that the number of persons working in a unit of the informal sector ranges from one to a maximum of 25 (Lall, 1989).

Heather and Vijay Joshi (1976) have distinguished organized and unorganized sectors in Bombay under the three major heads: market structure, technology and relationship with government. While doing so they highlighted John Weeks analysis of the two sectors. They defined informal sector as those, engaged in economic activity, which are not identifiably performing it for the formal sector. Illustrating the Indian situation Papola opines that the distinction between the formal and informal sector employment can be made on the basis of registration of the manufacturing enterprise under the Factories Act. Under the Act registration is obligatory, once the employment size of the enterprise is a registered factory, the conditions, hours of work, leave, payment of wages, dismissals, etc., get regulated.

Jan Breman (1976) considered mode of production as a basic for analytical distinction between formal and informal sectors, He described the latter as containing a 'mass of the working poor, whose productivity is much lower than it is in modern urban sector form in which most of these people are excluded'. To him the distinction refers to two economic sectors, each having its own structural consistency and dynamics.

Focusing on the employment and development policies in an urban economy, Sethuraman (1976) defined informal sector as one which, "consists of small-scale units engaged in the production and distribution of goods and services with the primary objectives of generating employment and income to their participants notwithstanding the constraints on capital-both physical and human and knowhow. Another distinct feature is that all these enterprises employ labour at a relatively low wage rate. Informal units, in most case function as 'family units' in the sense that majority of the family members, if not all, actively participate in the functioning of the units. Moreover, single proprietorship or own account workers units are quite common in this sector.

The informal sector, as its name suggests, is not formal in its character or operations (Sethuraman, 1977). It represents a spectrum of economic activities, with the participation of self-employers, casual workers, and unpaid family workers and

migrants. The understanding of the informal sector would improve if it were recognized as a heterogeneous, multidimensional or multi-layers phenomenon. The type of ownership, magnitude of capital, size of unit, nature of work force, work-rule and environment of units in this sector, do not fall under any identifiable single pattern. Perhaps the most interesting feature is that heterogeneity prevails not only in every fact of the units engaged in different kinds of economic activity, but even in every aspects of units engaged in the same activity. Diverse activities and the complex nature of the structure of the informal units engaged in manufacturing, trade, servicing, and construction and so on make it extremely difficult to find a comprehensive definition for these.

The variety of activities transacted and the number of enterprises engaged in these activities may be large, but given the small size of employment in an enterprise, labour is predominant and production depends much on physical and manual work rather than on large machinery, thus making the units more labour intensive (Papola, 1978).

Papalo (1981) in his study on Ahmadabad has pointed out that the share in informal sector employment has increased from 40 percent in 1961 to 47 percent by 1971. The study found that in agriculture and allied activities it constitutes 50 per cent, in trade and commerce 67 per cent, in transport and communication 76 per cent and in other services 49.5 per cent.

Papola and Subrahmanyam (1981) in their study have observed earning differentials among three different types of workers, Viz., establishment workers, independent workers and casual workers. Average earnings of establishment workers are substantially higher compared to the earnings of casual workers. Independent workers earning are even twice the earnings of casual workers. His study also showed that the percentage distribution of workers in the lower earning class is more in the casual workers and insignificant (only 1 per cent) in the higher earning class. On the other hand, establishment workers and independent workers are concentrated in the higher earning group.

In this regard the International Labour Organization in its Fourteenth International Conference of Labour Statisticians at Geneva (1987) formulated a broad

concept, which covers the essential aspects that occur in all the countries for operational definitions. The definition is as follows: The informal sector consists of small scale, self employment activities, with or without hired workers, typically operating with the primary objectives of generating employment and income for their participants; to the extent these activities are carried out without formal approval from the authorities and escape the administrative machinery responsible for enforcing tax and minimum wages legislation and other similar instruments concerning fiscal matters and conditions of work, they are concealed.

In India, the term informal sector has been used in the official statistics or in the National Accounts statistics (NAS). The terms used in the Indian National Accounts statistics are 'organized' and 'unorganized' sectors. The organized sector comprises enterprises for which the statistics are available from the budget documents or reports etc. On the other hand the unorganized sector refers to those enterprises whose activities or collection of data is not regulated under any legal provision or do not maintain any regular accounts. In the unorganized, in addition to the unincorporated proprietorships or partnership enterprises or enterprises run by cooperative societies, trust, private and limited companies are also covered. The informal sector can thereafter, be considered as a sub-set of the unorganized sector.

The National Sample Survey Organization (NSSO) carried out a sample survey in 1999-2000 and its results showed that out of the total workforce of 397 million, only 28 million workers are employed in the organized sector and the remaining in the unorganized sector. In the light of the definition of informal sector, which encompasses private unincorporated enterprises as mentioned above, NSS 55th Round, 1999-2000 also covered non-agricultural enterprises in the informal sector in India. As per the Survey, there were 44.35 million enterprises and 79.71 million workers employed thereof in the non-agricultural informal sector of the economy. Among these 25.01 million enterprises employing 39.74 million workers were in rural areas, whereas 19.34 million enterprises with 39.97 million workers were in the urban area.

Utpal Chowdhury (2000) reported that the dualist approach of 'formal-informal' sector of economic activities had some serious limitations. The relations of

different modes of production on a continuum along with their process of transition in the overall sectoral framework can be more suitably explained. This article suggests a different framework' enlightening particularly, the relationship between the ensemble rather than clarifying the two-sector terminology.

Jeemol Unni (2001) provided evidence of the growing informalisation of the labour force in the south Asian countries. Two broad components of the informal economy, i.e., non-wage and wage employment were discussed. The share of the first component has been rising in the last two decades. Within non-wage employment, certain invisible groups of workers, such as home based workers and street vendors are vulnerable to changes in the global and local economy. The increasing casualisation of the workforce was evidence of an increase in the second broad component. Within wage employment, home workers or outworkers and informal workers in the formal enterprises are vulnerable. The low quality of employment available to women in the informal economy is brought out by evidence on the wages and income received and differentials in earnings.

Arimah (2001) opined that the informal sector does not appear to have a meaning independent of the formal sector, as it only derives its meaning when contrasted with the formal sector.

International Conferences of Labour Statistics (2003) defined informal employment to include,

- Own- account workers working in their own informal enterprises
- Own- account workers producing goods exclusively for own final use by their household.
- Contributing family workers, irrespective of whether they work in formal or informal sector enterprises.
- Members of informal producers' cooperatives.
- Employees holding informal jobs, whether employed by formal sector enterprises, informal sector enterprises or as domestic worker employed by households.

Following the definition of the Second National Commission on Labour, Verma (2003) equated the term 'informal economy' with the unprotected segment of

the labour market, where entry is free owing to higher labour turnover; wages are significantly lower and the workers lack legal protection. This sector includes the self-employed, home-based workers, small and tiny industries employing few workers.

Kala G.S (2004) emphasized that there was a total lack of job security and social security benefit. The organized sector takes advantages of this vulnerable position of the labour force in the informal sector and large industries are now finding it advantageous to decentralize production to make use of workers in the informal sector.

Siddhartha Sarkar (2005) stated that the recent phenomenal intensification of the informal economy and the rising interaction and interdependence of the formal and informal sectors have led to a growing interest in the studies of the informal economy among researchers and policy-makers. The terms 'informal sector' and 'informal economy' are used interchangeably to denote significant number of job seekers and unemployed workers outside government regulation and formal system of labour social protection. Existing literature on the informal economy shows that there is no standardized conceptual framework wrapping the subject. Policy responses to the informal economy surveys have been able to untie some of the variables that undermine informal sector mainstreaming. The surveys have also identified interesting issues for further enquiry.

Sakthivel and Pinaki Joddar (2006) described that India's workforce comprises nearly 92 per cent in the unorganized segment, with the entire farm sector falling under the informal category, while only one-fifth of the non-farm workers are found in the organized 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 unorganized workforce remains flat. Further analysis reveals that the coverage of social security schemes had been extremely sparse among the economically and social vulnerable sections. The pro-rich, pro-capital policy of the present regime was 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 was fraught with danger.

Arupmitra (2006) provide estimates of the informal (unorganized) sector workers in non-farm activities based on the 55th Round of NSS, which are indeed on the high side relative to the estimates reported. The NSS 55th Round collected information on the informal sector non-agricultural enterprises for the first time as a part of the employment- unemployment survey. Information on workers including those working in the proprietary and partnership non-agricultural enterprises was also collected for each member of the household during the employment-unemployment survey. In other words, the estimated number of workers in the informal non-agricultural enterprises based on the enterprises survey as well as the household survey in both the schedules differ substantially from each other in terms of the number of workers. By and large the household schedule enumerated a large number of workers than the enterprises schedule.

Ademu (2006) defined the informal sector as comprising those employment generating activities of some urban residents, undertaken for survival in the absence of formal employment. These activities are characterized by lack of regulations by institutions of society in a social and legal environment in which similar activities are regulated. Common features of operators in the informal sector include:

- Easier access to production factors which are derivable from social organization of family and friends.
- Involves entrepreneurs in virtually all branches of the economy ranging from productive activities, general services and specialized services.
- Technology is determined more by the constraints of the social relations.
- Motivation for production by the operators in the informal sector is becoming more profit oriented.

The article on “The Welfare Fund model of Social Security for Informal sector Workers: The Kerala experience” by K.P. Kannan (2008) examined the evolution of the institution of Welfare Funds' for informal sector workers in the state of Kerala in India. The Kerala experience, which is now thirty years old, reflects what the workers in the informal sector could achieve in countries like India given the contemporary

political context and the democratic political framework of the State. But it required sustained collective action on the part of the workers. The paper found that while the Welfare Fund Model of Collective care arrangements for the informal sector workers 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. Even then the model offers a minimum of social security to the informal sector workers who are unprotected. Therefore the question of replicating this model with suitable modifications to other states in India as well as to other countries, where there are no social security arrangements for informal sector workers, is worth pursuing.

Ishola Rufus Akintoye (2008) explained how unemployment in Nigeria could be reduced through the informal sector participation. The author suggested that the Nigerian Government and all relevant stakeholders continue in their quest towards reducing unemployment while they give their undivided support, in making sure that the informal sector continues to enjoy access to credit to finance its activities and accomplish its goal of unemployment reduction.

Evidence shows that the earnings in the informal sector are very much low compared to the formal sector. Further, the earning differentials among different sectors and among different activities in the informal sector itself appears to be significantly influenced both by the personal characteristics of workers and by the structural factors in the urban economy. In addition to these factors, persistent wage differences between formal and informal sectors have also been explained both in terms of rational behaviors of formal sector firms and in terms of wage legislation and trade unions.

2.2 POVERTY: CONCEPT AND RELATED STUDIES

The concept of the poverty line was first mooted by the Indian Labour Conference in 1957. The Government of India sets up a distinguished working group in 1962, which took into account the recommendations of the Nutritional Advisory Committee of the Indian Council of Medical Research in 1958, and came to the view that in order to provide the minimum nutritional diet in terms of calories intake, and to allow for a modest degree of items other than food, the national minimum per capita

consumption expenditure should not be less than Rs.20/- per month at 1960-61 prices. The group suggested that for urban areas, the minimum should be raised to Rs.20/- per capita and the corresponding figure for rural areas would be Rs.18.90.

An early study was made by Ojha on Indian poverty, which was intended to focus attention on the range of inequality in incomes and levels of living on society. Adopting a calorie norm of 2250 per capita per day for an average Indian, he assumed that 80 percent of this must be obtained from food grains (cereals and pulses) in the rural areas. He preferred to use a nutritional norm corresponding to 518 grams of food grains per person per day for the urban areas increased from nearly 52 per cent to 70 per cent between 1960-61 and 1967-1968.

Another study conducted by Dandekar and Rath (1971) revealed that an annual average per capita expenditure of Rs.14.20 per month at 1960-61 prices in rural areas would suffice to meet the calories requirement i.e., an intake of 2250 calories per capita per day. They used 616 grams of food grains in the rural areas and 490 grams in the urban areas per day per persons to decide on the cut-off line of poverty. They observed that for rural areas in 1960-61 an annual per capita consumer expenditure of Rs.170/- was needed to ensure a diet adequate to 2250 calories per capita per day. They revised their rural minimum slightly upwards to Rs.180/- in difference to the annual minimum of Rs.240/- per person. Further they found that 40 per cent of the rural population lived below the poverty line in 1960-61. Minhas on the basis of the National sample survey data, revealed that if one regarded the level of per capita annual consumption expenditure of Rs20/- as the bare minimum, the percentage of people below the poverty line would come down to the level 37.1 per cent in 1967-68. His study also revealed that during the period between 1956-57 and 1967-68, the proportion below the poverty line among the rural poor seemed to have fallen in the good harvest years but shot up again in the bad harvest years. Further he stated that this fall in the proportion of people below the poverty line was largely explained by the growth of average per capita consumption at the rate of about 1.25 per cent per year over this period rather than by the fall in the concentration index of consumption expenditure. He concluded that there has been a steady decline in the proportion of people below the poverty line from 65.0 per cent in 1956-57 to 50.6 per

cent in 1967-68, and 215 million people were under the minimum level of living in 1956-57 and 210 million in 1967-68.

Dantwala (1972) has pointed out that if the national average per capita consumption is taken as an aspiration norm, 69.25 per cent of the people in rural India in 1960-61 had consumption expenditure below the average for rural areas (Rs.21.47 per month per person). In urban areas 71.3 per cent of the people lived below the average urban consumption expenditure of Rs.40 per month. He took into account the percentage of people living below the respective average per capita monthly consumption expenditure in 1968-69. According to this estimate, it would be approximately 68 per cent for rural areas and 72 per cent for urban areas. He observed that the estimate shows a slight decline in the percentage of population below the aspiration norm in the rural areas and a nominal increase in the urban areas.

Samir Das Gupta (1973) examined the nature, structure and magnitude of poverty in the rural and urban areas of different states in India. He has pointed out that 47.65 per cent people in rural areas and 40.71 per cent people in urban areas lived below the poverty line. The poverty level has been estimated on the basis of per capita monthly consumption expenditure of 61.80 and Rs.71.30 for the rural and urban areas respectively at 1976-77 prices. The author has measured the relative levels of poverty by using the following indicators viz.,

- i. Reason of migration
- ii. Present socio-economic conditions which include the nature of occupation, per capita income, indebtedness, expenditure on education, health awareness, size of the family , nature of housing, level of aspiration and
- iii. Nature of dieting and nutritional base line.

He has also viewed the increasing level of poverty as directly related to the increasing levels of unemployment and inflation. Further suggestion had been made for minimizing the level of poverty across the urban areas of the country.

The Seventh Finance Commission made an attempt to find a more inclusion concept of poverty line. The National Sample Survey data covered household

consumption expenditure. From the data, it was observed that 277 million persons lived below the augmented poverty line in 1970-71. Out of the population of 15 states people below the poverty line constituted 52 per cent; of these 22.5 million persons in the rural areas and 52 million persons in the urban areas lived below the poverty line.

Poverty can be measured relatively, but a measure of absolute poverty is more useful for making cross-cultural comparisons. Unfortunately, the measurement of absolute poverty is difficult, because of inter-individual and intra-individual variations in minimum needs over time. As a result, simplistic assessment methods and confusion have marked many of the estimates of absolute poverty in less-developed countries. Using Indian material as an example, Peter Cutler (1984) attempted to trace the progress of the methodology; to explain how widely varying poverty estimates have come about; and to draw some tentative conclusions about the extent and pattern of absolute poverty in India today.

G. B. Rodgers (1987) made a study on "A conceptualization of poverty in rural India" This paper investigated the different aspects of poverty in rural India. Based largely on data from a region of Bihar, the various characteristics and sources of poverty were enumerated and discussed, including food intake, other consumption, health, security, education and status as characteristics; and occupation, employment, wages, assets, organization and demographic factors as sources. It was argued that poverty must be seen as a multivariate phenomenon; policy to affect any one aspect of poverty was likely to be rendered ineffective by negative feedback from other variables in the poverty complex. Only a simultaneous attack on all aspects of poverty could be successful.

Jha (1989) in his study on urban poverty in Delhi expressed the view that although according to the consumer expenditure survey of the NSSO, 29 percent of urban population was living below the poverty line in 1983, the magnitude of urban poverty was more than 29 percent taking into consideration the basis of deprivation of basic urban services and amenities. According to him, poverty needs are to be identified on the basis of a composite index of deprivation rather than on the basis of minimum intake of calorie alone.

In his book on "Rural poverty in India: An analysis of Inter-State Differences" Nayyar, R. (1993) presented a systematic measurement of poverty in rural India on a state-wide basis, and analysed the factors underlying the observed interstate differences. Covering the period 1960/61-1983/84, the data provided estimates of rural poverty, both in absolute and in relative terms, based on alternative concepts and criteria. Cross-section and time series evidence were used to highlight differences in space and time. The relationships between poverty and malnutrition, disease and morbidity, and the inadequacy of health and educational facilities were considered. Regression analysis was used to identify interstate differences in rural poverty, establishing causality between poverty and each of the explanatory variables, which emerged as significant. The living conditions of agricultural workers who form majority of the rural poor were also examined. Some of the major programmes launched by the government to tackle the poverty problem were also considered.

In their article, Brenda Cossman and Ratna Kapur (1993) explored the ways in which law was implicated in women's socio-economic inequality and poverty in India. The authors examined several different areas of the law to illustrate the extent to which law was based on and serves to reinforce women's economic dependence. Family law, labour law, and rural development law all served, although in very different ways, to reinforce assumptions about women's economic dependence in title family, and in turn, to reinforce the actual socio-economic conditions that produce the economic dependency. In the second part of the paper, Cossman and Kapur examined some of the ways which attempts to use the law, and particularly, rights discourse, to improve women's socio-economic conditions in India, have been undermined. The authors considered the Indian experience with public interest litigation and its limitations for feminism, as well as the growing challenge of religious fundamentalism to women's struggles for social change in India.

Das (1994) in his study highlighted certain social and economic aspects of poverty and the poor in Surat city. He tried to understand the socio-economic conditions of the urban poor in terms of rural –urban migration, mechanisms through which they generally cope with the odds of employment and degraded living condition. His analysis of field survey findings' pointed out to the fact that though slum dwellers are not a homogeneous congregation of a city's poor as some of them

might have higher income, all of them can certainly be identified as the urban poor since their incomes are generally low and often insecure and fluctuating with limited income opportunities determined by the ongoing development processes within the country.

Almost all developing countries are now experiencing demographic ageing. The paper on “Old Age and Poverty in Developing Countries: New Policy Challenges” by Peter Lloyd-Sherlock (2000) examined the consequences of ageing for the poor. It assessed the extent to which the poor are participating in demographic ageing, or whether the process is largely restricted to relatively privileged groups. The paper observed that policy and research mainly focus on pensions programmes, which have little relevance for most poor older people. It then described livelihood patterns for poor elders, highlighting the importance of intergenerational exchange. Health policies were also found to largely ignore the needs of this group, and the expansion of private financing presents particular problems.

Dhar's (2000) paper detailed out the strategies for redistribution of basic services such as water supply and sewerage, public transport system, health services, education, housing etc. among the down trodden people. The paper conceded that the constraint on resources should be removed and should be made low-income-people-friendly, that they be tailored to the overriding consideration of carrying the minimum essential services to the largest numbers at an affordable cost. This calls for development of an information system based on reliable and relevant knowledge derived from original research in the field of human settlements. There is need for strengthening and redesigning local government structures within the framework of a system of human settlements so that they can play their appropriate role effectively in the development process and in the distribution of public goods and services.

Gour and Jawa (2000) in their paper on eradication of urban poverty highlighted urban poverty alleviation programmes in action and observed that urban poverty still remains one of the major issues. For effective implementation and outcome of these programmes emphasis must be given to the need for the identification of real beneficiaries; sufficient financial assistance at the grass root level; community

involvement and participation, and uniformity in access to goods and resource allocation.

Kundu's (2000) paper examined the trends in rural and urban poverty and analysed the interstate variations and explained these in term of socio- economic factors. It showed that rural poverty has declined smoothly with economic development, which according to him was not the case with urban poverty. The availability of water supply, toilets and electricity that are not explicitly incorporated in the official definition of poverty, was also analysed at the state level as also across size class of urban settlements. His conclusion was that private agencies, NGOs, community organizations and city managers should share the responsibility for the urban development activities including poverty alleviation.

Loughhead and Mittal (2000) observed that urban poverty is growing and that policy makers and planners have considered this fact of the urban poor. They argued that even now the focus of many policies in developing countries was dominated by rural issues, with urban poverty viewed as symptom of rural urban migration. They have made a strong case for urban poverty analysis and provided a conceptual framework through which it could be undertaken and addressed.

Mitra and Pool (2000) examined the gender bias in poverty, which underlined the social and economic subordination of women, reflected in their unequal access to basic amenities such as education; health care and labour force participation. She stated that in order to alleviate poverty and improve the economic status of the urban poor women, policy makers need to perceive women as economic actors for the role they play at the household level in the process of moving their families out of poverty. To reduce their poverty and improve their status, women have to be made more productive and effective income earners.

Sandhu (2000) has made an attempt to understand the nature, extent and causes of housing poverty in urban India. Various indicators like toilets, water connection, affordability number of rooms etc have been used to classify the class of housing ranging from critically poor to low income to middle income groups. The causes of housing poverty are attributed to existing socio- economic and political

systems and the unrealistic attitude of the ruling elite towards the urban poor according to the author what is lacking is political will rather than resources.

Ghosh B.N. (2002) made an analysis on the “Allocative inefficiency and rural poverty in India”. The magnitude of rural poverty is larger as compared to urban poverty in India. The basic explanation for sectoral poverty differentiates in India is the misallocation of resources and urban-biased strategy of development. Investment allocation in Indian planning is not strictly based on the consideration of equity and economic efficiency. The author reported that the rural sector gets the smaller share of investible resources, and therefore rural income, output and employment fall short of the optimum level and rural poverty intensifies.

In the context of a simple model of the urbanization of poverty in a developing country, Martin Ravallion (2002) identified the condition under which the poor urbanize faster than the non poor. This was found to be consistent with cross-sectional data for 39 countries and time series data for India. However, the estimated empirical model suggested that the urban poverty rate rises slowly relative to the rural rate. It was predicted that 60 per cent of the poor will still live in rural areas by the time half the population of the developing world lives in urban areas.

Kumar and Aggarwal (2003) in their study on consumption pattern and poverty in Delhi slums made an attempt to determine the extent of poverty in Delhi slums through consumption patterns, employment and education of the slum population. The study brought out significant social and economic aspects of the people living in Delhi slums, including low level of education of the migrants, gender disparity in economic status, and significant number of households below the poverty line. The results emphasized the need for a positive employment generation policy among urban slum dwellers. There is also a need to generate employment and provide facilities at the origin of migration in order to check the influx into Delhi.

Aasha Kapur Mehta and Amita Shah (2003) made a study on “Chronic Poverty and Development Policy”. Viewing chronic poverty in terms of extended duration, severity and multidimensional deprivation, this paper used existing literature to draw attention to those people in India for whom poverty is intractable. Two sets of approaches were used: an area-based approach and a historically marginalized groups-

based approach. The area-based approach mapped the location of the chronically poor by identifying states and regions that have been especially vulnerable to poverty in terms of severity and multidimensionality. It focused on dry lands and forest-based regions. The historically marginalized groups approach draws attention to groups who have suffered multiple deprivations for long periods. Chronic poverty was disproportionately high among casual agricultural laborers, scheduled castes and scheduled tribes. In conclusion, the paper briefly reviewed the factors that contribute to chronic poverty and the efficacy of policies to reduce such deprivation.

Anirudh Krishna (2006) reported that in a survey conducted among 5536 households in 36 villages of three districts in Andhra Pradesh, fourteen percent of households had escaped from poverty over the past 25 years, but another 12 per cent of households fell into poverty during the same time. Escaping poverty and falling into poverty are responsive, respectively, to different sets of factors. The author was of the view that two different sets of poverty policies will be required in future: one set to assist escape, and another set to prevent descent. While ill health and high healthcare costs, social and customary expenses, high-interest private debt, and drought are associated most often with falling into poverty, diversification of income sources and land improvement are most closely related with escape. Some other factors, including industrial growth and education, have had only very slight and indirect effects on poverty in these villages.

The paper on “Experiences of Combining Qualitative and Quantitative Approaches in Poverty Analysis” by Barbara Parker and Valerie Kozel (2007) examined poverty and vulnerability by using a multidisciplinary approach in which household survey data and poverty analysis were applied in interaction with open-ended qualitative research methods. The study used a variety of quantitative survey-based methods in combination with qualitative Participatory Rural Appraisal (PRA) methods to explore key issues concerned with poverty, risk, and vulnerability in some of India’s poorest regions. It documented poverty as a multidimensional phenomenon and the poor as a highly heterogeneous group. The study suggested that efforts to reduce poverty in its many dimensions must recognize this diversity and how it was reflected in constraints and opportunities for rising out of poverty. Poverty reduction policies and programmes must be designed accordingly.

G.M. Antony and K. Visweswara Rao (2007) made an attempt to calculate the Human Development Index (HDI) and Human Poverty Index (HPI) of Indian states; to trace the indicators useful for finding variations in poverty; and to develop a composite index that may explain variations in poverty, health, nutritional status and standard of living. The HDI and HPI were calculated for different Indian states. A set of possible indicators varying between rich and poor states of India was identified with the use of discriminant function analysis. A composite index has been developed for measuring the standard of living of Indian states with the help of factor analysis. The study found that demographic, socio-economic; health and dietary indicators play a major role in determining the real standard of living. Poverty, standard of living and human development depend on multiple factors. The existing indices, such as HDI and HPI, use income indicators to measure the standard of living, and do not take into account diet and nutritional status indicators. The proposed index was found to be more suitable for measuring the real standard of living and human development, as it is a comprehensive index of income and non-income indicators. Further validation may be carried out for different populations. Discriminant function analysis and factor analysis were used to assess health inequality and standard of living among Indian states. From the proposed multi-dimensional index the authors expected to provide a better picture of human development. Further work is of interest for other populations.

Many studies have explored the connection between trade and poverty theoretically and empirically for the developing world. Saibal Kar and Sugata Marjit (2009) made a study on "Urban informal sector and poverty " They offered another look at the possible implications of trade liberalization on urban poverty by using the urban informal sector as a catalyst. The theory showed that trade liberalization in the import competing sector raises informal wage across occupational types, and expands production and employment in the informal industrial segment. Further, using Indian provincial data on wage, capital stock and value added in the informal sector they showed that real informal wage increased with trade reform and transmitted favorable impact on urban poverty reduction.

Anirudh Krishna (2009) made a study of 35 north Indian villages to find out the extent of poverty, Members of 11.1 per cent of 6,376 households in these villages have overcome poverty in the last 25 years, while members of another 7.9% have

fallen into poverty. Households' escape from poverty was assisted by one set of factors, but an entirely different set of factors was associated with households' decline. Two distinct sets of policies were required thus, one set to promote escape from poverty and another set to arrest decline into poverty. Poverty has some distinctly local antecedents. A methodology for tracking changes in poverty at the local level was developed that community groups and others can use to assess change and examine causes.

In the article on "Energy-microfinance intervention for below poverty line households in India" P. Sharath Chandra Rao (2009) reported that more than 72 per cent of India's population resides in rural India and it also has a high concentration of people living under abject poverty. Of the total rural population 27.1–28.3 per cent lives below the poverty line (BPL). A lack of energy-finance options is hampering the quality of life of the BPL community. The members of this disadvantaged household which forms 27.1 percent and 23.6 percent of the India's rural and urban population has no ready access to mainstream finance or know-how of sustainable energy products nor do they have access to energy service providing agency. This lack of energy-finance options has provided the marginalized population little means to break the conventional energy paradigm and the corresponding poverty cycle. Considering the afore-mentioned problem the authors proposed an energy-microfinance intervention or a model that encompasses two independent entities. One has an energy expertise and the other possesses finance management skills. Alternately, they also propose a special purpose entity that comprises of these two entities. This entity fosters different institutional, technical and financial engineering approaches to the provision of energy, finance and infrastructure services necessary for poverty alleviation.

2.3 STUDIES ON CONSTRUCTION

Contract labour is defined as labour hired by contractors. Construction is the major activity in which ILO makes a four fold categorization of contracting arrangements.

- a) Contracting arrangements between undertakings in the same country;
- b) International sub-contracting between undertakings;
- c) Subcontracting performed as individual tasks and

- d) Labour only sub-contracting whereby the recruiting agent or an intermediary supplier has an undertaking with labour generally for the performance of a specific job.

Characteristics

- a) High economic vulnerability due to the double combination of irregular and unstable employment and consequent high mobility on the one hand and their utilization only in the lowest grade or job on the other.
- b) High proportion of female labour and frequent employment of whole family or couples;
- c) Ignorance, poverty, illiteracy and poor health;
- d) Lack of unionization due to mobility;
- e) Lack of opportunities for training, skill up gradation and literacy for employed people and of basic education for the children;
- f) Most of the work is done in the open and the workers materials and equipment are exposed to the weather;
- g) Change in the work site activities from day-to-day;
- h) The workforce tends to be “nomadic” moving from site-to-site and from employer-to-employer;
- i) The work site is often far from the head office or regional head quarters of the organization essentially responsible.
- j) A large proportion of specialized activities are involved generally in closely coordinated sequences;
- k) Construction trends to be labour intensive in building Construction approximately half the cost in on wages and salaries in civil engineering works is usually less than half.

Classification

The Classification of Construction labourers proposed by Vander Loop (1998) can be summarized as follows:

Stable wage workers: Blue collar and white collar labourers permanently employed by capitalist enterprises, generally big construction firms. They are protected by official legislations regarding wages, social security, etc. There are for

example, skilled or quasi skilled technicians working with specialist firms like lift erection or sanitary fitting. Division of planning Short term wage labourers: contracted and paid per day, month or season, or for piece work. There is no guarantee for continuity of job. The location as well as the time of the work is being determined by the employer. The difference with the casual wage labourers are often at least; semi-skilled and that they have a greater of employment opportunities.

Casual wage labourers: They are employed outside the manufacturing or service establishment like construction labourers, load carriers and pullers of hand carts. They get contracts only for very limited periods, for which they have to search continuously. In some cases, they are better organized than the short term wage labourers.

Disguised wage labourers: The worker himself decides where and when to work, but nevertheless an entrepreneur is able to appropriate part of the surplus produced by the worker. The best example is home work (a kind of sub-contracting).

Dependent labourers: They seem to be self-employed but are in reality strongly dependent on one or more large scale enterprises for credit, rent of equipment and/ or for sales.

Self-employed labourers: They are independent in all respects; they can make a choice among provisioners as well as customers. They are sole owners of their means of production. They do, however, depend on general economic and social circumstances and on the supply and demand position of their product.

The employment in unorganized construction sector rose from 8.43 lakhs in 1960-61 to 9.92 lakhs in 1976. Gradually it went upto 12.14 lakhs (Economic Survey 89-90). Construction accounts for 5.6 per cent of all jobs generated in the country. In addition, more than 90,000 contractors registered with various authorities operate in the informal sector activities. They account for 1,333 crores and form bulk of the employment in the construction sector (Vaid and Kutty 1986). As per the estimates, every one million worth of construction generates 3000 mandays of skilled and semi-skilled workers and 1300 mandays of managerial and technical manpower- (Bhargava, M.L. 1984). Over 6,000 women workers are employed in the organized

sector of the construction activity. During the off-season a large number of migrant populations from farming join in construction activity. Studies reveal that the building materials constitute 60-70 per cent of the cost of construction in any project. They cover articles of wood, minerals products, glass, paints, metal products, flooring materials, etc. The investment in building materials is estimated to be about Rs. 22,000 crores (Sankaram Kutty, 1990).

Studies conducted by Guha Phulran (1975), Sinha (1975), Mongia (1976) Srivastave (1978), , Ranade and Manohar (1981), Gulati (1981), Walter Fernandes (1982), Hema Nair (1988), Ratna Prabha (1990), Shiva Kumar, M.S. (1991) and others revealed the following major issues on construction labour.

- a) There is visual absence of reliable data about the number of workers, employment trends, working conditions, recruitment and training, etc.
- b) Women workers are also found in large number in construction activity, child labour is a persistent problem in this sub-sector.
- c) Discrimination of wages is found and the women are paid low wages in most of the cases.
- d) The workers work for long hours in a day without any overtime facility.
- e) Construction labourers are forced to remain unemployed due to unfavorable climatic conditions, the non-arrival of building materials in time or illness in their families.
- f) Women construction workers are not merely supplementing household income, but in many instances are major contributors to the household income.
- g) Indebtedness is a perennial issue in the families which is passed on from father to son. Sometimes it turns marginal farmers into landless labourers and results in forced labour.
- h) The living conditions are deplorable in several cases with small houses, large size families, lack of proper medical aid, illiteracy among their children, etc.
- i) Unionism is mostly sporadic. Bargaining power is very low. They receive wages on the mercy of the contractor/ maistry.

- j) Usually recruitment of labour is done by 'maistry'. They follow informal processes for recruitment. The maistry serves as a bridge between supply and demand and the various fields and levels of work, he is sought after by both contractors and labourers, but is guided first by both contractors and labourers, but is guided first by his own interest and then by those of the contractors or labourers.

Leela Gulathi (1979) in her study of socio-economic aspects of the brick kiln workers in Kerala has explained the cause of the wage differentials between male and female workers in the informal sector units.

Leela Gulathi (1991) made a case study of "Women in the unorganized sector with special reference to Kerala" the paper presented a macro-level picture of the women workers in the unorganized sector in Kerala vis-à-vis India. In the second part, it offers insight on questions relating to conditions and consequences of working in the unorganized sector the discussions of which are based on intensive case studies by the author covering life stories of five women belonging to the bottom of the pyramid. The entire woman in these case studies started work as young children supplementing the incomes of their parents who also were in casual wage labour. The construction worker came from a family of artisans forced into unskilled wage labour with the decline of the handloom industry. The brick worker was an orphan child who started going out to work at the age of seven or eight to pay her keep. The agricultural workers parents were involved in the same wage labour and the coir worker's mother also was delibring coir. As regards the kind of work opportunities open to women working in the unorganized sector, very often the choice is made for them in the sense that they go for the type of work their parents or relatives are involved in. the construction and brick workers both work almost exclusive as head load transplanting or weeding, is doing head load transportation. In essence, the difference between one job to another is not much. In large part, the work for women consists of a narrow range of non-descript jobs, monthly calling for unskilled labour and manual strength.

Subrahmanyam (1992) et al., in their study on construction workers in Ahmadabad have noted that significant variations in earnings are exist between casual and regular workers in the construction activity. Besides this, the study also observed that the percentage distribution of casual workers in the lower earning group

(Rs.61.90) is nearly 60 per cent compared to the percentage of (25 per cent) regular workers in the same earning group. On the other hand, in the highest earning group (Rs.251+) only 2 per cent of casual workers are traced compared to 13 per cent of regular workers.

Satya Raju(1994) made an analysis on the “Socio-economic aspects of Construction Labour in India” This examined the issues relating to the concepts of informal sector; the role and contribution of construction activity in service sector, the experiences of various studies conducted in India and the findings of a study in Visakhapatnam. On the basis of random sampling method, 250 workers were selected for the purpose of interview. The schedule was designed to elicit the information on their socio-economic conditions and working and living conditions.

Andhra Pradesh (AP) is the poorest southern State in India and ranks lowest among south Indian states on human development indicators, as well as growth and per capita income. Construction work in urban areas has been an important way of coping with drought in Mahabubnagar, which has huge tracts of unirrigated land with only a single cropping season (Deb et al., 2002). A majority of construction workers from this district belong to the Scheduled Castes. The situation here is similar to that found in southern MP: workers are recruited by contractors and agents (mestries), who are hired by construction companies to find labourers. The companies pay the agent and not the workers, and underpayment of workers is common. In early 2008, a group of workers interviewed by Deshingkar during the course of research for the DFID-funded Andhra Pradesh Rural Livelihoods Project, showed that they were receiving the equivalent of Rs 1,200 per month in cash and food, even though the mestris were being given Rs 150 per worker per day (Rs 4,500 per month). Mestris recruit workers against an advance of Rs 20,000–25,000, and this lump sum is used to repay older debts. Underpayment traps the workers in a continuous cycle of debt. There is a strong power relationship between the worker and the agent: Olsen and Ramanamurthy (2000) show the variety of insidious ways in which construction workers are exploited by mestries, ranging from trapping them in bonded labour by paying less than subsistence level, extracting overtime and child labour, and using caste-based and patriarchal modes of oppression to maintain exploitative labour relations.

Ram Lakhani (2004) made a study on the "Occupational Health of Women Construction Workers in the Unorganised Sector" This study was undertaken to assess the occupational health status of women workers in the construction industry by evaluating incidences of occupational health disorders. One thousand and fifty-two workers were selected by stratified random sampling, medically examined and subject to relevant interviews, examinations and investigations. Over three-fourths of the women and almost all men reported working for 10 to 12 hours daily. A majority of the women reported headaches and backaches, as well as pain in the limbs. Fifty-six per cent of women and 16 per cent of men reported injuries resulting in work loss. They had no social security or other workers' benefits. Most women and men said that they would prefer to do some other work. Respiratory, eye and skin disorders and noise-induced hearing loss (NIHL) were found to be prevalent amongst workers exposed to hazards like dust, noise, heat and cold, non-ionising radiation, and exposure to dry cement, glass and adhesives, tar and paint. About 76 per cent of women reported gender-specific work stress factors, such as sex discrimination, and balancing work and family demands, above and beyond the impact of general job stressors such as job overload and skill underutilisation. Discriminatory barriers to financial and career advancement were found to be linked to recurrent physical and psychological symptoms and more frequent visits to the doctor among women workers. Bingquin Li and Huamin Peng (2006) had analysed the need for providing social protection to rural workers in the construction industry in urban China. Construction workers, the authors pointed out that, have long suffered from various problems, including delayed payment of salaries and exclusion from urban social security schemes. The authors analysed both the risks the rural workers in the Construction industry face because of their being rural workers. The authors hence suggested that social protection needs to take into account both the work related risks and status related risks. Thirty one indepth interviews with Construction workers carried out in Tianjin, PRC, was used to demonstrate both the risks and the inability of the state led social policy to tackle these risks.

Deshkal Society in their online article (2004) reported that. Being part of unorganized sector of labourers, they lose in bargaining for fair wages. They are not paid minimum wages; even the agreed wages are not paid in time. Even after the

construction work is over, substantial due remains with the builders or the contractors, who are always on the look for devouring these due wages. Moreover, their working time and hours are not well regulated. They do not get overtime rates for excess work. They work under very hazardous conditions. The working conditions and the facilities provided at the sites are far from satisfactory. Safety conditions and measures are hardly met. In case of accident, there is, in general, no provision for financial and medical aid. It is up to the workers themselves to arrange for the treatment. There is no scheme like ESI coverage for them. In the extreme cases like death, no body owns the responsibility. Apart from these, there is no recreational facilities, no availability of drinking water, toilets, canteens etc. If the workers are female, the problems at work site and while commuting gets compounded and multiplied. More so if they are pregnant or having small children. There is no system at all to take care of these children at work site. And they just cannot take leave out of work during this period lest they would face extreme financial problems. The living conditions are no way better than the working conditions. It will not be entirely wrong to say that the situation is still worse. They are destined to live in slums where one does not get proper (at all) civic amenities. The surroundings are totally unhygienic. There are no proper facilities for drainage, toilet, potable water, electricity, recreation etc. There are no local medical facilities, hospital, school and fair price shop. Besides the problems and woes discussed above, 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 leave, accident and death claims, concession loans and financial aid for children's education and medical needs.

Mathew Anna (2005) made a study on the "Awareness of social issues among Indian women construction workers". The working conditions, quality of life and health facilities available for the women construction workers were assessed and it suggested that awareness must be created for the suggested that awareness must be created for the new set of opportunity for these women.

A vast majority of India's labour force is in unorganized sector. In the absence of economic opportunities in their own states, many workers migrate across the other states of India to seek employment. Construction industry depends almost entirely on migrant workers, majority of which are women. The main objective of the paper on

“Women workers in unorganized sector: A study on construction industry in Haryana” by Santosh Nandal (2006) was to shed light on the socio-economic problems faced by a section of the women workers in construction industry. These women workers have a very tough life. In spite of being actively involved in economic activities for survival, bearing and rearing of children remain their prime responsibility, and thus they end up with playing roles in both production and reproduction.

Maria Kuruvila, S Dubey, Pratik Gahalaut (2006) made a study on the Pattern of skin diseases among migrant construction workers in Mangalore. This study was undertaken to provide epidemiological data regarding various dermatomes among migrant construction workers in India. One thousand construction workers, including 467 migrant laborers, were examined for various dermatomes. Most (88 percent) workers were males and 51.17 percent were in their third decade. Infective and non-infective dermatomes were seen in 89.72 percent and 53.74 percent of laborers respectively. Among infective dermatomes, fungal infections were the most common (46.25 percent) ones, followed by bacterial infections (24.83 percent), scabies (8.56 percent) and viral infections (6.42 percent). Contact dermatitis to cement was seen in 12.48 percent of the laborers. Masons had a significantly higher incidence of contact dermatitis to cement, viral infections and scabies than helpers. The study concluded that the pattern of dermatomes is an expression of poverty, overcrowding and the occupational hazards of the construction industry.

Self Employed Women’s Association (SEWA, 2006) made a study of construction workers in Gujarat. The main objective of this survey was to advocate immediate enactment of the Act passed by the Central Government within Gujarat. Moreover, SEWA wanted to prepare a detailed report on the current socio-economic condition of the construction workers in the state and submit it to the government. The survey was conducted on a random sampling basis; the lottery methodology was used for identifying the respondents of the survey. Five sample respondents (3 women and 2 men) were selected from each of 50 ‘nakas’ i.e. street corners of different areas of Ahmedabad. In all, 250 sample respondents (125 men and 125 women) were selected. Majority of the women workers (68.8 per cent) said that they work as head loaders on construction sites; 90 per cent of women workers surveyed were unskilled

labourers, while a nominal 10 per cent work as semi-skilled labourers, mostly assisting the male masons. The women workers said they did 9 main types of work on the construction site. Their male counterparts were engaged in 21 different construction related types of work; A key finding of the study was that almost all the women workers were engaged in unskilled jobs (manually carrying/transferring construction materials); It was found that 65percent of the women's families had been doing construction work from one generation to the next, while the remaining 35 percent of women joined this sector to support their families mainly due to the non-availability of other work and the closure of the textile mills in the city; The average daily wages of the female workers were found to be substantially lower than the male workers. The average daily income of the female worker was Rs. 60, as against Rs. 128 for the male worker, who earned more than double that of the women; the incidence of physical strain during work was more in the case of women workers. Around 88.8 percent women complained of fatigue and physical strain during work, while only 74.4 per cent of men complained about it; 51 percent of the women workers reported that they had sustained physical injuries during on-site work, while the incidence of injuries was much lower in the case of male workers. Only 13 percent of them had sustained physical injuries at the work place; - 54.4 percent of the women surveyed, agreed that they were not provided with any basic amenities except drinking water on the sites, while 4 percent male workers confirmed about the inadequacy of basic amenities on the worksite; Construction activities demand physical labour, hard work and strain from the workers. Therefore, 85 percent of women workers surveyed wanted favorable changes in their work conditions. These women also expressed their willingness to upgrade their skills in various construction related techniques.

SEWA conducted a survey in Ahmedabad city itself, in order to get basic information about the workers' conditions. This survey was conducted in 50 nakas and about 1000 forms were filled. Simultaneously campaign work for the construction workers in Gujarat was taken up by SEWA, informing the workers about the law passed by the Central Government for the construction workers, especially about the fact that they were entitled to social security. From 1998 to 2003, an intensive campaign started pressing the demand for passing a state law for the construction

workers in Gujarat itself. This campaign finally resulted in the law being passed in Gujarat for the construction workers.

The main focus of SEWA Madhya Pradesh's work with construction workers has been to study the work conditions, to find out about the socio-economic status and issues facing construction workers. In Indore, first a survey was conducted in four areas of Indore. Further, discussions were held with construction workers and data was thus collected. From the city of Indore, the survey was conducted amongst 50 workers. It is estimated that there are 5 to 8 lakh construction workers in Delhi. Out of these 5 lakh workers, about 3 lakh workers are migrants and the rest 2 lakh are residents of Delhi. About 20% of the total construction workers in Delhi are women.

In order to assess and study the socio-economic status of these workers, SEWA has completed a survey of 200 construction workers residing in two areas of Delhi, namely, Anand Vihar and Raghbir Nagar. A sample of 100 female construction workers and 100 male construction workers was taken for the survey. Also, a total of 100 workers were covered from Anand Vihar area and a total of 100 workers were covered from Raghbir Nagar. The surveys were covered in a period of 15 days, starting from 17th August, 2006 and per day a minimum of 14 samples were collected. The study brought out the extreme insecurity, hardship and lack of social security benefits in the lives of construction workers. From unequal and discriminatory wages, to harsh working conditions, to the absence of child-care and health benefits, the workers in the construction industry are a neglected lot. For the workers in the construction industry, the main priority is that of having work that is regular and thus gives them a regular income. Unlike the workers in the formal sector, these workers are being denied of basic social security benefits that they should be getting, from their employers and from the Government. On the other hand, the study shows little or no awareness on the part of the workers with regard to the Board that has been formed solely for the benefit of the construction workers. The fact that none of the workers interviewed have got themselves registered in the Board, increases the necessity of taking up active measures to increase levels of awareness amongst the workers and also an initiative on the part of the Government to make sure that more and more workers register themselves in the Board.

Madhya Pradesh (MP) has ranked among the least developed states in India. It has the largest population of Scheduled Tribes of all states and a high proportion of Scheduled Castes. Landlessness, nominal and unproductive landholdings and the inability to invest in farming continue to characterise the tribal population of the state. Tribal and forested areas of Madhya Pradesh have been identified among the 15 pockets of chronic poverty in India (Shah, 2007). Migration has long been a livelihood strategy for tribal people from the southern districts (Mosse et al., 1997). Until about 2005, the recruitment of migrant construction workers from this area was largely done by agents locally known as mukkaddams. Mukkaddams provide the labourers a cash advance to help the family left behind in the absence of the migrant. Recruiting workers against advances is one of the basic features of bonded labour and this system of recruitment has been interpreted as a form of bondage in the literature (Mosse et al., 1997). The advances are repaid through migrant wages, which are at a level that does not allow easy and quick repayment. Construction labourers work long hours in harsh conditions; injuries are common and there is inadequate medical assistance or compensation (Mosse et al., 2002). Water, fuel, sanitation and security are major problems. A study by DISHA, an NGO in Gujarat, found that over half the migrants slept in the open and the rest had very perfunctory accommodation. They face harassment, abuse, theft, forcible eviction or the demolition of their dwellings by urban authorities or police. The sexual exploitation of women by masons, contractors, the police and others is routine but unreported by women, for fear of the consequences (loss of employment, violence). Although unions have taken up the cause of such workers, many do not register with unions because of their continuously changing work destinations. Mukkaddams are almost never registered with the government, although they are required to do so under the Inter-state Migrant Workmen Act (ISMWA) of 1979 mandatory for contractors to register themselves and their workers and to provide worker with decent accommodation, crèche facilities, access to healthcare, and minimum wages. Activists and researchers of labour laws⁸ say that it is extremely difficult to prosecute agents from one state in another state. Although it is well known that the ISMWA has not been properly implemented, there is no political commitment to improving this situation. The lack of political interest can be explained by the fact that poor migrant workers do not matter in elections; they are at the destination only temporarily, and thus rarely have voting

rights or any other powers that would be of consequence for politicians and industrialists. According to Mody (2004) there is a nexus between big business, government and political parties because the construction industry is one of the largest sources of 'black money', which is used for financing political parties. The parties repay the construction companies by granting them access to land, large contracts for public works and illegal building transactions. If there is a dispute, it is the workers who are intimidated by the management and harassed by the police. Physical violence and evictions are common and employers are never prosecuted. Subcontractors absolve the companies of any responsibility to provide workers with benefits under labour law and keep costs low by paying low wages.

In his work on "Older Construction Workers: A Study of Related Injuries, Underlying Causes and Estimated Costs" Marius Eppuenberger (2008) analysed how to quantify the injury rates among older construction workers as well as to determine the events leading to these injuries, the nature of the injuries and the bodily locations affected. The costs associated with these injuries were investigated to understand whether there were any discernable differences between injuries to older and younger workers. The statistical data was collected from the Western Cape region and was for the period 1998 through 2005 while the interviews and questionnaire data were collected during 2008. The study found that older workers sustained less injuries in total compared with younger workers. No discernable variances occurred between younger and older workers when it came to events leading to injuries (causes) and the type/nature of injuries. It was, however, found that for the body parts affected, older workers were more prone to certain injuries. Older workers sustained less severe injuries compared with their younger counterparts but the injuries were more costly. The research findings supported the notion that older workers receive less training than younger workers.

The children living on construction sites often suffer from malnutrition, under nourishment, accidents, and innumerable health problems. According to a Mobile Crèche's (2008) study, about 70 per cent of children living on construction sites suffer from malnutrition, compared with the national average of 21 per cent. The study also pointed out that in the absence of clean drinking water and flush latrines, cholera and

other diseases spread quickly and many people suffer coughs caused by inhaled paint fumes and cement particles

Most of the children on construction sites are out of school children. They either stay at home or loiter around the construction site. Different factors explain this high rate of dropout children, migration being the most important one. Indeed, the families frequently move from one place to another, making it difficult for the children to attend school regularly. Some children were enrolled in their village's school but were forced to drop out when moving to the city. The lack of willingness to send their children to school is another factor. According to a survey conducted by Pratham in the city of Thane (2008) accessibility of school does not seem to be a major issue.

Employment is considered the best way out of poverty. The construction industry has a very high potential of employment creation, especially for the uneducated poor. However prevailing practices regarding labour in the construction industry such as outsourcing and recruiting on temporary casual terms, lead to deteriorating working condition. It is sometimes viewed that construction employment is not decent and a mere exploitation of cheap labour. The thesis on "Making construction employment decent work; Dynamic modeling of worker's willingness to be employed in the industry" by Ramya Kanganayagam (2008) aimed to investigate how construction employment is shaping worker's lives, what make the workers willing to work in construction and how the job can be improved. From the qualitative data gathered from case study and literature a system dynamics model was developed to investigate worker's willingness to work in construction. The study revealed that insecure and inadequate income, necessity for physical exertion, exposure to health and safety hazards, exposure to poor living conditions, requirements for separation from family, lack of free time and gender discrimination erode worker's quality of life and reduce their willingness. The pressure to generate income and satisfaction resulting from fulfillment of certain higher level needs increase willingness. The study also investigated possible actions by construction companies such as limitation of overtime hours, provisions for accommodation and welfare facilities, safety and health measures, skills development and gender equality could improve worker's willingness and their life.

In this paper on “Who is at fault? Third party and child injuries at construction sites in Turkey” Emre Gürçanlı (2009) analysed the characteristics of the third party and child fatalities on or near the construction sites and to the accident causation, the parties which are at fault and the negligence behind them. Nine hundred and fifty six expert witness reports, which were submitted to criminal and labour courts, were investigated and third party and child fatalities were analyzed according to causation, type of construction and the time at which they occurred. According to the court decisions, parties at fault in the accidents were discussed by revealing the primary negligent acts of the parties. One hundred and twenty two (98 fatalities) of 971 victims were third parties and 69 (58 fatalities) of 122 victims were children (under age 12). All non-employee (50.0 percent) fatalities and 48.3 percent of child fatalities were caused by falls from height. After building/structure collapse (18.4 percent for third parties and 17.2 percent for children), the figures show that drowning ranks third. Five most hazardous work areas (82.6 of all deaths) were residential/commercial (39 cases, 39.8 percent), institutional (15 cases, 15.3 percent), small buildings (12 cases, 12.2 percent), wells (9 cases, 9.2 percent) and channels (6 cases, 6.1 percent). The vast majority of child deaths (79.3 percent) occurred on these zones. The time interval of 16:00–18:00 was of particular interest, 8 of 10 third party fatalities that occurred between these hours were of children. Additionally, this paper discussed the most hazardous conditions and safety violations along with legislative responsibilities and obligations of employers, employees and third parties. The safety requirements and legal provisions that were stipulated by the Turkish legislation were described and discussed.

Bikram K. Pattanaik (2009) in his article on “Young Migrant Construction Workers in the Unorganised Urban Sector” made an empirical socio-economic analysis based on a field study involving 1200 young unorganised workers found in the construction sector of the tri-city of Chandigarh, Panchkula and Mohali. The main aim of the study was to examine the reasons on why and how these young people had come to work in this urban environment, how they live and spend their money and what they perceive as their major problems. Based on the findings, the article argued that Indian policy makers, with specific regard to the urban unorganised labour sector,

should take more-adequate measures for the protection of human rights of such migrant workers.

Shah CK and Mehta H (2009) made a study on the "Injuries among Construction Workers in Ahmadabad City, Gujarat." Sixteen construction sites were selected randomly from four zones of Ahmedabad city. 240 construction workers, selected from 16 construction sites, were interviewed using a pre-tested preformed; Information related to injuries suffered during the last one year was collected. During the previous one-year, 55 workers (22 Percent) sustained injuries and 7.08 per cent workers had eye injury due to foreign body falling in the eye. Fall from the height was almost three times higher in male workers than among the female workers. Injuries were common among the workers recruited for less than 1 year (18.92 Percent). About 60.42 Percent injuries were seen among the illiterates. As far as all injuries are concerned, no sex difference was observed. Scaffolding workers made the highest-risk group reporting maximum number of injuries. No fatal/disabling injury was reported during the year. Eye injury was the commonest form of injury among the construction workers. The authors hence suggested that along with the helmets, protective gear for eyes needs to be provided to construction workers.

The construction sector has the largest number of unorganized labourers in India next only to agricultural sector. Women form half the workforce and by choice or by design they are not allowed to acquire specific skills that may enable them to become masons. Women join as unskilled workers and remain unskilled till the end of their working life span. However, men get training and systematically upgrade their construction skills to graduate as masons, supervisors and contractors. A study was conducted by Annette Barnabas, Joseph Anbarasu.D and Clifford Paul.S (2009) on the career progress of 440 men construction workers and 440 women construction workers and 51 building contractors to find out the reasons why women in the construction sector were not able to acquire skills for masonry work and how they could be trained to become masons. The findings of the study showed that there is an inherent gender bias against women and also the shared general belief that women construction workers are unfit to be trained informally like men in the construction sector even though they have the necessary skills, capability and desire to become masons. Though the contractors are willing to accept women as masons by giving

them training and placement in the construction sector, it has been, the social forces that have perpetuated the concept of women as inferior workers are inimical to any such move. This study also analysed the methodology of training offered to men in the construction sector in India and proposed a new methodology of training that would qualify women construction workers to become masons and empower them economically.

In their study on “Health status of women employed in unorganized and self-employed sector” Ranjwan S. R and Zend J.P (2009) assessed the physical fitness of 110 women engaged in unorganized and self employed sector such as construction work, brick making, domestic work, tailoring and pottery by step-wise method. It was found that physical fitness and body mass index of the majority of subjects were below average in all occupational groups. Aerobic capacity of majority of workers was good but it was found to be decreased with age. Musculo skeletal complaints were highest among brick makers followed by pottery workers and construction workers. The attitude of women construction workers towards job was negative whereas other workers were in the state of neither liked nor disliked except tailors who had expressed favourableness at moderate level.

Jeet Singh Mann (2009) made a study on the “Welfare and Protective Measures pertaining to the Construction workers in India”. This article discussed the ground realities/conditions of these workers. Based on the study, certain guidelines for promotion and protection of these workers were suggested. The author pointed out that they are thrown out of employment without any social security benefits as specified under the Building and other Construction Workers (Regulations of Employment and Conduct of Service) Act, 1996 or Contract Labour Act, 1970. Workers are unorganized and incapable to bargain on the issue of welfare and social protection. Subsequently the enforcement mechanisms provided by the relevant enactments are inadequate and ineffective in enforcing the provisions in practical life. Moreover there is no single agency which ensures the effective and efficient implementation of relevant schemes. It is the need of the hour to formulate a comprehensive protection law covering all construction workers for all adversities, not only at work place but also afterward. The proposed scheme the author reported should be equipped with single enforcement mechanism. Because the success of any

scheme depends upon its implementation, otherwise the legislation remains a piece of paper for workers.

Prof. Dileep Kumar M (2009) made a qualitative research on the problem of construction workers in Pune. This particular research follows the qualitative research methodology. A questionnaire was prepared and it was subjected to pilot study. Direct personal interview technique was used to collect data from the construction labourers. 82 construction sites in Pune locality were considered for the study. The Study followed descriptive study design. The entire research took about 8 months to complete the data collection. The data thus generated is subjected to classification and grouping since the study is qualitative nature. Considering the close similarity of the replies grouping is done. No statistical tool implemented for analyzing the data since the purpose of the study is to understand the severity of the problems alone. The study brought out the plight of construction workers in Pune. The living conditions were staying in tin sheeted and rubber sheeted houses. Majority labourers have to build temporary huts by themselves, near by the site. The construction company was not making provision of any electricity of sanitation facility to the construction labourers. The sanitation hygiene of the construction site and the labourer's houses found poor condition. Majority sites do not have any toilets. Where the sites have toilets there it is having substandard quality. There is limited provision of drinking water and the labourers have to depend on bore well, tanker lorry water and public water supply. The construction company was not making provision of water facility for washing cloths and cleaning their utensils. There also the labourers have to depend on open well, public water supply, bore well, etc. Some of the construction companies are not making provision of facility for washing at all. Majority construction site doesn't have any bathroom facility. Labourers have to depend on open bath, from where water available. The women labourers are not eligible to get the maternity benefits. More over the companies are not ready to compensate with employee's having partial and full injuries and are not covered by life insurance. Adequate accident relief equipments like helmets, hand Gloves and shoes, safety belts, protection eye wear etc like safety materials and equipments to the construction labourers. The wage structure of the construction labour is also found inadequate considering their labour. Majority labourers are getting a wage in between 50-100Rs/day. Here the study observed

differential wage system for the skilled and unskilled labourers. For the unskilled labourers the wage comes around 41-60Rs/day. Leave facilities are not available for the construction labourers. Some companies unofficially give medical leave and maternity leave to the construction labourers. No holiday policy is found in majority construction sites. The working hours of the construction labourers varied considerably. While majority construction sites are making provision of 8-11 hour a day. The labourers do not get healthy food from the construction site. Majority companies are not making provision of better food to their labourers. Dal, Rotti, Rice and Vegetables are the regular food habit. Women labourers have to look after the food and home in addition to their regular work. The construction companies are not provided with crèches for the children. Majority children are wandering around the site while parents working in the site. No one to look after these children and ensure their better health, education and care in their tender age. Many factors like frequent migration from one area to another, economic problems etc, cited by the construction labourers in making provision of better education to their children.

In the working paper on “Welfare fund for Kerala construction workers needs fine-tuning” Sankar Radhakrishnan (2009) reported that over one million of the estimated 1.5 million construction workers in the State are registered with the Kerala Construction Labour Welfare Fund. Despite this, the Fund's coverage in some districts of the State needs to be improved, accompanied by measures to create more awareness about the Fund, says a recent working paper published by the International Labour Organisation (ILO). The paper also recommends several measures to improve the finances of the Fund, administrative measures to reign-in expenses and steps to enhance the benefits offered by the Kerala Construction Labour Welfare Fund. The working paper also suggested measures to control administrative expenses, especially staff salaries and reformation of the system used to remit benefits to members of the Fund. Another suggestion put forward in the paper was that steps be taken to strengthen the database of the Fund.

In the article “Women and globalization: Challenges and Opportunities Facing Construction workers in Contemporary India” Bipasha Baruah (2010) identified the opportunities and constraints faced by the female construction workers in urban India, citing empirical research conducted in the city of Ahmedabad. The Self-Employed

Women's Association (SEWA) conducted three surveys in 1998, 2003, and 2007 to learn more about the needs and priorities of construction workers in the context of economic globalization. While enthusiastically endorsing the role that training and certification can play a role in providing skilled women with opportunities for quality employment, the author emphasized the need for wider policy intervention at the state and national levels to ensure that such programmes have replicable, sustainable, and gender-equitable results.

In their paper, Kanak Kanti Bagchi and Nirupam Gope (2010) had made an attempt to find out the magnitude of pecuniary and non-pecuniary poverty of two groups of urban informal sector workers, viz., rickshaw pullers and construction workers at Siliguri town of Darjeeling district of West Bengal. The study was based on a sample survey of 100 workers from each group of workers. An attempt was also made to find out justification for a modicum of social security to these two groups of workers. The study found that in addition to income poverty, there is a huge incidence of non-pecuniary poverty among these workers in the form of non-availability of basic minimum services like housing, sanitation, health facilities, safe drinking water and toilet facilities. In respect of social security it is revealed that the main concern of the workers is for assured employment.