Chapter I
Introduction

In the beginning of 1991, Indian economy faced serious problems of deficit financing causing inflation, rising costs of inputs, dwindling foreign exchange reserves, substantial increase in the subsidies and interest payments, and finally revenue expenditure and declining public outlay on agriculture, etc. All these factors forced government to take necessary steps to correct the distortions in the economy. Various economic reforms, such as, liberalization, privatization and cut in subsidies, were introduced as part of the package. The import substituting development strategy hitherto nurtured by the Indian planning regime since 1951 was given up in favour of an export-linked strategy. It is believed that India can no more keep aloof from the rest of the world, particularly if technological advances occurring elsewhere is to be assimilated and adopted to India’s own production requirements. In the post-independence history of India’s economic life, the 1990’s was a totally different decade where practically the whole of the old policy fabric that had doggedly endured itself since the beginning of planning era in 1951, came under change. Foreign investment was now invited by all the regions, in a wide range of areas (Chadha : 2002).

The new economic reforms and structural adjustment program initiated have raised certain issues and there are many divergent views about its implications especially for agricultural and rural development. The advent of WTO, have added another dimension to overall economy of the country in general and agricultural as well as rural development in particular. The globalisation of Indian economy is expected to increase more opportunities for export of agricultural products. It was expected that agricultural scenario might change from growing subsistence low value crops to high value crops for export. This might prove to improve the economic conditions of the farming community, as they will be able to get better prices for their produce in the international market. But in India more than 80 per cent of the farmers cultivate marginal and small land-holdings of less than two hectares and find it difficult to meet the cost of farm inputs, especially purchased inputs. It is most likely that the benefits of globalisation go to large farmers and this will further accentuate the existing disparity in the rural sector (Singh : 1998).
Punjab, until recently the most prosperous state of the country, is in deep crisis. Its agrarian economy is at the cross roads as agricultural production and crop yields have nearly stagnated. Profit margins of the farmers have come down drastically. Farmers are resorting to suicide. Soil resources, which are a critical requirement for sustainable development, have sharply deteriorated because of excessive use of chemical fertilizers and relatively fixed cropping pattern. Underground water table is going down at an alarming rate. Punjab, which is a relatively developed state with requisite irrigation facilities and infrastructure, was projected as a showpiece of India’s successful green revolution strategy. After more than three decades of adoption of new agricultural strategy, focusing on grain production to the exclusion of other foods and cash crops, the agrarian economy of Punjab is in deep crisis due to skewed agricultural base. In the mean time the food scenario at the national level has completely changed from the food shortage of mid-1960s to the burgeoning surpluses of late 1990s which is once again dwindling. In this changed context Punjab’s wheat-paddy dominated agrarian economy is becoming economically as well as ecologically non-sustainable and the state is being treated as if it has become a liability for the nation (Sidhu, 2002 : 32). In the course of time these two crops have seriously affected the employment pattern and employment requirement of the workforce. During the sowing and harvesting periods there is sudden spurt of activity and consequently the need for labourers increases considerably. When the sowing and harvesting operations are over, this demand suddenly disappears.

Going little back to the history of agricultural development in Punjab, it can be seen that the introduction of green revolution wrought a major change in the pattern of rural labour employment. Migrant labour, that previously used to migrate to urban sector only, started migrating to rural Punjab and was available at much lower wages as compared to local labour. However, with the availability of cheap labour, agricultural development took place at a rapid pace. Punjab became as the most flourishing state of India giving rise to particular pattern of employment.

The change in employment pattern and the role played by migrant labour can hardly be underestimated that started with the onset of green revolution during the late 1960s. It is, therefore, not out of place to go into the success story of green revolution before looking into the impact of liberalisation.
The state of Punjab emerged as a champion of green revolution due to favourable conditions, such as, land tenure system with low concentration of land, Jat tribe known for its self-cultivation, and abundant supply of water for irrigation, both from surface and underground resources. In 1970-71, Punjab contributed 8.8 per cent of the total rice and wheat production in the country. In 1999-2000, this share had gone up to 15.1 per cent. For the central pool stock, 45.2 per cent of the total rice and wheat procured in the country comes from Punjab (Venkata Subramaniam : 2002; 11). The green revolution also helped the state by increasing its food grain production from 73.06 lakh tones in 1970-71 to 251.36 lakh tones in 1999-2000. During this period rice production increased from 6.88 lakh tones to 87.16 lakh tones and wheat from 51.45 lakh tones to 158.52 lakh tones. There has been a substantial increase in the production. Not only the production but also the productivity of both rice and wheat increased substantially. However, during the last decade, rice yield remained stagnant around 3.3-3.5 tones per hectare and wheat yield seems to be reaching a plateau. Incidentally, mechanization of various operations and sudden maturation of crops cut short the duration of both sowing and harvesting operations. The process shortened the employment days of casual labour and peasants on the farm. The capitalist pattern of agricultural development not only increased casualisation of the work force but also increased the share of hired labour. The new pattern of labour employment created a paradox of scarcity and surplus of labour in the state. Even now during the peak seasons there is an acute shortage of labour which is met by seasonal migration from UP and Bihar (Gill : 2002).

According to Johl and Sidhu (2001), introduction of improved production technology in a sustained manner over the past three decades and increased mechanization through tractors, pump sets, threshers, etc., along with increase in productivity and cropping intensity, have significantly influenced employment (labour use) in the agriculture sector. In 1971-72 the demand for labour, based on cost of cultivation estimates, was assessed at 443.3 million man-days for crop sector, which increased to 502.85 million man-days in 1985-86 because of an increase in the cropped area and productivity. Green revolution eventually tied down Punjab agriculture to the market from both ends, that is, from input as well as output. The enhanced dependence of agriculture on the market had two contradictory effects on producers as well as labour. On the one hand, the productivity of
agriculture had increased manifolds bringing prosperity to rural Punjab. On the other hand, the penetration of market made agriculture more vulnerable and open to the vagaries of the market.

Commercialization of agriculture is not simply an economic phenomenon. It has direct bearing upon the human relation. In other words, market swallows the relations of cooperation prevalent in the traditional mould and reproduces them in the new form of competitive spirit. In the traditional mode of agricultural production, the economic activity was tied on to the hierarchical order of caste system. The distinction between the social and economic was amorphous. The social relation reproduced by hierarchical order of caste system was sustained by religious sanctity of ‘purity’ and ‘pollution’. The trio of religious-social-economic was so strongly tied together and mutually re-enforcing that it could endure the onslaught of the market forces for a long time. Finally thrust of green revolution cracked open the solid phalanx of the above mentioned trio and unleashed the new social forces that paved the way for new radical social transformation. But the social change, which was brought about by new economic forces, had different effect on different segments of rural social hierarchy. The rural rich managed to share the major chunk of the development cake leaving crumbs for the poor. Studies on rural Punjab have shown that the already deprived, exploited and oppressed sections had more to loose than to gain out of the whirlwind of green revolution. There were many changes that had occurred in the social and economic life of rural labour during the green revolution period.

Some of the important consequences of green revolution were:

1. The displacement of multiple cropping systems with the wheat-paddy/cotton crops leading to the shrinkage in labour demand to a few peak periods of agricultural activity.
2. The extensive mechanization and displacement of demand for manual work.
3. The abrupt rise of the labour demand during the peak agricultural operations paving the way for the influx of migrant labour from the other states.
4. The large-scale in-migrants changing social relations between the employers and the local labour, affecting seriously their collective bargaining power.
5. The new wheat-paddy/cotton cycle affecting the demand for female labour.
In a nutshell, the penetration of the capitalist market into the life and society of rural Punjab has reconstituted the social relations, which seem a radical departure with the past.

Green revolution transformed the entire social and economic conditions of rural Punjab. The traditional way of agriculture, which was carried out largely to meet immediate needs, transformed to profit making. The qualitative change in rural life was not homogeneous for all the categories of rural people. Some of them were adversely affected while the others gained out of the green revolution. This was all true, particularly when we look at another dimension of rural labour, namely, the influx of migrant labour.

To meet the rising demand of labour in agriculture, the labour from nearby and poor states like Uttar Pradesh, Bihar, Madhya Pradesh, etc started migrating to Punjab agriculture. The rise in green revolution stimulated influx of in-migration of labour to rural Punjab. The competition between machinery and manual labour on the one hand and between local and migrant labour on the other transformed the entire labour use pattern in Punjab.

**Migration**

The word migration means the more or less permanent movement of people across a boundary. Lee (1969 : 285) has broadly defined migration as “a permanent or semi-permanent movement of residence. He does not place any limitations on the distance of move or upon the voluntary or involuntary nature of the act. He did not even distinguish between internal or external migration.” Migration is not just a process of people moving from one place to another. Migration has certain impact on both the place of origin and destination. Place of origin is affected as the population moves out creating scarcity of human resources. And at the place of destination, besides adding to the density of population it affects economic, social and cultural life of local people as well as migrants. Migration, like fertility and mortality, holds a place of prominence in analysis of population change in any area. Migration is a process of cultural diffusion, social integration and economic development (Chandana : 1986).

In the light of ongoing structural changes and consequent changing contours of rural economy as a whole, the nature and pattern of migration is also changing over time. Accordingly, the concept of migration now connotes much wider dimension than what
has been conceptualized conventionally. Now the whole spectrum of migration varies from daily commuting to some nearby places on the one hand, to permanent shift of residence to some distant places on the other. Besides this, since rural migrants are not a homogeneous group, the nature and pattern of migration also varies from one to another social group of migrants.

Because of the conventional approach of defining migration, the intensity of migration is generally reported to be very low in India. The two major sources of data on migration in India, the Census and National Survey Sample (NSS) cover only permanent or semi-permanent migration with seasonal migration partly overlapping with the category of short duration migration (Srivastava : 1998). However, even the definitions of permanent or semi-permanent migration adopted in the census and the NSS do not consider long-term migrants without changing the place of residence as migrants. As a result the coverage of these two data sources becomes so restrictive that both of these report declining trends of out migration over the years (Kundu and Gupta : 1996). Contrary to this the National Commission on Rural Labour (NCRL, 1991) found increasing trends of seasonal and temporary migrants over the years. Besides this, many of micro-studies dealing with the issue of migration in the theoretical contest report much higher incidence of out-migration, particularly in the case of underdeveloped regions (Breman : 1978; Ghosh and Sharma : 1995; deHaan : 1999). There is a considerable change in the nature and cause of migration in recent years. Relatively more migration is taking place among the labour force in search of their livelihoods, which is mainly for relatively longer terms (Rodgers and Rodgers : 2000; Sharma et al. : 2000). Migrant labour during the pre-reform period played a very important role in the agrarian economy of Punjab. Before focusing on the effects of liberalisation, it is important to place migration in perspective.

**Classification Of Migration**

Most of the classifications of migration are centered around time, space and direction. The social, demographic, cultural and emotional aspects of classification of migration remain missing or are casually dealt with. For instance, whether migrants move out in groups or in kin’s company or whether migrants are age and sex selective, these
sociological aspects are generally overlooked in the predominantly economic centered migration classificatory schemes.

Migration is generally classified as international and intra-national. International migration has greater political significance. It is because it involves the crossing of political barriers, and geographical and cultural boundaries. But internal migration tends to occur within the same broad cultural and political boundaries. Internal migration does not change the population size of the country as a whole. But it does have impact on social, economic and cultural features of people, it also affect the size and demographic composition of the concerned regions.

Gould and Prothero (1975) have classified migration into four types: rural to rural, rural to urban, urban to urban and urban to rural. Each of this type has different reasons behind it. For example, urban to urban migration can be stimulated by high wages in another city. But it can also be that an officer gets transferred from one city to another. Here in this study the population under study will be the labourers who migrate from economically backward regions to economically developed regions. This migration may be from rural to rural or urban to rural.

The currents of migration in general flow from the areas of limited economic opportunities and retarded social development to the developed and the fast developing areas where migrants can expect greater pecuniary gains and consequently a better level of living and an improved socio-economic status (Premi : 1976 and Singh : 1980). Here we are not interested in reproducing all those classifications such as conservative and innovative by Peterson (1970) and the above classification by Gould and Prothero (1975), as they are well documented.

**Laws and Models**

The phenomenal migration during 19th and 20th century attracted attention of scholars of demography (Zelinsky), economics (Todaro; Lewis) and Sociology (Lee) who looked into the process of migration. The theories and models given by them are used as the basis for new studies on migration. Ravenstein (1880) had developed many generalizations, which are known as laws of migration. His two classic papers have stood the test of time. According to Ravenstein migrants move from the area of low economic opportunities to areas of high economic opportunities. The choice of destination is
regulated by distance; migrants from rural area move first to the nearby towns and then to large cities, each stream of rural-urban migration produces a counter stream of urban-rural migration, although the former tends to dominate the latter, the urban residents are less migratory than the rural, and migration accelerates with improvements in transportation and communication and rapid expansion of trade and industry (Joshi : 1987).

Everett S. Lee (1969), a sociologist built the theory of migration by taking Ravenstein’s laws of migration as the basis of his study. In his framework he tries to analyze the internal migration process. According to Lee, every case of out-migration involves an origin, a destination and an intervening set of obstacles. Lee’s theory reflected in a broad range of studies dealing with migrant selectivity and push-pull factors (Shukl and Chowdhary : 1992).

In Lewis model (1954) the economy consists of two sectors, a traditional, rural subsistence sector characterized by low productivity and surplus labour, and a high productivity modern urban industrial sector into which labour from the subsistence is gradually transferred or migrated. Lewis assumed that the urban wages would have to be at least 30 per cent higher than average rural income to induced worker to migrate from his home areas (Bhardwaj : 1989).

Todaro (1969), claimed to have come to terms with urban employment and underemployment which is almost a universal phenomenon among the under developed countries. Instead of advocating the simple wage differential as the cause of migration, he showed that it is the ‘expected’ wage differential, which matters. He also took into account the period of initial unemployment in the urban setting. The underlying assumption of the model is that the material progress is the function of the gradual but continuous transfer of ‘economic agents from the rural based traditional agriculture to urban job oriented modern industry. The serious imbalance between the rural and urban sectors makes the high rate of employment inevitable in the latter. As first step migrants would be absorbed in the ‘rural traditional sector’ eventually shifting to the modern sector. In Todaro’s model, a migrant take into account two things : the rural-urban real income differential and the probability of obtaining an urban job (Singh : 1995).
According to various research studies different reasons have been assigned which are determinants of migration. Francis Cherunilam (1987) presents five broad factors, which cause migration, viz., economic, demographic, socio-cultural, psychological, political, institutional and miscellaneous factors.

Migration flows are generally noticed from economically backward or stagnating area to prosperous or dynamic area that needs appropriate consideration because economic factors are behind large streams of international, internal, inter and intra-state migration. It may be educative to correlate economic conditions with “push” theory because the push factor or the impelling factor referred to the poor economic conditions and the resultant economic miseries or lack of opportunity for advancement push people out of the region in search of livelihood or better opportunities. The International Labour Organization has also pointed out in its studies that the main push factor causing the workers to leave agriculture is the low level of income (adverse economic conditions) (Singh : 2002).

The above studies have concentrated only upon the transfer or migration of labour from rural to urban sector. The urban sector being more developed attracts the labour class from rural areas. All the above laws and models deal with rural-urban income difference and migration of people. These theories are based mainly on the studies of developed nations. But in the case of developing or underdeveloped countries like India, the conditions are different. In India there are glaring inequalities in terms of economic development between different states. Migration of people is more due to regional uneven development. There is a need to evolve model of migration that would take into account the regional imbalances in the primary sector.

In Punjab two types of migration takes place, viz., emigration (out-migration) and in-migration. One is international migration and other is internal migration. Emigration among Punjab youth to America, Canada, Australia, Gulf and various European countries is a known old phenomenon. And in-migration of labours from poor states like Bihar, Uttar Pradesh, etc to rural Punjab started after green revolution at a fast pace especially during peak agricultural season.
Emigration from Punjab

Migration is an intrinsic part of life for most of the Punjabis. The state seems to rank third, after Kerala and Gujarat in terms of migration as measured by the number of people of Indian origin living outside India. Among the 20 million strong diaspora, it is believed that 10-15 per cent are people of Punjabi origin. It is generally believed that Punjabi migrants have a higher per capita income level than the average Indian migrant (the latter in turn possessing a higher level of income than the national average of their host countries), harbor a strong commitment to maintain their own cultural and linguistic heritage, and seek to preserve their links with the families in India. From humble origins, Punjabi migrants have risen to become one of the highest earning and best educated groups in their host countries and have achieved eminence in a variety of fields. Many wealthy people of Punjabi origin have individual trusts and charities for projects pertaining to health, education or infrastructure in their villages in Punjab (World Bank: 2004).

World Bank also reported that while there are no official estimates of the magnitude of remittances received by the Indian states, the abnormally high deposit to credit ratio and the growing interest of foreign banks in opening branches in Punjab indicate that remittance flows to Punjab are likely to be considerable. Some experts informally estimate the annual remittance flow to be as high as US$ 2 to 3 billion per year, i.e., 12 to 18 per cent of Punjab’s gross state domestic product. While it is difficult to estimate the economic impact of remittances on Punjab’s economy, it is generally believed that the state’s current economic problems would have started much earlier and become more severe in the absence of the large flow of remittances from these migrants.

In-migration to Punjab

The migrant labour, which is available at low wages as compared to local labour, proved to be a boon for farmers of Punjab. Because labourers were available at cheap rate thus their profit multiplied. Migrant labour, being cheaper and in abundant supply, has contributed a lot to the development of agriculture in Punjab.

Migration of labour from other provinces, such as Eastern U.P., Bihar, West Bengal, Madhya Pradesh and Rajasthan, etc., have changed the demographic contours of Punjab and is influencing the vote mix in several constituencies and municipal wards. If such
labour in-migration continues it might lead to significant social and political consequences in the near future. The study of Johl and Sidhu (2002: 27) claims that migrants in Punjab are adding to crime rate.

According to Gill (2000), “though migrant labour had strengthened the economy in Punjab, its continuous flux has also resulted in a host of avoidable problems. This workforce due to abject poverty is driven out from the ‘home’ states (Orisa, Bihar, West Bengal, Madhya Pradesh, Tamil Nadu, Rajasthan, Uttar Pradesh, Dehli, &K and even Haryana) for food, employment, better wages and a better quality of life. Punjab is an attractive destination for these inter-state migrants. Several lakh migrants have made Punjab their “second home”.

In Punjab, agriculture is the mainstay of migrant labour. A study by Punjab Agricultural University has revealed that 1.52 per cent of the migrants are today registered voters. About 55 per cent of the migrant agriculture labour is keen on settling down here permanently. This desire was in mere 12 per cent in 1983-84. Interestingly, at some places migrants have been elected to panchayats and municipalities. While the list of unemployed ‘local’ youth gets longer, the added problems of migrant labour have led to the pressing of the panic button in the state, which is getting more and more dependent upon migrant with the ‘big brother’.

Yadwinder kaur (2000) in her study on role of migrant labour in Punjab comes out with the result that migrants, by and large were in the 20-30 age group, landless, illiterate, married with large families, meager means and in debt. In Punjab, despite initial problems of language and adjustment, they have learnt to adapt food habits, get shelter from employer farmer and receive higher wages than they would have got back home. The local labour is jealous, consider migrants as poachers living off the jobs and wages, which should have accrued to them. Farmer-employer is doubly blessed: he pays less wages, has hands to work for 24 hours and does not depend on ‘unreliable’ local labour who easily get job in the non-farm sector and return to farm when faced with urban layoff. Locals were ever on the lookout for other outlets. Migrant labourers return to the same village and work with the same farmers with whom they directly negotiate wages. The last two-three decades have seen a major influx of migrant labour into Punjab. It is
strangely felt that the day is not far way when migrants could easily upset political calculations.

Sucha Singh (2000) opined that the basic factor for migration from villages to cities, from one state to another and from one country to another was economic. He pointed out that the Punjabi youth, in search of greener pasture, went abroad and likewise migrants from Bihar and other states came to Punjab to earn their living. In Punjab 56 per cent of the people were engaged in agricultural activities in 1991 and now this figure had come down to a mere 39 per cent, implying that the people, particularly the youth, either migrated to cities or have gone abroad. This migration could not be halted but the important matter was that whenever the migrants went they stick to their traditions and culture and not get influenced by other cultures.

Punjab received 55 per cent migrant from the neighboring states of Haryana, Himachal Pradesh, Rajasthan and union territory Chandigarh. It is noteworthy that Uttar Pradesh alone provided one-fourth of the lifetime migrants and 8 per cent came from Bihar. All these states and the union territories of Chandigarh and Delhi accounted for 87.7 per cent of the lifetime migrants. The share of Haryana, Himachal Pradesh, Jammu & Kashmir, Rajasthan and Chandigarh declined to 47.7 per cent in the intercensal stream and 45.2 per cent in the current streams accounting 38.3 per cent and 41.4 per cent respectively of the total inter-state migrants implying that the economic factors of higher wage earnings dominated to a much greater extent in the decision making to move rather than the militancy during the later part of the 1980s which should have severely restricted their migration (Iyer: 2004).

Thus labour migration has social, economic and political consequences for Punjab agriculture. Migrant labourers coming to Punjab especially after green revolution have also affected the labour utilization pattern. They are displacing local labour, hitting hard the employment chances of the latter. The local labour is diverting towards non-farm activities.

**Economic Reforms And Present Scenario**

There was a major shift in India’s development strategy from July 1991. The new strategy was termed as New Economic Policy (NEP). It was mainly based on the IMF – World Bank’s Structural Adjustment Program (SAP). The major planks of the NEP were...
liberalisation, privatization and globalisation (LPG) of the Indian economy whereas the
earlier strategy was largely governed by the planned development with public sector at
the commanding heights. GATT Agreement, 1994 and consequential establishment of
WTO with effect from January 1, 1995, gave a big push to the LPG or economic reforms.

The stabilization program adopted under NEP, particularly the devaluation and
floating of the rupee, has had indirect effects on the whole economy including
agriculture. But the focus of the specific reforms has been almost entirely on
manufacturing with the abolition of most of the shifting system of industrial licensing;
the removal of import licensing from nearly all manufactured intermediate goods, and
capital goods tariff reductions and the relaxation of the rules regulating foreign
investment. By contrast, very little of the reforms effort has so far been directed towards
agriculture in India, though it accounts for two thirds of the employment population and
about 30 per cent of GDP. But the agreement under WTO is bound to have bearing on
agriculture and its employment potential.

The World Trade Organization (WTO) came into effect from 1st January 1995, which
replaced GATT (Singh : 2000).

The main proposals of WTO relating particularly to agriculture are:

1. Tariff and non-tariff barriers on trade of agricultural products are to be lowered
   by 36 per cent in six years in developed countries. While the least developing
countries are not required to reduce such tariffs. The direct export subsidies are
   also to be reduced at the same rate.

2. The aggregate measurement of domestic support to agriculture sector is to be
   limited to a maximum of 5 per cent in developed and 10 per cent of the value of
   production of individual product in developing countries. The subsidies, which
   are given under the mechanism of ‘GREEN BOX’ and ‘BLUE BOX’ are not
   objectionable under WTO rules and regulations.

3. The application of sanitary and phyto-sanitary (SPS) measures necessary to
   protect human, animal and plant life and health are to be followed as per
   international specifications.
4. Compulsory imports by 3 per cent of the domestic requirements of agricultural commodities are to be made except for nations having problems of balance of Payments. This limit will go up to 5 per cent by five years.

Ever since the Indian economic reforms have been initiated, not much emphasis has been given to agriculture, which still employs two third of burgeoning population. Though the share of GDP in sectors other than agriculture is increasing, they have failed to absorb the growing work force on a significant scale. Employment, both in rural and urban sector, has considerably declined during the post liberalisation period. As self-employed population has declined, the casualisation of labour has increased in the recent years. Similarly the growth rates of employment both in public and private sector remains considerably low for a populous and developing country like India. The elasticity of employment to GDP in case of all industries of origin have shown a declining trend over the years and primary sector has shown negative trend during nineties, indicating that the reforms have not percolated much to the rural based agriculture sector. Any strategy for reducing poverty and inequality has to concentrate on employment intensity for overall development of the economy (Datt, 1999 : 3517).

A considerable anxiety is being expressed in some quarters regarding the poor performance of agriculture in the nineties indicating that the process of reforms has bypassed the agricultural sector. Agriculture has been playing a crucial role in the past years in economic development of the country, and will continue to do so in the near future too, as 72.2 per cent of Indian population (Census : 2001) is dwelling in the countryside. Presently, it contributes around 25 per cent of GDP and employs 64 per cent of the work force. However, agriculture cannot be expected to employ a large number of work force indefinitely and also hold its share in overall GDP. It is also argued that while there has been emphasis on trade, industry and the financial sector, attention of the reforms in some sense has not percolated to the agriculture sector (Reddy, 2001).

According to Chadha (2000), as more and more countries are coming within the fold of the WTO, and as the member countries are skeptically and cautiously implementing the WTO obligations, the painful pricks of globalisation are being felt with still greater intensity. The WTO conditions make it mandatory on the member countries (now
approximately 140) to eliminate or dilute to the rock bottom level the tariff and non-tariff restrictions against the free movement of commodities, factors and technologies. These obligations also profess complete revocation of other quantitative restrictions impending unrestrained global trade such as the Multifibre Agreement (MFA)\textsuperscript{6} and various types of anti-dumping measures, particularly those practiced by many industrial countries against imports from developing countries.

The issue of appropriate priority for agriculture in our reform process needs to be explored further in view of the fact that the trends in recent years are clearly indicative of a possible long-term deceleration in agriculture. It may sound ironic that agriculture is one sector where there is convergence of all the three main objectives of economic policy in India, namely, output growth, price stability and poverty alleviation, but we seem to have relegated the sector to the background in the process of economic reforms. In fact, there is a feeling that the economy may face slow down if there is inadequate pick-up in demand from rural areas and the depressed price conditions in agricultural commodities in the recent past have brought to fore the criticality of agriculture sector in enabling Indian economy to maintain a respectable growth rate (Datt, 2001: 14).

**Change in In-migration**

The rising trend of migration to rural Punjab stabilized after early 1990s for various reasons: prolonged period of terrorism and attacks on migrant labourers during this period, changing cropping pattern to suit the market demand that allowed extensive mechanization of agriculture, resulting into displacement of rural labour, and also relatively slow rise in wage rates. These together dampened the flow of migrants from rural Bihar to rural Punjab (Singh: 1995).

According to Anup Karan (2004) a higher percentage of seasonal migrants, are involved in low-paid non-agricultural self-employed occupations such as construction labour, rickshaw pulling, carrying head loads etc. now migrant labour has started offering themselves in non-farm sector as the agriculture sector has become all the more mechanized.

**Employment Pattern after Economic Reforms**

The performance of Indian economy on major macroeconomics parameters such as growth rate, employment, poverty and inequality and external sector, during the post-
reform era, is not better off than in the pre-reform era. The position has rather deteriorated on many counts. The comparison of employment situation between pre-reform decade and the post-reform decade depicts a dismal picture. The annual compound growth rate of employment during 1990-98 was 1.58 per cent compared to 3.13 per cent during 1980-90. The growth rate of employment in allied agricultural activities during the corresponding periods was 1.80 per cent and 5.62 per cent (Ghuman : 2001).

The number of persons employed per sample of 1000 as reported by NSSO for the past three decades is evident from the table below. Among the rural males, the employment has showed a negative trend from 1977-78 to 1987-88. Though there is a slight increase in the subsequent round, however a drastic decline of about 4 per cent can be observed during post reform period. Among the rural females, a very high decline of about 5 and 9 per cent can be seen during 43rd and 55th round, respectively. In all there was a 6 per cent decline in persons employed in rural area during 1999-2000 in comparison to 50th round of 1993-94. It is important to note that even the per sample absolute figures of employment among all categories have shown a significant decline from 27th round to 55th round (Kumar et al, 2001 : 92).

Table : 1.1

<table>
<thead>
<tr>
<th>Round / Year</th>
<th>Male</th>
<th>Per Cent Change</th>
<th>Female</th>
<th>Per Cent Change</th>
<th>Total</th>
<th>Per Cent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>27th (1972-73)</td>
<td>545</td>
<td>-</td>
<td>318</td>
<td>-</td>
<td>*</td>
<td>-</td>
</tr>
<tr>
<td>32nd (1977-78)</td>
<td>552</td>
<td>1.28</td>
<td>331</td>
<td>4.09</td>
<td>444</td>
<td>0.23</td>
</tr>
<tr>
<td>36th (1981-84)</td>
<td>547</td>
<td>-0.91</td>
<td>340</td>
<td>2.72</td>
<td>445</td>
<td>0.23</td>
</tr>
<tr>
<td>43rd (1987-88)</td>
<td>539</td>
<td>-1.46</td>
<td>323</td>
<td>-5</td>
<td>434</td>
<td>-2.47</td>
</tr>
<tr>
<td>55th (1993-94)</td>
<td>553</td>
<td>2.6</td>
<td>328</td>
<td>1.55</td>
<td>444</td>
<td>2.3</td>
</tr>
<tr>
<td>58th (1999-2000)</td>
<td>531</td>
<td>-3.98</td>
<td>299</td>
<td>-8.84</td>
<td>417</td>
<td>-6.08</td>
</tr>
</tbody>
</table>

* Proportions not given in NSS 27th round.
It becomes fairly evident that in peasant economies, with continuing population pressure, small and fragmented agricultural holdings, highly iniquitous land distribution structures, increasing application of labour saving farm production technologies, etc., agriculture alone cannot provide the ultimate answer for rural unemployment and underemployment. The census 2001 has shown the drastic fall of the percentage of agricultural labour from 22.2 per cent in 1991 to 16.4 per cent in 2001.

Labour absorption capacity of agriculture is on the decline in Punjab. Per acre requirement of labour for all major crops, except cotton, declined between 1970-71 and 1983-84. The annual rate of decline was highest for paddy (2.36 per cent), followed by wheat (2.22 per cent), rapeseed and mustard (1.69 per cent), maize (1.61 per cent), bajra (1.34 per cent), sugarcane (0.98 per cent) and jowar (0.25 per cent). Only in case of cotton there was an increase of 0.19 per cent per annum (Bhalla : 1987). Labour absorption per cropped acre declined but overall labour absorption in agriculture increased during the 1970s. The increase in total labour absorption was due to an increase in gross cropped area and shift in cropping pattern from low labour absorption crops towards high labour absorption crops. The major crop, which contributed to this process, was the introduction of paddy in kharif season.

The trend of overall increase in labour absorption in the 1970s was reversed in the 1980s and the 1990s. The total labour absorption in agriculture in Punjab stood at 480.38 million man-days during the triennium ending 1983-84. It declined to 445.56 million man-days during the triennium ending 1992-93 and further to 431.67 million man-days during the triennium ending 1996-97. The overall decline in employment in 1992-93 over 1983-84 is estimated at 7.25 per cent and in 1996-97 over 1983-84 at 10.14 per cent. The major cause of this decline was the sharp decrease in man-days required per hectare in paddy cultivation. The average per hectare labour absorption in paddy, wheat, rapeseed and cotton crops declined by 20.31 per cent between the trienniums ending 1983-84 and 1996-97 (Gill : 2002).

**Increasing Casualisation**

Government of India revealed that casualisation is increasing amongst rural labour. According to NSSO data of Government of India, in Punjab the percentage of
casual labour was 16.67 per cent in 1983 which rises to 26.80 per cent in 1993-94 (GOI : 1990; 1997)

Trends towards a greater casualisation (erratic and low-paid work) of the workforce that was witnessed in the 1980s appears to have continued in the 1990s. Low productivity and inability to absorb the growing labour force make agriculture sector in India witness to a pervasive process of marginalisation of rural people. This process is likely to get intensified in the coming years, raising formidable problems in achieving sustained development of rural areas and rural people (Rao and Hanumappa : 1999).

Non-farm employment

In 1951, non-farm labour productivity was less than twice the corresponding figure for the farm sector. By 1983 this ratio had gone up to more than three is to one. By 1993-94, despite the fact that labour productivity had risen in both sectors, the figure for non-farm sector had gone up to more than four times that for agriculture (Bhalla : 1998).

World Bank report (2004) reveals that Punjab’s employment structure has shifted away from agriculture into the non-farm sector, with only 39 per cent of its work force employed in agriculture in 2001, a drastic fall from 53 per cent in 1991. Punjab has now become the state with the second lowest percentage of work force dependent on agriculture after Kerala. The occupational structure in rural areas has also changed considerably, with a large decline in agricultural labourers as a proportion of the total labour force – Punjab is one of the four states that have witnessed such a decline. By contrast, employment in the rural non-farm sector in Punjab has expanded rapidly over the 1990s, from 28 per cent in 1993-94 to 39 per cent in 1998-99, consistent with the slowdown in agricultural growth rates over the last decade. Also the Schedule Castes, i.e., local labourers are highly represented in agricultural wage labour activities and are particularly under-represented among cultivators. In the non-farm sector, Schedule Castes are more likely to be engaged as casual labour or own enterprises that rely on family labour or specialize in the lower return occupations (e.g., non-mechanized transport services such as transporting goods by animal carts, rickshaw pullers, etc).

There is greater pace of shift of rural labour from agriculture to non-agriculture during the post-reform period. For example, in Punjab the workforce engaged in agriculture in 1983 was 82.5 per cent which reduced to 74.5 per cent in 1993-94 and
further declined to 72.5 per cent in 1999-2000. This is a clear shift from agriculture to non-agriculture sector of rural work force. Also there has been a small decline in the proportion of rural persons offering themselves for work; for them, the labour force participation rate has declined from 44.9 per cent in 1993-94 to 42.3 per cent in 1999-2000 (Chadha: 2002).

Punjab has highest proportion of Schedule Castes (28.31 per cent) that generally work as agricultural labourers and also constitute the weaker social section in the state. The performance of different employment generating schemes for socially backward persons who suffered from various disabilities has been below expectations (Chand: 1999, Planning Commission : 2001). A very large proportion of the labour force in the state is employed in the activities in the unorganized sector. Though this sector has been catering to a large section of the population by providing goods and services at affordable prices and contributing significantly to the state’s income, it does so under severe constraints limiting its capacity to accommodate a larger number of workers (Chand : 1992, 1997). Removal of quantitative restrictions in the wake of deregulation and globalization policies has had an adverse effect on the demand of agricultural and industrial products in the domestic and global markets. Post-liberalization growth of the different sectors in the state has been low as compared to that of the pre-liberalisation period.

The removal of quantitative restrictions is creating problems, certainly the tough competition for Punjab’s agricultural and allied activities. The main activities in the allied agriculture activities are dairy, livestock and poultry. Dairying and livestock have not developed as independent occupations in Punjab. All categories of farmers (mainly small, marginal and middle farmers) and landless agricultural workers are engaged in dairying, mainly as a part-time occupation. It not only generates employment, but also is a major source of regular income throughout the year. Certainly, removal of quantitative restrictions on dairy products would hit hard the dairy activity in Punjab. It would adversely affect a very large number of workers and a significant proportion of income and thereby the entire agricultural economy of India.
Marginalisation

Devinder Sharma (2002) writes that, in India, the poor and hungry continued to be alienated further. Among the multiplicity of the problems confronting agriculture, rapid fragmentation of land holdings is keeping pace with increasing population. Drastic slump in the growth rate of wheat, falling by over 50 per cent from the days of green revolution, steady erosion of the natural resource base and absence of a much needed genetic breakthrough, have taken the shine out of the golden harvest. Heavy application of fertilizers has ruined the soil fertility and exacerbated the problem emanating from leaching of harmful nitrates into ground water. It has also resulted in the near eclipse of organic matter from the fields – all aimed at turning the lands sick and unproductive.

Liberalisation era began in India when over 40 per cent of rural households were landless or near landless, and over 96 per cent of the owned land belonged to the size of groups of marginal, small and semi-medium. The decade of 1981-82 to 1991-92 seems to have witnessed a marked intensification of the marginalisation process – the percentage of small farmers increased from 14.70 per cent to 21.75 per cent (Madaswamy : 2003).

According to Singh and Goel (2001), the marginal (over one hectare area) and small farmers (1-2 hectare land) have negligible marketable surplus. The number of such subsistence farmers is increasing at an alarming rate. In 1985-86, marginal farmers accounted for 57.8 per cent of the cultivators, which increased, to 59.4 per cent in 1990-91. Their number increased by 12.9 per cent within five years. Similar was the case with small farmers. On the other hand, farmers with more than four hectares of land are dwindling down drastically. If the number of small and marginal farmers continues to swell at the same rate, it can create a food security problem with serious dimensions.

The rising proportion of marginal operational holdings every year renders farm operations unviable on these holdings adding to the number of unemployed and under-employed persons. Rising indebtedness of the farming community due to easy availability of finance for productive as well as unproductive purposes especially through informal lending institutions has created serious problems for the peasantry. Capital formation in agriculture has considerably declined. The critical phase, through which the state’s farming community is passing, is the result of policies and farm practices followed over the years, disregarding the dangers of such practices (Chand : 2002).
Indebtedness

In order to increase agricultural productivity, we have been importing expensive seeds and inputs, including agro-chemicals and fertilizers. Nevertheless, till the invocation of WTO conditions, those agricultural inputs could be retransformed through indigenous adaptive research and development (R&D) to generate cheaper substitutes. But now the WTO obligations, particularly the Trade Related Intellectual Property Rights (TRIPS), will not only restrain us from undertaking imitative R&D for a period ranging between 14 to 20 years but also constrain us to lower domestic R&D subsidies in the range of 25 to 50 per cent compared to the previous level of 75 per cent. This implies that the HYV seeds and other expensive inputs will have to be repeatedly imported in each crop period, which may make our agriculture and primary production highly cost ineffective and uncompetitive in the world market, besides creating food insecurity for our poorer masses due to spiraling food prices (Chadha : 2000).

Farmers are finding it difficult to pay back the loans, which they have taken at high rate of interest for buying seeds, fertilizers and other expensive inputs for crops without any financial assistance from the Government agencies. Machinery is bought with these loans whereas from commission agents, debt for consumptive purpose is taken at exorbitant rates. As a result, the Punjab farmers are highly indebted. Unable to pay back these loans and under pressure to alienate land or livestock assets, they are resorting to suicides. The state itself is so highly indebted that its annual debt servicing liability is larger than the annual plan size of the state (Sidhu : 2002).

The burden of debt is also high among the small and marginal farmers. The liability in the form of debt of small and marginal farmers is to the extent of Rupees 1229.58 crore out of the total debt. Per acre debt is the highest among the small farmers (Rupees 10105/-), whereas debt in case of large farmers is Rupees 4230/-. It is also interesting to note that the greater proportion of the debt of small and marginal farmers originated from loans taken for non-productive purposes (Kumar et.al. : 1998).

In Punjab, there has been spurt in the number of suicides since 1993. The number of suicides in Punjab showed continuous increase from the year1988 to 1999. The number which was merely 95 in the year 1988 showed almost ten fold increase and reached to a alarming level of 986 suicides per annum in 1999 after which it showed
declining trend. The increase in the number of suicides in the state may be attributed to the changing agrarian structure, failure of crops particularly cotton in recent years, increasing debt among farming community, increasing unemployment, depleting water resources and increasing cost and deepening the tube wells and increasing spending on social functions by the people in the state. The Punjab farmers are caught in the co-web of the moneylenders due to easy availability of money through private moneylenders. The farmers take loans and sometimes use the money for unproductive purposes like marriage or to meet the day-to-day household consumptive needs. The debt multiplies over time and due to declining returns from agriculture the farmers finds it hard to return the amount (Grover et.al. : 2003).

Punjab’s agriculture is going to face both internal and external challenges under the WTO regime. Globally Punjab’s wheat and rice are becoming more and more non-competitive because of its high-cost, stagnating yield, falling global prices and non-diversification.

So it is clear from the whole sequence that unemployment is increasing in rural Punjab. In such a situation one can well imagine the fate of migrant labour that have been coming to Punjab since the days of green revolution. Today Punjab agriculture is unable to provide employment even to rural local labour, what to talk of migrant labour. The squeeze in labour demand in agriculture has changed the equation between local and migrant labour. There is a pressure on labour to look for employment opportunities in non-farm sector. Some of the categories of labour have been thrown out of the labour market while the others have been re-employed in the changed economic scenario. Casualisation of labour has added another dimension to the pattern of labour use. In this background the present study is conducted with the following objectives.

**Objectives :**

1. To examine the changes in cropping pattern after economic reforms and its relation with the pattern of labour use.
2. To know the different modes of employment of labour within agriculture and their wages and working conditions.
3. To ascertain the extent of rural non-farm employment of migrant as well as local labour.
4. To access the extent of indebtedness among the local and migrant labour.
5. To examine the diversification of the use of migrant labour, if any, after economic reforms.

Methodology

Employment pattern in rural Punjab seems to be influenced by the socio-cultural, ecological and different agricultural practices. Therefore, while selecting villages for study, Punjab is divided into various regions or zones on the basis of above criteria. That is, from the natural ecological point of view, Punjab can be divided into two regions, namely, foothills of Shivalik ranges and plains. On the basis of socio-cultural practices, Punjab can be divided into three zones – Majha, Doaba and Malwa. And lastly on the basis of cropping pattern, Punjab can be divided into two regions, cotton belt in the south and the paddy belt in the rest of Punjab (Appendix I). However, the only winter crop of wheat is quite evenly spread all over the state.

In the light of above three types of divisions of Punjab, we included the following five districts under study namely, Amritsar, Hoshiarpur, Ludhiana, Bathinda and Fatehgarh-Sahib.

The next step towards the village selection was the selection of block from each district that was made, in addition to above criteria used for the selection of district, on the basis of distance from the urban influence. Since it is a study of rural labour the attempt was made to finally select such villages that are relatively free from the urban influences. After the selection of five blocks, one village was randomly selected from each of the block under study. The villages under study are: Gohalwar from Tarntaran block of district Amritsar, Datan from Mahipur block of district Hoshiarpur, Sherpur Bet from Machiwar block of district Ludhiana, Harnaam Singh Wala from Rampura Phool block of district Bathinda and Manhera Jameetgarh from Khera block of district Fatehgarh Sahib.

After selecting block, followed by village selection, detailed information from key informants was collected on the number of households, caste structure and also the occupational structure of the villages. For number of households and caste structure, Anganwadi record was available in each village, which is the best source as it is most
reliable and daily updated record in Punjab. A village profile of each village was prepared before interviewing the respondents. Information from Tehsildar office was also collected.

**Sample**

Labour use pattern cannot be studied in the absence of knowledge about the labour market and the role played by the migrant labour therein. It was, therefore, necessary to study all the three categories, namely – land-owners, local agricultural labourers and migrant labourers.

The land owning households were proposed to be a part of this study because it will give useful insights about the amount and nature (male/female, attached/seasonal, local/migrants) of labour employment in a year. Since the labour utilization pattern vary according to the size of land owned by a household, purposive sampling was made from different levels of ownership of land. A sample of 20 households of land owning cultivators from each village was brought under study, after selecting four households from each categories of marginal, small, semi-medium, medium and large farmers. And similarly 30 landless local labourers’ households were selected from each village. The sample selection of landowners is based on proportionate stratified random sampling procedure. The local labourers sample is based on random sampling procedure. The 100 landowners households and 150 landless local labour households were included in the sample from the five villages under study. The classification of different strata of Landlords or Farmers is given below:

1. Marginal Farmers : upto 2.5 acres
2. Small Farmers : 2.5 to 5 acres
3. Semi-medium Farmers : 5 to 10 acres
4. Medium Farmers : 10 to 25 acres
5. Large Farmers : 25 acres and above

Unlike landowners and local agricultural labour, there was no stable universe for the migrant labourers who are generally temporary visitors to rural Punjab during the peak period of labour demand. The studies conducted so far reveals that migrants work in groups on contract or piece rate wages for particular agricultural operations.
The studies also show that on an average, on a busy season 9 to 10 groups of migrant labourers are absorbed in a village. Therefore groups were contacted through group leaders and information was generated from each and every member of the group. 300 migrant labourers were interviewed for detailed information on migrant labour employment in agricultural and non-agricultural sector in rural Punjab.

**Pilot Study And Pre-Testing**

In order to prepare the final interview schedule, it was necessary to conduct a pilot study. The main thrust of the pilot study was to understand the aspects related to various kinds and modes of employment available for each category of our sample, that is farmers (land-owners), landless local labour and migrant labour and that whether the interview schedule cover all the important aspects related to our study. It helped in gaining insight into the issues involved in present study and also to include appropriate questions in the interview schedule after pre-testing.

The pre-testing done, facilitated in reconstructing each item in the interview schedule in a sharp and pin pointed manner. It also helped in eliminating few redundant questions and including few important ones.

**Tools of Data Collection**

The structured interview schedule was used to collect the primary data of landowners and agricultural labourers. This was supplemented with observation method particularly in case of migrant labourers and attached labourers and non-directive interview for issues like indebtedness and exploitation of labourers. Besides primary data, information from secondary resources is also taken such as census data, statistical abstracts, economic surveys, revenue record of Patwaries and from records of Anganbadi workers of respective villages.

**Notes**

1(a) International migration is a term used to refer to change of usual residence between nations. The term immigration is used to denote the flow of persons establishing a usual residence in a given nation. The term emigration is used to denote the flow of persons relinquishing a usual residence in a given nation to establish residence in some other nation. Net international migration devotes the difference between the
number of persons immigrating to a given nation in a given period and the number emigrating from that nation in the same period.

(b) Internal migration occurs within the boundaries of a given country. Internal migrants are mobile persons who live in the same country at census time as at the date of origin. Internal migrants may be further classified: (i) Intra-state: live in a different place but within the same state. (ii) Inter-state: live in a different state.

(c) Migration flows (i) In-migration: is comprised of migrants arriving at a particular place of destination, with no reference to the place of origin. (ii) Out-migration: is comprised of migrants departing from a particular area, with no reference to the place of destination (Borgatta et al., 2000:1431).

Structural Adjustment Program (SAP): Structural Adjustment Policies are economic policies which countries must follow in order to qualify for new World Bank and International Monetary Fund (IMF) loans and help them make debt repayments on the older debts owed to Commercial banks, Government and World bank. Although SAPs are designed for individual countries but have common guiding principles and features which include export-led growth; privatization and liberalization; and the efficiency of the free market.

SAPs generally required countries to devalue their currencies against the dollar; lift import and export restrictions; balance their budgets and not overspend; and remove price control and state subsidies. Devaluation makes their goods cheaper for foreign imports more expensive. In principle it should make the country wary of buying expensive foreign equipments. In practice, however, the IMF actually disrupts this by rewarding the country with a large foreign currency loan that encourages to purchase imports (Shah: 2005).

Tariff and non-tariff barriers: Tariff are taxes on imports of commodities into a country or region and are the oldest forms of government intervention in economic activity. They are implemented to for two economic purposes. First, they provide revenue for the government. Second, they improve economic returns to firms and suppliers of resources to domestic industry that face competition from foreign imports.

Non-tariff barriers are also known as voluntary export restraints, under this exporting countries would agree to limit shipments of a commodity to the importing country, although often under threat of some even more restrictive or onerous activity.

U.S. commitments under the WTO on market access, options are limited for U.S. policy innovations in the 2002 Farm Bill vis a vis tariffs on agricultural imports from other countries. Providing higher prices to domestic producers by increasing tariffs on agricultural imports is not permitted. In addition, particularly because the U.S. is a net exporter of many agricultural commodities, successive U.S.
governments have generally taken a strong position within the WTO that tariff and tariff rate quota barriers need to be reduced (Sumner : 2002)

1 'GREEN BOX' measures mainly include support/investment/funding by the government for activities such as research, pest and disease control, training, extension and advisory services, environmental programmes, regional assistance programmes limited to the producers in disadvantaged regions, and natural disaster, etc.

(b) 'BLUE BOX' includes product-limiting subsidies. Exemption under 'BLUE BOX' measures refers to direct payments to producers: payments not linked to production, structural adjustment assistance provided through investment aids to compensate for the structural disadvantage through resource retirement programmes, through producers-retirement programmes, government financial participation in income insurance and income safety-net programmes (Ghuman : 2002).

5 Sanitary and phyto-sanitary (SPS) measures: The agreement on the Application of Sanitary and phyto-sanitary measures sets out the basic rules for safety and animal and plant health standards. It allows countries to set their own standards. But it also says regulations must be based on science. They should be applied only to the extent necessary to protect human, animal or plant life or health. And they should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail (Fact Sheet : 2005).

7 Multifibre Agreement (MFA): Trade in clothing and textile is governed by MFA. It is an elaborate system of 'quotas' imposed by developed countries on export from developing countries (Chowdhary : 2002).

7 Trade Related Intellectual Property Rights (TRIPS): This laid down norms and standards for seven types of intellectual property, such as, i. Copyright and related rights, ii. Trademark, iii. Geographical indications, iv. Industrial design, v. Patent, vi. Undisclosed information and vii. Layout design of integrated circuits (www.wto.org/english/tratop_e/trips_e/t_agmo_e.htm).