1.2 Background

Beginning since the mid-1980s, the Indian economy introduced, in a piecemeal manner, the growth strategy aimed at globalisation, liberalisation and privatisation of its various sectors. Such policy initiative got further momentum during the 1990s when a variety of measures, largely came to be known as 'Economic Reforms', were introduced. The adoption of such growth strategy uplifted the Indian economy from its long continuing (1951-1980) moderate growth rate of 3.5 percent to relatively high rates of economic growth. Moreover, the developments in the spheres of communication, information and technology seem to have revolutionised modern life.

In such times of sustained high growth, it has been the question of sharing the growth benefits that has led to a debate among researchers. There are some who opine a general improvement in the living standards whereas there are others who argue that the trickle down effect of growth have been very limited and varied. It has served only those possessing market powers. The plight of the common man has not improved much in that three-fourth of the people continued to have a per capita income of PPP $2 a day or two times the Indian poverty line in 2004-05 (Sengupta et al., 2008). Moreover, the growth process has largely been 'exclusionary' in the sense that it has by-passed the majority belonging to socially underprivileged groups in both the rural and urban areas.\(^1\)

In the light of these observations, a rethinking on India's growth strategy from a labourist perspective makes one believe that the restructuring of economic activity under 'New Economic Policy' has not been strictly pareto-optimal as it has left labour worse-off than its counterpart factor of production, viz. capital. The labour has been forced to remain 'at the receiving end' in the policy frameworks whereas the capital has been privileged to enjoy various benefits and relaxations.\(^2\) Prominence has been attached to the notion of 'labour market flexibility' and the deregulation of the labour market has been desired for enhancing efficiency in production processes (ILO-SAAT, 1996; Sundar, 2005). The laws governing labour rights have received disparaging treatment.\(^3\)

The employment content of growth deteriorated - as reflected by a decline in employment elasticity of output from 0.62 during the pre-reform period (1983-1988) to 0.16 during the post reform period (1993-2000).\(^4\) The organised seg-

---

\(^1\)Such phenomenon has provided a way to re-orient development thinking to the notion of 'inclusive growth' (Gol, 2006; Mody, 2005; Kannan, 2007).


\(^3\)Besley & Burgess (2004), for example. opine that if West Bengal had not passed any pro-worker amendments, it would have enjoyed a registered manufacturing output that was 14 percent higher than its 1990 level and employment that was 4 percent higher.

\(^4\)As pointed out by the Report of Special Group on Targeting Ten Million Employment Opportunities Per Year over Tenth Five Year Plan, Planning Commission, May 2002, p. 158.
ments recorded ‘jobless growth’\(^5\) with an increasing informalisation of certain operations (Ramaswamy, 1999; Neethi, 2008). Moreover, the increasing workforce had to seek employment in various informal sector activities. From the estimates provided by the National Commission for Enterprises in the Unorganised Sector (NCEUS), it becomes clear that in 2004-05, about 86 percent of the Indian workforce has been seeking livelihoods in the informal sector and about 6.4 percent has been working as informal workers in the formal sector. This imply that in 2004-05, as many as 92.4 percent of the Indian workforce have worked as informal workers (NCEUS, 2007, Table 1.1, p. 4).

Owing to such high dependence on informal economy for livelihoods, there has aroused interest in understanding the nature of employment generated by this segment. But, as per the available evidence, the informal sector employment suffer from not only an absence of income security but also various other related securities like work security, job security, skill reproduction security and representation security.\(^6\)

| Table 1.1: Percentage Distribution of Population and Unorganised Workers by Poverty Status and Social Groups, 2004-05 |
|---|---|---|---|---|---|
| Poverty Status | Population | SC/ST | OBC | Muslim | Others |
| 1. Extremely Poor | 6.4 (6.5) | 10.9 (11.4) | 5.1 (5.2) | 8.2 (8.2) | 2.1 (1.8) |
| 2. Poor | 15.4 (15.9) | 21.5 (21.6) | 15.1 (15.3) | 19.2 (19.9) | 6.4 (6.1) |
| 3. Marginal | 19.0 (17.9) | 22.4 (22.2) | 20.4 (19.6) | 22.3 (19.9) | 11.1 (10.3) |
| 4. Vulnerable | 36.0 (35.5) | 33.0 (32.7) | 39.2 (38.2) | 34.8 (34.8) | 35.3 (35.0) |
| 5. Middle Income | 19.3 (20.3) | 11.2 (11.6) | 17.8 (16.9) | 13.3 (14.7) | 34.2 (35.7) |
| 6. High Income | 4.0 (4.4) | 1.0 (1.3) | 2.4 (3.0) | 2.2 (2.5) | 11.0 (11.3) |
| 7. Extremely Poor and Poor (1+2) | 21.8 (22.0) | 32.4 (33.3) | 20.3 (20.4) | 27.4 (28.1) | 8.5 (7.7) |
| 8. Marginal and Vulnerable (3+4) | 55.0 (53.3) | 55.4 (53.8) | 59.6 (57.8) | 57.1 (54.7) | 46.3 (45.4) |
| 9. Poor and Vulnerable (5+6) | 76.7 (75.3) | 87.8 (87.1) | 79.9 (78.2) | 84.5 (82.8) | 54.8 (53.1) |
| 10. Middle and High Income (7+8) | 23.3 (24.7) | 12.2 (12.9) | 20.2 (21.8) | 15.5 (17.2) | 45.2 (47.0) |
| 11. All | 100 (100) | 100 (100) | 100 (100) | 100 (100) | 100 (100) |

Source: Sengupta et al. (2008, p. 52).

It becomes evident from the poverty estimates provided by the Sengupta et al. (2008) that there exists an association between informality and poverty among the working masses. Table 1.1 reveals that close to 80 percent of the informal workers belong to the households with less than two times (i.e. Rs. 24 per capita per day) the official poverty, whom the Commission called ‘Poor and Vulnerable’. It is also found that a large set of these poor and vulnerable workers belongs to the socially-deprived classes. As these workers are also poorly endowed with education and skill capabilities, these workers may also be more exposed to work-related vulnerability - an aspect explored by us at some length in this study.

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\(^5\)A detailed account of this phenomena is provided by Bhalotra (1998); Goldar (2000); Nagaraj (2000); Nagaraj (2004); Bhattacharya & Shaktivel (2005) and Kannan & Raveendran (2009).

\(^6\)See, for example, Kantor et al. (2006).
1.3 An Introduction to the Study's Domain

We are concerned here with exploring the employment situation in unorganised manufacturing sector. It is noteworthy that the term ‘informal sector’ has been coined by Keith Hart to describe various urban, small-scale and often illegitimate income-earning opportunities in the shanty towns of Accra, Ghana (Hart, 1973). Subsequently, the International Labour Organisation (ILO) being concerned with widening “the term’s currency beyond Hart’s anthropological concern with the underworld of illegal brewers, unlicensed traders, prostitutes and others”,7 operationalised and popularised this concept. Such backing encouraged research across the world and thereby, various definitions had been proposed by different scholars.8

Owing to the efforts made by the ILO to evolve a conceptual framework and guidelines for the collection of statistics on informal sector, a resolution was adopted by the Fifteenth International Conference of Labour Statisticians (ICLS) in February, 1993, which was later on made a part of the System of National Accounts, 1993, which considered those enterprises as unorganised if they are private unincorporated ones, unregistered, have no accounts and employ a certain number of workers.

It has been the Expert Group on Informal Sector Statistics (Delhi Group) that deliberated, since 1997, the issue of operationalising the definition of informal sector for producing comparable statistics across nations. It has made various recommendations9 but these concepts and definitions are still evolving and the country experiences are found to be varied in coverage and quality.

As far as India is concerned, it is noteworthy that here, the term ‘unorganised sector’ is being used. The National Sample Survey Organisation (NSSO) is the main agency engaged in providing information about various aspects of this segment. As far as the segment of manufacturing is concerned, there has been a lack of standard definition. So, the NSSO has adopted not only various criteria but its definitions too have not remained uniform over the period of time. In earlier surveys (up to 1974-75), it has used the nomenclatures like the ‘household enterprises’, ‘small-scale manufacture and handicrafts’, etc. to capture the unorganised manufacturing enterprises. But, since the 33rd Round (1978-1979), it has classified these enterprises as ‘Own-Account Enterprises’ (OAEs) and the ‘Non-Directory Establishments’ (NDEs). In the latter surveys like the 51st (1994-95), 56th (2000-01) and 62nd Rounds (2005-06), it has defined them as

8It has been known as capitalist versus the peasant system of production; firm-centred versus bazaar-type economy; upper and lower circuits; legal versus illegal; formal versus informal; organized versus the unorganized; protected versus the unprotected; recorded versus unrecorded; high versus low productivity; modern versus traditional; mechanized versus non-mechanized; advanced versus backward (Dewan, 2000, p. 44).
9A detailed account of these recommendations is provided by the NCEUS (2008, p. 11-13).
'Own-Account Manufacturing Enterprises' (OAMEs), 'Non-Directory Manufacturing Enterprises' (NDMEs) and the 'Directory Manufacturing Enterprises' (DMEs) as per their usage of wage labour in the production process.

Having found such serious definitional lapse, the National Commission for Enterprises in the Unorganised Sector (NCEUS) has devised a concrete definition of 'unorganised sector'. It has also recognised the existence of 'unorganised worker'. While defining the unorganised sector, it has considered enterprise's ownership and employment size - the former aspect is used because an enterprise, if unincorporated, remains vulnerable to bear any emerging business risk on itself; and the latter aspect is used to capture the size of the enterprise (NCEUS, 2008, p. 13-17).

Specifically, as per the definition proposed by the NCUES, the unorganised enterprises refer to "all unincorporated private enterprises owned by individuals or households engaged in the production and sale of goods and services and operated on a proprietary or a partnership basis and employing less than 10 persons" (NCEUS, 2006). A glance at this definition reveals that it is general, comprehensive and representative in its character - the general character gets reflected in its universal application across all sorts of enterprises; its comprehensive becomes evident when it, by the indicators of ownership and employment, addresses not only the implicit presence of vulnerability but also various legislation related issues; and its representative character is recognised when it "corresponds closely with the definition of informal sector as adopted internationally by the International Labour Organisation (ILO) and the United Nations Statistical Commission (UNSC)" (NCEUS, 2008, p. 24).

As a large part of our study is based on primary survey, we, while selecting the sample enterprises, stick to this definition. But, for background analyses, we have to rely on NSSO's secondary data on unorganised manufacturing whose definition is slightly broad than that adopted by the NCEUS.

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10The NSSO treats those unincorporated enterprises as unorganised which are not registered under sections 2m(i) and 2m(ii) of the Factories Act, 1948 in addition to those registered under section 85 of this Act. It also covers bidi and cigar manufacturing enterprises, both unregistered and registered under Bidi and Cigar Workers (Conditions of Employment) Act, 1966.

11The choice of 'labour status approach' (covering the aspects of 'protection', 'regularity' and 'autonomy') by an earlier study (Harriss et al., 1990) is also an indication of such lacunae.

12This commission was set-up by the UPA (United Progressive Alliance) government on 20th September, 2004 under the chairmanship of Arjun Sengupta to act as an advisory body for recommending measures on various aspects related to output and employment in India's informal economy.
1.4 Choice of Punjab as Study Area

Historically, Punjab - the land of five rivers, had been the location of the 'Indus Valley Civilization'. Following the death of Maharaja Ranjit Singh, it had become the last state annexed by the British. Due to its large geographical territory and fertile lands, it had been known as 'The Greater Punjab'. At the time of India's independence, a large part of this Greater Punjab went to the share of Pakistan. Subsequently, in response to a powerful movement led by Sikh Akalis, the remaining Indian Punjab had been further trifurcated in 1966, on a linguistic basis, into the present-day states of Punjab, Haryana and Himachal Pradesh. Today's Indian Punjab occupies an area of 50,362 square kilometers - 1.53 percent of India's total geographical area.

Punjab resides 24.4 million people - 2.36 percent of India's population (Census of India: Punjab, 2001). Since the organisation of the state, its population has grown at a declining rate. In terms of population density, Punjab is much above the national average. In 2001, against the national average of 273 persons per square kilometer, the population density in Punjab has been 483 persons.

Being primarily an agrarian economy, a relatively large proportion (66.08 percent) of its population resides in rural areas. From a social point of view, Punjab is dominated by Jat Sikhs. They have become a majority followed by Hindus only after the 1966 re-organisation of the state. Others like Christians, Muslims, Jains etc. also reside in Punjab but their population share is minimal. The Scheduled Tribe (ST) population is largely absent in the state but the share of

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13 The five rivers, viz. Jhelum, Chenab, Ravi, Beas and Sutlej, are tributaries of the Indus river. The word 'Punjab' emerged from two Persian words 'panj' and 'aab' - 'panj' means five and 'aab' means water, which gives the literal meaning of the 'Land of Five Rivers'.

14 The decadal growth rate of population has been 23.9 percent, 20.8 percent and 20.1 percent respectively over the three decades beginning since 1971.
Scheduled Caste (SC) population is very high. As per 2001 Census, they account for 28.9 percent of the total state population.

A consideration of the work status reveals that about 37.6 percent of total population is working and within this, about 32.2 percent are the main workers and about 5.4 percent are the marginal workers. In terms of occupational structure, it is observed that about 23 percent of the total (main and marginal) workers are cultivators, about 16 percent are working as agricultural labourers, about 4 percent are working in household industry and the rest are seeking their livelihoods by providing a range of other services. Moreover, males constitute the majority (76.8 percent) with relatively low participation of females in the labour market.

Another facet of the occupational structure is revealed by the type of activities performed by the people. The primary sector activities like agriculture, animal husbandry etc. are the major occupations of people in Punjab's rural areas. In 2001, about 54 percent of the workers in rural areas have been directly involved in these activities - the shares of males and females being 43.6 and 9.9 percent respectively. Besides this, a large number of people have been involved in other secondary and tertiary activities in various organised and unorganised sectors.

It is noteworthy that the Census of India provides information on household industry workers only and thereby, it does not provide any clue about the workers engaged in other formal and informal sector occupations. However, the survey conducted by the NSSO in 1999-2000 has revealed the presence of a large unorganised sector in Punjab's economy that has employed 20.67 lakh workers with about 89 percent share of males in total workforce. Within Punjab's informal sector, the manufacturing segment holds a significant employment share of about 25 percent. Its contribution to total gross value added is about 19 percent.\footnote{As per NSSO (2001, p. A21-A29 & A86).}

Recent estimates, provided by NCEUS (2007, p. 254), on the structure of workforce in Punjab reveal that in 2004-05, the unorganised workers constitute a significant proportion of its total workforce. Such dominance of unorganised workers is found to be prevailing across almost all the non-agricultural segments except mining and education (fig 1.2).

Besides these, a major attraction for selecting Punjab as the focus area of the study has been the fact that this state, in economic terms, is one of the prosperous states of India. Its agrarian economy is much dynamic and highly capital intensive in nature. In fact, most of the economic prosperity in Punjab has been achieved through its dynamic agrarian economy - the introduction of Green Revolution technology in the 1960s has played a large role in transforming the rural economy of Punjab. This state, occupying less than 2 percent of
Figure 1.2: Unorganised Workers’ Share in Punjab’s Non-Agricultural Sector

Note: FREBS stands for Finance, Real Estate and Business Services, Etc.
Source: Based on NCEUS (2007).

India’s total area, has been contributing a mammoth share to the central pool of food grains. Moreover, its manufacturing sector is largely represented by the small-scale industries - a large part of which is unorganised in its nature. These unorganised enterprises contribute significantly to not only total industrial employment but also the output and exports made by Punjab’s small-scale industry to the national export pool.

Its gross state domestic product has grown at the rate of 5.32 percent per annum during the 1980s and later on, with a somewhat slow rate of annual growth (4.71 percent) during the 1990s (Ahluwalia, 2000). In terms of per capita income levels, it has enjoyed very high ranks among the major Indian states over the period of time (Table 1.2). Its economic prosperity is also reflected by a very high level of average per capita expenditure (Rs. 1010 and Rs. 1520 in rural and urban areas respectively) in 2005-06 - Punjab has been only next to Kerala (NSSO, 2008a, p. 16).

In such situation, if one subscribes to the Ranis and Stewart’s argument that there are primarily two distinct causal chains reflecting the relationship between economic growth and human development - one runs from economic growth to human development and the other runs from human development to economic growth, then it may be hypothesised that Punjab’s impressive attainments in the spheres of economic growth must have led to a high level of human development in the state.

16The contribution of agriculture sector though being the largest in Punjab’s state domestic product, has declined whereas that of the manufacturing sector has increased over the period of time (GoP, 2004a, p. 19). The growth rate of manufacturing sector has been more than 8 percent since 1966-67 (Singh & Singh, 2002).
17As discussed in the second chapter, section 2.5.4.
18See, Ranis et al. (2000).
Table 1.2: Real Per Capita Income (in Rs.) Across Major Indian States (Base=1999-2000)

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<td>18449</td>
<td>21979</td>
<td>25986</td>
<td>28487</td>
<td>31439</td>
<td>37075</td>
<td>43013</td>
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<tr>
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<td>13806</td>
<td>16031</td>
<td>18449</td>
<td>21979</td>
<td>25986</td>
<td>28487</td>
<td>31439</td>
<td>37075</td>
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<tr>
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<td>9620</td>
<td>11002</td>
<td>14694</td>
<td>17527</td>
<td>20231</td>
<td>22825</td>
<td>26598</td>
<td>31790</td>
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</table>

Note 1: PCY - Per Capita Income; R - Rank
Note 2: * implies that from 1995-96 onwards, the PCY of Madhya Pradesh, Uttar Pradesh and Bihar is inclusive of the values for Jharkhand, Chattisgarh and Uttarakhand respectively.
Source: http://mospl.nic.in/

Such argument seems to hold some ground in light of the fact that Punjab stands only next to Kerala in terms of human development index (HDI). In addition, the observations revealing the existence of relatively small proportion of people below absolute poverty line in Punjab and the existence of high per capita income levels hint at the affluent character of Punjab’s economy and society.

Figure 1.3: Sectoral Distribution of Migrant Labour in Punjab During late 1990s

Source: Based on GoP (2004b, p. 156)

Nonetheless, we opine that these average figures are not inequality-neutral. Therefore, one must not get the impression that each and every individual in Punjab is relatively better-off than his counterpart in other Indian states. As far as the labour market is concerned, there may also be a very high incidence of insecurity - an outcome shaped by the structure of labour market. There is a high presence of migrant workers in Punjab’s industrial sector. As much as 28.4 percent of the total migrant workforce coming to Punjab seeks livelihoods in the industrial segment (fig. 1.3).

Moreover, we also observe (in chapter seven) that the social welfare effort undertaken by the state in Punjab has not been much significant in both absolute and relative sense. The state even in the midst of such high vulnerability across

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19Punjab and Kerala’s HDI values are found to be 0.537 and 0.638 respectively in 2001.
the concepts of transient and chronic poverty is of significance in poverty analysis, whereas it turns out to be somewhat arbitrary in vulnerability analysis as both the transient and the chronic poor are vulnerable.

Similarly, Chaudhuri et al. (2002) consider the concepts of poverty and vulnerability quite interlinked. They consider vulnerability as an ex ante (forward-looking) rather than an ex post concept. They hold that the poverty status can be observed at a specific time period, given the welfare measure and poverty threshold whereas it is difficult to observe directly the incidence of vulnerability in the household. It can only be predicted. Further, they consider household’s observed poverty status (defined by the status of its observed consumption expenditure vis-à-vis a pre-determined poverty line) as the ex-post realisation - an ex-ante probability of which is nothing but household’s level of vulnerability.

Various researchers also link the notion of vulnerability with risk and uncertainty. Ligon & Schechter (2003), for example, consider risk as an important part of vulnerability. Siegel et al. (2001) decompose vulnerability into several ‘risk-chain’ components viz. risky events, risk responses and the outcomes. They consider that vulnerability begins with the notion of risk and define household’s vulnerability to future welfare loss as its exposure and response to risky events. Similarly, Chaudhuri (2003), while distinguishing ex-ante (vulnerability) and ex-post (poverty) measures of well-being attribute the existence of these differences solely to the prevalence of uncertainty.

Thus, conceptually, the notion of vulnerability holds a little distinction from poverty. A person may be vulnerable but not poor in a single point of time. However, he may join the poor if such vulnerability persists. It is also noteworthy that the definitions of vulnerability proposed by Chambers and Moser are much compartmentalised in their nature. We are of the opinion that the experience of vulnerability is not a step-wise process; rather it is much conditioned by one’s initial endowments and background characteristics. Therefore, any analysis of vulnerability must take into account these aspects so as to have a holistic account of the processes that contribute to the emergence of vulnerability.

B. Methodological Issues

A second strand of literature has focused on various methodological issues related to the measurement or the quantification of the incidence of vulnerability. This literature can be classified broadly along two lines, i.e. the ones that subscribe to the objective approach and the others who subscribe to the subjective approach for examining the incidence of vulnerability.

It is noteworthy that those subscribing to the objective approach hold differing opinions about the selection of objective criteria. Ligon & Schechter (2003), for example, consider vulnerability as low expected utility. They adopt a utilitar-
ian framework to capture the effects of risk on household welfare. They define vulnerability as the difference between the utility a household would derive from consuming some particular bundle of commodities with certainty and the household's expected utility of consumption.


A few researchers subscribing to the objective approach define vulnerability in terms of welfare loss. Skoufias & Quisumbing (2005), for example, define vulnerability as the ex post assessment of the extent to which a negative shock has caused the welfare loss whereas others like Hoddinott & Quisumbing (2003) have defined vulnerability as uninsured exposure to risks.

Some researchers have linked vulnerability with household's inability to cope with shocks. Amin et al. (1999) while examining the access of micro-credit in their study of Northern Bangladesh consider that household as vulnerable who is unable to smooth consumption in the face of fluctuations in income due to various covariate and idiosyncratic shocks to the household resources. In a similar vein, Cuna (2004) defines vulnerability as the inability of a household to secure its living standards in the face of a certain negative event.

The literature using the subjective approach, unlike the objective one, gives importance to people's perceptions regarding 'what they value' and 'how they perceive something'. It is based on their own evaluation and appraisal of their well-being and is generally operationalised by enquiring people's perceptions about satisfaction, perceived adequacies and probable threats on a certain predeter-

21 They consider time as an important factor to determine the degree of household vulnerability. They hold that a long length of the time horizon is related with more risk and thereby more vulnerability.

22 They identify the household types that are vulnerable to macroeconomic shocks. They find out that the households headed by relatively well-educated persons as well as the females are less vulnerable in comparison to relatively less-educated and male-headed households respectively. Moreover, it is pointed out that the households with more children are more vulnerable to economic shocks.
In a similar tone, Pais (2002) has examined the growing incidence of informal employment by focusing on the casual employment in the manufacturing sector for the 1983 to 1993-94 period. It finds that there has been some decline in the pattern of casual employment in the urban manufacturing sector but the decline has not been uniformly spread across various two-digit and three-digit industrial levels. It also records a variation in the casualisation of the female workers.

In fact, in the absence of suitable (detailed) data to examine the dynamics of insecurity, most of the available research on the subject has been based on micro case studies. Amidst these works, a few like Jan Breman's *Footloose Labour* seems to be the classic one as it is the result of author's painstaking effort made over a long period of more than thirty years to understand the plight of wage labour in the lower echelons of the non-agrarian economy in South Gujarat. By focusing on the two villages of Chikhilgam and Gandevigam, Breman (1996) portrays a far disturbing picture of the living and working conditions. It records that the outmigration of Halpati labourers has been in the form of daily commuting, seasonal circulation and semi- or permanent settlement. It provides a detailed account of their wages, working hours and debt bondage, which ensures a supply of cheap and unskilled labour. Moreover, it brings out the mediatory mechanisms bringing the labour into the contact of employers. The middlemen like Mukaddams, Thekedars etc. in spite of being informal are much organised. They are found to be playing their role not only in labour recruitment but also in extracting labour and discipling the labour force.

Another anthropological account of the work and life in the informal sector is provided by de Neve's *Everyday Politics of Labour*. By focusing on two rapidly growing townships, viz. Kumarapalayam and Bhavani, de Neve (1999, 2005) ventures through the diverse terrain of employment and labour relations in textile workshops. It illustrates how the well-to-do peasants could set up their power-loom units on their own and how they could attract labour to run their machines. The study points out that there has emerged a system of giving advances to the workers in return for working with them. These new owners in order to keep their looms running 24 hours a day and seven days a week, compete with each other by raising the 'baki' to unprecedented levels. Interestingly, the workers are not forced to gradually work off their debt as the bosses actually prefer them to keep the baki (interest-free) as long as they are willing to work for them. Such system of credit arrangement (closer to Breman's notion of 'neo-bondage') has represented an institutional form of bondage - the politics of baki and the practice of accepting cash advance at the time of recruitment keeps the worker tied to their boss.

In fact, such practice of keeping the labour tied has been quite opposite to what Kapadia (1995a) has found in her study on Gem-cutting industry in rural South India. She has found that the workers are trapped in such a situation
of bondage that it becomes almost impossible for them to escape from. In this industry, the workers do not earn their wages but their earnings are considered as if they are repaying their debt. This ideological ploy enables the owners to exercise their claim over the workers by paying them low wages. Moreover, it restrains the workers to engage in workers’ unions and thereby openly resist the demands of the owners.

In light of the fact that the debt-bondage is a consequence of workers’ inability to earn sufficient wages for sustaining their lives, the findings made by Bhagat (1997) assume significance. By an inter-state analysis of minimum wages in India, this study has found that the fixation as well as the revisions of the statutory minimum wages do not consider seriously the minimum requirements of a worker’s family of three consumption units to rise above the poverty line. Owing to these concerns, studies like Jhabvala (1998) have advocated for such minimum wages that should be based on workers’ needs.

Researchers have also linked the experience of vulnerability with specific characteristics of the workers. A large number of researchers, for example, have related vulnerability with gender by pointing out that the female workers are relatively more vulnerable than their male counterparts. A study by Kapadia (1995b) points out that the Pallar women (in Tamil Nadu) contribute their almost entire earnings to support their families whereas their male counterparts contribute very little as they spend a large part on their own. These females are found to be performing the double role of breadwinner and housekeeping which enhances their work intensity to a considerable extent. They are the first to get up and the last to go to bed. As far as the household division of labour is concerned, the study reports that the women undertake the agricultural work whereas the children especially girls are engaged in taking care of household operations. They are also engaged in wage work but "when not engaged in wage work or domestic work, a young girl is sent to cut grass for sale as cattle fodder" (p. 201). All this significantly disturbs their educational attainments as the 'Pallar parents are irresponsible. They don’t bother to send their kids to school." (p. 204).

By focusing on the unorganised women workers, a study by Jhabvala & Sinha (2002) has examined the varied impact that the process of liberalisation and the globalisation has had on their working conditions. By commenting on the aspect of employment, income and liberalisation policies, this study has revealed the changes that has occurred not only in the quantity of employment but also in the nature of employment and thereby, it has urged for developing specific policies to mitigate the economic plight of the women workers. Similarly, Vanamala (2001) has pointed out that the deregulated and liberalised market system has induced organisational, managerial and technological changes in the industries in such a way that there has emerged a variety of casual and contractual jobs where the work-relations are flexible and insecure. This 'low road flexible' employment
strategy has a vicious down-spiralling effect as the female workers are more
hard hit by the market changes than their male counterparts primarily due to
the nature of their jobs.

By focusing on the case of Tirupur knitwear industry, Neetha (2002) reveals
the incidence of flexible production and feminisation of the workforce. It argues
that central to the export success of Tirupur industry has been the aspect of
feminisation and the demographic segmentation of the workforce that has been
brought in by way of disorganisation and reorganisation of its production struc­
ture and the labour process. In case of another export-oriented industry, viz.
the leather tanning industry, Nihila (2002) examines the state of women. It finds
that in unorganised industries, the women are engaged in performing the haz­
ardous jobs, which are prohibited by the Factories Act primarily on the grounds
of health. These women are found to be suffering from myalgia (52 percent), dys­
pepsia (46 percent), urticaria (42 percent), vertigo (35 percent), anaemia (35 per­
cent), abdomen pain (32 percent), asthma (26 percent), bronchitis (26 percent)
and so on (p. 161). It also reveals the severe incidence of various gynaecological
problems affecting women.

Another study, Chakravarty (2004), by focusing on a case of garment manu­
facturing industry in Hyderabad and the surrounding areas finds that the dis­
crimination against women is not taking place within the labour market. Rather
it is the lack of education in general and technical education in particular that
makes a woman less endowed and thereby bars her entry into the industrial
labour market.

Similarly, Deshpande & Deshpande (1997) has addressed the issue of gender­
based discrimination in India’s urban labour market by examining it across four
lines, viz. employment discrimination, occupational segregation, wage discrimi­
nation and human capital discrimination. It provides an intensive overview of the
existence of gender-based discrimination. However, the analysis remains some­
what imprecise especially in the case of wage discrimination, which is pointed
out merely with a comparative consideration of the earning patterns across var­
ious levels of education. It does not account for labour market experience and
other influencing characteristics like skill, migration status, social class etc.

A study by Gopal (1999) reveals how the women home-based workers remain
disempowered. These workers in spite of being dependent on each other remain
divisive and competent to each other - a situation whose advantages are largely
reaped by the beedi industry. Similarly, Unni & Rani (2005) point out the im­
pact of recent policies on home-based work in India. It observes that there has
taken place an increase in home-based work on account of expansion in mar­
kets. But, the female workers largely remain in the dependent status in vertical
sub-contracting chains, which reveals their vulnerability to market shocks.
Child labour is another aspect considered by a large number of studies. Based on the survey data from two villages in UP, it is pointed out by Lieten (2000) that the children are viewed as an economic asset. It points out that in the Mamdani tradition, the households pursue a conscious strategy of increasing their household size so as to involve children in the labour force. But, in another context, a study by Swaminathan (1998) reveals that even the high economic growth can also be a contributory factor for the child labour. Basing its observations on one of the area recording high economic growth in Western India, it finds that the growth has been associated with an increase in the number of child workers over a long period 15 years. The children are found to be working at repetitive manual tasks requiring least training or experience. It is held that there takes place a ruthless use of children when economic growth is accompanied by the deregulation of the labour market.

Similarly, there have been various studies focusing on the working conditions and the responsible factors behind child labour. An earlier study by Burra (1986) by reporting the narratives of various child workers reveals the sufferings experienced by the child workers in Firozabad's glass bangle industry. It also reveals how the children are made to work under very insecure and poor working conditions. A major reason responsible for the plight of child workers is the parents' practice of seeking advance payments from the employers. Similarly, a study by Ramachandran et al. (1997) relates the employment of child workers in factories with their household poverty. But, it does not find indebtedness as a real factor behind the employment of child labour. But, another study (Bhukuth, 2005) relates the incidence of child labour in brick kilns to child household's indebtedness. It reveals that the parents due to the sheer prevalence of poverty in their households are unable to afford the schooling of their children. Rather, their indebtedness is forcing them to treat their children as active earners in the household. Similar observations are made by Sharma et al. (2005) in the context of Aligarh lock industry. Based on its survey of child workers in this industry, it finds that these are solely the economic pressures that force the children to enter into low-wage and hazardous work environment.

The available research has also indicated that these are the workers belonging to the socially - disadvantaged communities who are relatively more vulnerable than their other counterparts. Banerjee & Knight (1985) have provided a rigorous analysis of the caste discrimination in the Indian labour market. Amongst various scholars, it has been Thorat who has written widely on the discrimination and oppression experienced by the dalits and scheduled castes in India over the period of time.

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25 Ghosh & Sharma (2003) too provide an account of poor working conditions in this industry.
26 Burra (1987) provides evidence on hazardous working conditions in this industry.
27 Some of major works are Thorat (1999); Thorat & Deshpande (2001); Thorat (2002, 2008).
A recent study by Madheswaran & Attewell (2007) has diagnosed the incidence of caste discrimination in the Indian urban labour market on the basis of evidence drawn from the NSSO data. It besides revealing the existence of discrimination against the SC/ST workers in both public and private sectors, points out the large presence of endowment differences as well which clearly indicates the low human capital endowments of the SC/ST workers. Similarly, another study by ITO (2007), by focusing on rural India, finds the existence of transaction costs in the labour market and discrimination against backward classes with regard to their access to regular employment. It also points out that the achievement of India's reservation policy so far has been very limited.

Similarly, Kannan (1988) also reveals that the Harijan workers remain as relatively worse placed. It points out that the Harijan women are engaged in such agricultural operations which are not merely 'unclean' but also back-breaking as well (e.g. weeding). Similarly, in cashew processing industries, these Harijan women workers are confined to unclean operations like shelling.

Finally, some of the literature also relates the migration status with the exposure to vulnerability. As far as the seasonal migration is concerned, Breman (1985) is one the major work available in the context of Gujarat where a great mass of migrants come from various places like the western part of Maharashtra and Surat districts. Jobbers play a large role in getting these workers employed on the farms. These workers come regularly every year and are generally involved in a variety of tasks in the fields. Piece-rate basis is the general mode of payment by which the employers maximise their profits. But, at the same time, this mode of payment enforces not only the workers to work for long time but also their families, especially women and children are employed to undertake a variety of tasks. Surprisingly, the "women remain working in the fields up to the last moment of pregnancy, and sometimes give birth their, too." (p. 239).

Such adverse experience of working conditions by the migrants has remained the focus of a number of other researchers as well. Warrier (2001) provides a detailed account of the plight of migrant women in the fish processing sector. It reveals that these women belonging to the fisher communities of Kerala's coastal districts are employed on short-run contractual arrangements. Their working environments are damp and cold and the living environments are unhygienic. There is a large absence of periodic inspections. Due to which, they remain vulnerable to various diseases. The diseases such as the irritation of eye and nausea, malaria, chickenpox, jaundice, skin rashes, peeling of skin, finger cracks etc. being a few among a large range of diseases experienced by these women. They are also unable to protest due to the fear of losing job. Dewan (2001) too highlight the existence of appalling conditions of work in the bakery units.

Gupta & Mitra (2002) based on the survey of rural migrants in the slums of Delhi point out that there is a high proportion of the poor among those migrants
who have migrated 1 to 5 years ago than among those who have been there in Delhi for 12 to 15 years. Based on this observation, this study opines that the migrants are able to improve their living standard with an increase in their period of stay.

Duraisamy & Narasimhan (1997) emphasise that the aspect of wage discrimination among migrants and the natives has not received much attention. It finds that the migration status has a severe impact on the earnings of the workers. The migrants earn, on an average, 17 percent less than non-migrants in conditions of similar education, experience, training and the industry.

Mosse et al. (2002) in their survey of a stone quarry at Kota, Rajasthan have observed that the work sites are far from safe. There is no provision of safety equipment and the employers do not show much concern at times of accidents. Moreover, there prevails livelihood insecurity especially when the migrant workers are not attached to some contractor. Even if they are attached to the one, there prevails fluctuations in earnings as the workers remains a little assured about the availability of work each day. They also suffer from the intentional delays in wage payments. These workers working the same amount of time are found to be ending up with different amounts of wage receipts that in turn are determined largely by the nature of recruitment, advances and pre-existing debts. The plight of the migrant women is found to be much worse as they have to fulfill domestic and reproductive needs alongwith wage labour.

But, why is it so? A nuanced explanation about the plight of the migrant workers is provided by Gill (1998). It is said that the migrant labour is "paid wages which are lower than the local labour, have longer working hours, and they can be employed at a short notice and are immediately replaceable.... This becomes possible because the migrant labourers at the destination are rootless and marginalised. They have little staying back power, and therefore, are prepared to work at the lowest wage rate. They also cannot afford to go on strike in cases of high handedness shown by the employers as they remain at the fringes of the society and being outsiders suffer social discrimination" (p. 620).

D. Emerging Conclusions and the Scope for Further Research

Thus, we observe that the workers in unorganised sector are vulnerable and there prevails large differences among various workers in their respective exposure to vulnerability. These differences are largely conditioned by structural characteristics of the labour market which remain largely influenced by considerations such as gender, migration status, social class etc.

Our conclusions go in line with what Breman (1999) and Breman (2001) pointed out earlier. As per Breman, the labour market is characterised by contractualisation, enforced migration and casualisation. Moreover, there are sys-
emic biases in employment with respect to caste, gender, education and skill which reinforce their influences in such a way as to leave a large set of working masses in a state of vulnerability and insecurity. So, in such situation, there arises an important research question: Who are those relatively more vulnerable workers among this broad set of vulnerable ones?

One may still focus on the segment of unorganised manufacturing for such exploration as a majority of its workforce, in one sense or the other, is vulnerable. Hitherto, there has not taken place much systematic research that have taken care of various methodological issues. There has been no study which has attempted to conceptualise the nature of vulnerability experienced by workers in this segment. Similarly, the research on the pervasiveness of discrimination in this segment is very much limited.

Therefore, there arises the need for having a comprehensive study for understanding the dynamics of insecurity in the unorganised manufacturing sector. Moreover, the impact of this insecurity at the household level needs to be examined thoroughly as most of the available research has provided only a partial picture of vulnerability by focusing on work-places only and consequently, not much is known about the worker households who are the ultimate bearers and sufferers of pervasive work-place related insecurities.

From a regional perspective, there is not much research on the vulnerability of the working masses in Punjab's unorganised manufacturing sector. Though an earlier study, viz. Singh (1990b) is available, the inferences derived from this study lack generality as its focus is on only one industry, viz. textiles and consequently, one remains without any substantiated notion about the general prevalence of vulnerability in Punjab's unorganised manufacturing sector. Moreover, most of the available research on migrant workers in Punjab has remained confined to those working in the agricultural sector (Grewal & Sidhu, 1981; Singh, 1997; Sidhu & Rangi, 1998). These workers in the manufacturing segment, in spite of representing a significant proportion of the total migrant workers (See, fig. 1.3) have not received much attention. But, there are various issues related with discrimination and exploitation of these workers. The aspect of social class may also aggravate the vulnerability impact.

1.5.2 Objectives

Given this brief review of literature, an overall aim of our study is to understand the dynamics of work-related vulnerability in India's unorganised manufacturing sector by focusing specifically on Punjab. However, this broad objective is addressed by way of following sub-objectives.

28There exists, as per our knowledge and the ISID index, only one study (Chand et al., 1998) on industrial migrant workers in Punjab.
The first sub-objective is to trace the evolutionary dynamism of manufacturing sector in Punjab so as to understand the initial conditions and structural changes that have taken place over the period of time. Along with this, we also wish to examine the post-1990 growth dynamism of unorganised manufacturing in Punjab through a labourist perspective.

The second sub-objective is to explore the disquieting domains of wage work in terms of work-intensity, reward pattern and the exposure to work-related insecurity in Punjab's urban unorganised establishments. Moreover, we also wish to explore the struggle-based survivals of self-employed workers by examining their working patterns and exposure to various insecurities.

The third sub-objective is to examine the dynamics of vulnerability at the household level by way of examining the pattern and incidence of deprivation in worker households along with exploring their exposure to various economic shocks, adopted coping strategies and ex-post impacts of these strategies on the well-being of household members.

Following the analysis of insecurity in the unorganised segment, a fourth sub-objective is to explore first the pervasiveness of vulnerability across other segments of Punjab's economy and then to decipher the underlying reasons for the persistence of vulnerability in an otherwise affluent state who, given its economic position, could have ensured a sound social welfare mechanism to its masses.

1.6 Analytical and Methodological Approach

In the initial stages, the study adopts a historical perspective to understand the conditions that led to the emergence of small-scale manufacturing sector in Punjab. It then adopts a labourist perspective to explore the post-1990 growth dynamism of unorganised manufacturing in the state. Following this, it subscribes to the social exclusion framework (primarily defined by caste and migration status) to explore the differences in wageworkers' exposure to work-related vulnerability. While exploring the dynamics of vulnerability at the household level, it assesses the deprivation status in these households along with having an understanding of their exposure to various shocks and thereby, adopted coping strategies and the consequent impacts.

Finally, in its attempt to understand the pervasiveness of vulnerability in an otherwise affluent state, it adopts the political economy perspective to decipher the existence of fragile social welfare effort.

The study adopts a mix of qualitative and quantitative approaches to add comprehensiveness to the analysis.
While using the qualitative approach, the study does not make use of any software for qualitative data analysis; rather it reports the inferences derived directly from the narratives and recall histories of the workers.

Similarly, while using the quantitative approach, we have applied both the statistical and econometric techniques. Along with descriptive analysis (cross-tabulations etc.) and simple statistics (growth rates, t-test etc.), we have made use of the inferential econometric analysis (like the quantile regression). Moreover, we also build a few indices like 'work-intensity index', 'reward-differential index' and various insecurity indices, deprivation indices and the freedom indices. As a whole, this quantitative approach strengthens the earlier derived inferences (with the qualitative approach) and thus, plays a complementary role in our analysis.

The study also adopts both the subjective and objective approaches of inquiry. The former approach is adopted to trace the incidence of vulnerability and the freedom to decent life - to some extent household deprivation as well but the latter approach is used largely for examining the magnitude of work-intensity, reward differential, earning patterns and the incidence of hourly wage discrimination in Punjab's unorganised establishments.

1.7 Data Inputs

1.7.1 Secondary Data

For background analysis, the study has relied on a variety of secondary data sources like the Census of India, All-India (Third) Census of Small-Scale Industries, National Sample Survey Organisation, Central Statistical Organisation, Labour Bureau etc.

Moreover, the study has utilised, in chapter seven, the information on state-level revenue and expenditure pattern available from the Reserve Bank of India (RBI) publications in addition to the information on state gross domestic product and population figures available from the Central Statistical Organisation. Also, it has made use of electoral statistics available from the Election Commission of India to highlight the dominance of political parties in the state.

1.7.2 Primary Data

The absence of secondary data for addressing vulnerability among working masses has led us to collect first-hand information through our primary survey. This survey has been conducted in the urban segment of Punjab's unorganised manufacturing sector and we have surveyed a total of 75 OAMEs, 125 establish-
ments, 300 wageworkers and 168 households of wageworkers (100) and OAME owners (68). Owing to the constraints posed by space, a discussion on the sample selection procedure, sample size, survey approach, focus of inquiry and the characteristic features of fieldwork sites is provided in appendix.

1.8 Significance of the Study

The present study may be termed as holistic due to its consideration of both qualitative and quantitative aspects related to the vulnerability of the working masses. It delves into not only the work-place related insecurities but explores their impact at household level as well. Moreover, it does not conclude merely with the diagnosis of these vulnerabilities; rather it explores their persistence by locating the existence of negligible social welfare effort - an outcome conditioned by social and political factors in the state. In this sense, one may term this study as a comprehensive research effort to assess the dynamics of vulnerability among the working masses.

Theoretically, this study holds significance as well. It provides a framework for understanding the vulnerabilities of the unorganised manufacturing sector workers. It also introduces a new typology of various work-related insecurities experienced by the wageworkers and the self-employed workers in the unorganised manufacturing sector. At the household level, while capturing the impact of economic insecurity on the household members, it coins the notion of individual's 'freedom from hunger', 'freedom from morbidity' and 'freedom from illiteracy' - all the three freedoms enabling one to lead decent life. Above all, its introspection into the underlying factors responsible for fragile social welfare effort in an affluent state adds to its merit.

1.9 Study Design

The detailed analysis undertaken as per four specific objectives is organised in the form of six chapters that along with the first (introductory) and the final (concluding) chapters constitute the overall design of the study.

The introductory chapter discusses the context of the study, research problem and the approach taken by us throughout the study.

The subject-matter of the first objective is presented in second and third chapters - the second chapter provides an account of the evolutionary dynamism of the manufacturing sector in Punjab and the third chapter, by deriving insights from the analysis of NSSO data, examines the post-1990 growth dynamism of unorganised manufacturing in Punjab with a labourist perspective.
The analysis related to the second objective is presented in the fourth and fifth chapters - the fourth chapter addresses the plight of wageworkers and the fifth chapter reveals the struggle-based survivals of the self-employed workers seeking their livelihoods in Punjab's urban unorganised manufacturing sector.

The sixth chapter provides a detailed account of the analysis performed under the third objective. It reveals the dynamics of insecurity at the household level by examining households' exposure to stress, resilience to various shocks, coping strategies and the experienced outcomes.

Similarly, the seventh chapter addresses the fourth objective of the study. Having observed the severe incidence of vulnerability in the unorganised manufacturing sector, it not only explores the situation in other segments of Punjab's economy but also undertakes an inquiry with political economy perspective to decipher such situation in an otherwise affluent state, who, given its economic capacity, could have provided its masses a sound social welfare mechanism.

And, finally, the last chapter provides summary and conclusions.