

Changing Character of Rural Economy and Migrant Labour in Punjab

Lakhwinder Singh, Inderjeet Singh and Ranjit Singh Ghuman
Punjabi University, Patiala

Rural economy of Punjab has been undergoing structural transformation. But the dependence of rural population in general and rural labour in particular for earning livelihood from the rural economy continues. This process of rural transformation has perpetuated the distress among the rural workforce. It is a strange phenomenon that migrant labour continues to pour into the rural areas. The rural economy of Punjab, due to a wage gap, does attract huge inflow of people from other poorer states of India. Rural-rural migration is largely seasonal and the stay of workers in most cases is less than six months. Therefore, the official statistics on migration grossly under record the rural-rural migration. Attempt has been made in this paper to fill this gap. Despite the fact that the rural real wage rate has declined between the period 1990 and 2000 rural-rural migration has increased during the same period. The majority of the migrants (more than 90 per cent) are able to find work in agriculture for only up to 50 days in a year. It has wide ranging implications for the rural-rural migration and on the level of living of migrant families.

Introduction

Migration and economic development are intimately linked. Dualistic development literature viewed internal migration as natural process in which surplus labour can gradually be withdrawn from the agriculture sector to fulfil the increasing demand in the urban industrial sector. This process of economic transformation has been considered socially beneficial because of human resources can be shifted from low paid economic activities (marginal product nearly zero) to rapidly growing economic activities where marginal product is positive (Todaro and Smith, 2004). Thus, economic theory of migration suggests that migration takes place in response to urban-rural differences in expected income. Contrary to this, Jolly (1970) argued that most of these concern looks irrelevant today. The rates of rural-urban migration in less developed countries continue to exceed rates of urban job creation. Dualistic theory of economic development and migration has been criticized that it completely ignored the empirical realities of most of the developing economies where the rural-rural migration is the dominant form than rural to urban. It is being generally observed from empirical literature on migration that the skill levels required for urban migration have increased over time. The skill requirements in urban areas and skill possessed by the agricultural workers have widened substantially. Therefore, the people of poorest areas do not have access to the most rewarding activities in the urban areas.

They migrate to activities, which are seasonal agriculture and also less rewarding. Another important factor that contributes to the flow of rural to rural migration is the improvement of agricultural productivity due to technological progress, which resulted into the improvements in mean income in such regions. The people of the less developed areas are likely candidates for such migration (Haan, 2007). The rural economy of Punjab do attract huge amount of flow of people from other poorer states of India. These workers do engage themselves into low paid agriculture sector related activities both regular and seasonal. The real wage rate in the rural economy of Punjab has declined at the rate of 0.8 per cent per annum between the period 1990 and 2000 (Deshpande, Mehta and Shah, 2007). Rural to rural migration, which is largely seasonal and the stay of workers in most of the cases is less than six months, therefore, excluded from the official records. The place of residence of migrant workers is usually at the place of work, that is, farm and thus is not being recorded during the period of conduct of census. Therefore, the official statistics on migration grossly under record the rural to rural migration. In this paper, an attempt has been made to examine the changing character of rural economy of Punjab and inflows of migrant labour. The paper is organised into seven sections. Section two deals with the changing character of rural economy of Punjab and situates the migrant labour pouring in from other states. The structure of migrant inflows and growth pattern is presented in section three. Fourth section provides state-wise analysis of inflows of migrant labour in urban Punjab. The trends of rural-rural migration are presented in section five. Section six contains discussion regarding the estimated number of migrant workers in the rural economy of Punjab. The concluding remarks are presented in section seven.

Changing Character of the Rural Economy of Punjab

The rural economy of Punjab ushered into the era of economic prosperity with the advent of green revolution in the mid-sixties. The share of agriculture sector in the state domestic product was nearly 53 per cent in the year 1966-67. In the early green revolution period, the rapidly growing agriculture sector increased its relative importance in terms of generating income, the share of this sector in the SDP further increased to 54.27 per cent in the year 1970-71. The rising production and productivity of agriculture sector not only increased the contribution of this sector to the state's economy but also provided number one position in terms of per capita income in the country. The fast rate of growth of productivity and value addition during green revolution period in the agriculture sector has given big push to raise the level of living in the rural economy of Punjab. The most important impact of green revolution on the rural economy of Punjab was a dramatic reduction of the proportion of people living below poverty line. This has happened mainly because of the fact that the available of employment opportunities in the rural areas of Punjab have dramatically improved. The estimated demand for labour (based on cost of cultivation data) was 443.3 million man-days for the crop sector in the year 1971-72. It further increased to 502.85 million labour man-days in the year 1985-86 (Sidhu and

Johl, 2002). During the period of early green revolution, the all along development of rural areas and other sectors of the economy generated huge employment opportunities in Punjab. The higher wage rate and higher level of living conditions also attracted labour force from other states, which was looking for survival. This has led to increase in the inflows of labour force from other states to both rural and urban locations in Punjab.

The green revolution in Punjab dramatically altered the cropping pattern. During the seventies and eighties, the diversified rural economy of Punjab turned towards predominantly wheat-paddy rotation. The number of crops sown in Punjab was 21 in the year 1960-61 and was declined to 9 in 1990-91 and remained so thereafter. The area sown under crops other than wheat declined from 62.74 in 1960-61 to 17.12 per cent in 2004-05. The area under rice increased from merely 6.05 per cent in 1960-61 to 63.02 per cent in 2004-05. Crop diversification index for the winter season declined from 0.79 in 1960-61 to 0.303 in 2004-05 and this index for summer crop season declined from 0.98 in 1960-61 to 0.58 in 2004-05 (Toor, Bhullar and Kaur, 2007). This indicates that there has occurred a clear "reversal" of diversification of the rural economy of Punjab. The assured market and prices of two crops (wheat and Paddy) provided by the state agencies facilitated this transformation. The rate of growth from the agriculture sector proper (crop) income has grown at a nearly 5 per cent per annum during the eighties. The growth rate of state domestic income, during the same period, from dairy sector was higher than the income from agriculture proper (Singh and Singh, 2002). The predominant two cropping pattern of agriculture has governed the technological changes which significantly affected the employment opportunities in the rural economy of Punjab. A rise in the income of rural households, particularly of farmers, increased the capacity of the farm households to employ innovations to further exploit the potential of yields. Thus, the new technological innovations of threshing, tractor, use of pesticides and insecticides, diesel pump sets and electric tubewells increased the use of mechanical power for tilling and harvesting operations (Gill and Singh, 2006). The biological innovations for making crops free from weeds and pest attack started decreasing the demand for labour in most of the operations earlier done by the labour. This kind of technological progress has reversed the early green revolution's peculiar characteristic, that is, the increased labour intensity in Punjab agriculture. The man-days of labour use declined after the mid-eighties in both the wheat and paddy crops. The requirement of man-days per hectare for wheat crop declined from 52.35 to 38.9 from 1985-88 to 1998-2000. For paddy crop, the decline of man-days per hectare was dramatic, that is, 103.60 to 56.32. Mechanical and biological technologies were mainly responsible for the decline in intensity of labour use in the major crops of Punjab agriculture (Sidhu and Singh, 2004). The capitalist pattern of agricultural economic development has increased the share of hired labour. In fact, the Punjab farmers have turned from peasant to managers of agriculture activities. The pattern of technological progress has reduced the sowing and harvesting operation time dramatically that has impinged upon reduction of family labour and spurt in the hired labour. This is a

paradoxical situation of Punjab agriculture, on the one side, during the peak season an acute shortage of labour is being met by seasonal migration from other states and on the other, surplus of local labour during the lean season (Gill, 2002).

During the period of 1990s, the green revolution technology has shown signs of fatigue. Productivity growth stagnated along with near freeze of prices, which resulted into the decline of agriculture sector's contribution to the state income. Growth rate of income generated in the agriculture (crop) proper was less than 1 per cent during the nineties and early years of twenty first century. This has created imbalance in the structure of Punjab state's economy, whereas share of agriculture sector's (Crops and dairying) income has sharply declined in the state domestic product from 54.27 per cent in 1970-71 to 33.70 per cent in 2005-06. But the proportion of workforce engaged in agriculture sector of Punjab continue to be very high, that is, 48 per cent in the year 2004-05. This comes out to be 66.9 per cent of the total rural workforce of Punjab in the year 2004-05. It needs to be noted here that agricultural workforce was as high as 82.5 per cent of the total rural workforce of Punjab in the year 1983. The workforce engaged in the agricultural sector of Punjab has declined to 74.6 per cent of the total rural workforce in the year 1993-94 compared with 1983. It further declined to 66.9 per cent in the year 2004-05 (NCEUIS, 2007). Furthermore, the 90.9 per cent of workforce in Punjab is engaged in the unorganized sector where the wage rate is very low. The workforce working in the agriculture sector, especially agriculture labour, small and marginal farmers, are earning below Rs 20.3 per capita per day, which is called vulnerable by the National Commission on Enterprises in the Unorganised Sector. The low growth of agriculture sector and high dependence of workforce are expected to further worsen the working and living conditions of the rural workforce. This will act as a disincentive for the migratory workforce usually comes to rural areas of Punjab for finding much-needed livelihood. This will either divert these flows to other fast growing states of India or will suffer because of non-availability of necessary skills required to be absorbed in the urban areas.

Migration Inflows in Punjab

There was a dramatic improvement in agricultural productivity with the advent of green revolution, which resulted into rise in per capita income. Intensive agriculture has also increased the demand for labour. The high yielding variety of seeds, irrigation network of canals and tubewells have given big push to multiple cropping pattern. This process of agricultural development created shortage of labour force required for intensive agriculture. The successful and sustained agricultural transformation widened the the gap of per capita income of Punjab compared to other states of India. The poor people of poorer states have started gradually flowing in the state of Punjab.

Table 1: Trends of migration in Punjab: 1981-2001

Year State	1981	1991	2001	Growth rate (Per cent per annum)		
				1981- 91	1991- 01	1981- 01
Bihar	50235 (06.43)	90732 (09.20)	267409 (17.01)	6.09	11.42	8.72
Haryana	248043 (31.74)	298192 (30.41)	361766 (23.02)	1.85	1.95	1.90
Himachal Pradesh	112289 (14.37)	136134 (13.80)	165158 (10.51)	1.94	1.95	1.94
Rajasthan	91879 (11.76)	110853 (11.24)	136168 (8.66)	1.90	2.08	1.99
Uttar Pradesh	220216 (28.18)	280350 (28.42)	517351 (32.92)	2.44	6.32	4.36
Madhya Pradesh	15556 (01.99)	15717 (1.58)	30559 (1.95)	0.10	6.87	3.43
West Bengal	12970 (01.66)	18635 (01.89)	45902 (2.92)	3.69	9.43	6.52
Jammu & Kashmir	30223 (03.87)	36108 (03.66)	47349 (3.01)	1.80	2.75	2.27
Total of eight states	781411 (95.02)	986621 (87.61)	1571662 (89.67)	2.36	4.77	3.56
Total	822377 (100.00)	1126149 (100.00)	1752718 (100.00)	2.59	4.52	3.55

Source: Government of India, **Census** (various issues).

Note: Figures in parentheses are percentages.

The total migrants reported in the census 1981 were of the order of 8,22,377 persons (table 1). This was increased to 11,26,149 persons in 1991. The annual rate of growth of migrants in Punjab during the period 1981 to 1991 was of the order of 2.59. The inflow of migrants increased sharply during the decade of 1991 to 2001. The total number of migrants increased from 11,26,149 in 1991 to 17,52,718 persons in 2001. The rise in flows of migrants in Punjab during the period 1991-2001 was quite sharp. The annual rate of growth comes out to be 4.52 per cent, which is higher than the previous decade.

The compound growth rate of migrant inflows to Punjab was 3.55 per cent per annum during the period 1981 to 2001. The overall growth rate is higher than the first decade that is 1981 to 1991 compared with the 1991 to 2001. This implies that the migrant flow to Punjab was higher in the decade of 1991 to 2001 than that of the 1981 to 1991. However, the similar trends can also be seen from table 1 so far as the growth rates of migrants coming from other important states are concerned.

The perusal of Table 1 reveals an important fact that the compound rate of growth of migrant inflows from Bihar was the highest compared to other states.

There was a sharp rise in the migrant inflows from Bihar state to Punjab. When we compare the structure of migrant inflows, Haryana tops in the year 1981 with 31.74 per cent migrants recorded in Punjab were from Haryana. Uttar Pradesh with 28.18 per cent of the migrant inflows to Punjab was ranked number two. Himachal Pradesh and Rajasthan ranked number 3 and 4 recorded migrant inflows shares 14.37 and 11.76 per cent respectively. Bihar state comes at number 5 so far as migrant inflow proportion in 1981 is concerned. The eight important states in terms of migrant inflows together covered nearly 90 per cent of migrant inflows to Punjab. The analysis of the changing structure of migrant inflows presented in Table 1 clearly shows that Uttar Pradesh has emerged as the most important state that sends migrants to Punjab. This is contrary to the widely held belief that the majority migrant inflows are from Bihar (Singh, 2006). However, the proportion of Bihar migrants in total migrants from other states to Punjab has sharply increased and Bihar is now ranked at number 3rd in 2001 and improved its rank from 5th in 1981. On the whole, the higher growth rate than the average of all states of India was recorded by four states, that is, Bihar, West Bengal, Madhya Pradesh and Uttar Pradesh during the period 1991 to 2001. The relative shares of migrant inflows in Punjab from these four states improved, but the share of migrants declined for rest of the states included in the analysis.

Migration Inflows in Urban Punjab

The structure and growth rates of migration inflows to urban Punjab from rest of the states are presented in table 2. The perusal of the table 2 reveals that the highest proportion of migrant inflows in the year 1981 was from Uttar Pradesh. The share of Uttar Pradesh was 38.02 per cent among the eight states. Haryana, Himachal Pradesh and Rajasthan occupied 2nd, 3rd and 4th position in terms of migrant inflows to urban Punjab in the year 1981. Bihar state having its share of urban migrants only 6.41 per cent in 1981 and was ranked number 5th. However, the average annual growth rates for the two decade period under consideration clearly shows that the migrant inflows to urban Punjab took place from Bihar has grown at a fast rate. West Bengal, Uttar Pradesh and Madhya Pradesh have recorded higher annual compound growth rates compared with the overall average of all the states.

Table 2: Structure and trends of urban migration in Punjab: 1981-2001

Year State	1981	1991	2001	Growth rate (per cent per annum)		
				1981- 91	1991- 01	1981- 01
Bihar	26039 (06.41)	58348 (10.88)	184992 (19.42)	8.40	12.23	10.30
Haryana	101607 (24.99)	117582 (21.92)	162931 (17.10)	1.47	3.32	2.39

Himachal Pradesh	58719 (14.44)	70812 (13.20)	93063 (09.77)	1.89	2.77	2.33
Rajasthan	38092 (09.37)	45603 (08.50)	59632 (06.26)	1.82	2.72	2.27
Uttar Pradesh	154568 (38.02)	206480 (38.49)	381625 (40.05)	2.94	6.39	4.62
Madhya Pradesh	6125 (01.51)	9537 (01.78)	16749 (01.76)	4.53	5.79	5.16
West Bengal	6297 (01.55)	10255 (01.91)	30553 (03.21)	5.00	11.53	8.22
Jammu & Kashmir	15092 (3.71)	17822 (03.32)	23265 (02.44)	1.68	2.70	2.19
Total	406539	536439	952810	2.81	5.91	4.35

Note: Figures in parentheses are percentages.

The structure of migrant inflows has changed dramatically during the period 1981 to 2001. Uttar Pradesh not only retained its first position rather improved its share in urban migrants. It is important to note that nearly 40 per cent of the urban Punjab migrants just came from the state of Uttar Pradesh as per the census of 1991. Bihar emerged as the second largest so far as migrant inflows to urban areas of Punjab are concerned. Haryana and Himachal Pradesh relegated to third and fourth position.

The West Bengal state has improved its relative position from 1.55 per cent in 1981 to 3.21 per cent in 2001 and recorded 8.22 per cent per annum growth rate between the period 1981 and 2001. The growth rate of migrant inflows from West Bengal to urban areas of Punjab is comparable to Bihar during the period 1991 to 2001.

Rural Migration in Punjab

Rural economy of Punjab received 4,04,657 persons from other states of India in the year 1981. Rural migrants registered increasing trend between the period 1981 and 1991. However, the rate of growth was 2.08 per cent during the same period. Rural migrants registered fast growth between the period 1991 and 2001 and the growth rate was nearly 3 per cent per annum. Among the eight states, which cover nearly 93 per cent of the total rural inflow of migration from other states, have been selected for analysis. Haryana occupies first position from where largest migrants came from. The proportion of migrants from Haryana was 39.06 per cent in 1981, which increased 40.10 per cent in 1991 and dwindled to 32.13 per cent in 2001. It is important to note here that Haryana state occupied rank one during the period of analysis. The rate of growth of migrant inflows from Haryana to rural Punjab was more than 2 per cent during the period 1981-1991 which was higher than overall as well as of the eight states average growth rate. However, the growth rate of migrant inflows declined to nearly one per cent during the period 1991 to 2001. This increase

was lower than overall growth rate as well as of the eight states average growth rate.

The total number of migrants, which came to rural areas of Punjab from rural areas of Uttar Pradesh was of the order of 65,648 in the year 1981. The proportion comes out to be 17.51 per cent. According to the proportion of migrants, Uttar Pradesh was ranked number two among the eight important states under consideration. The rate of growth of migrants from Uttar Pradesh to rural areas of Punjab was nearly one per cent during the period 1981 to 1991, which was below the overall as well as combined eight states growth rate. Therefore, the proportion of migrants declined to 16.41 per cent in 1991 (Table 3).

There was a sharp rise in the growth rate of migrants from Uttar Pradesh to rural areas of Punjab during the period 1991 to 2001, which was 6.62 per cent per annum. Therefore, the relative share of Uttar Pradesh dramatically improved to 21.93 per cent, which is more than 5 percentage point shift. Rajasthan and Himachal Pradesh occupied ranks 3rd and 4th in the year 1981 lost to the state of Bihar where the rate of growth was very high during both the decades. Bihar rose to the 3rd position in the year 2001 so far as relative shares of migrant inflows to rural areas of Punjab are concerned. Another important source, which has been sending substantial number of migrants to rural Punjab, was the state of Jammu and Kashmir. However, the rate of growth of migrants from J&K remained slightly below average of other states. Thus, the relative share of migrants from Jammu and Kashmir declined marginally in 2001 compared with 1981 and 1991. The growth rate of migrant inflows from West Bengal to rural areas of Punjab was 2.30 per cent per annum between 1981 and 1991. This growth rate dramatically increased during the period 1991 to 2001 and was of the order of 6.24 per cent per annum. The structure of rural migrants from other states remained quite stable except that the relative share of Bihar improved dramatically. Rural to rural migration from other states to Punjab has increased during the period of analysis but the growth was slow compared with the migrant inflows to urban areas of Punjab.

Table 3: Structure and trends in rural migration in Punjab: 1981-2001

Year State	1981	1991	2001	Growth rate (Per cent per annum)		
				1981- 91	1991- 01	1981- 01
Bihar	24196 (06.45)	32375 (07.19)	82417 (13.32)	2.95	9.79	6.32
Haryana	146436 (39.06)	180519 (40.10)	198935 (32.15)	2.11	0.97	1.54
Himachal Pradesh	53570 (14.29)	65322 (14.51)	72095 (11.65)	2.00	0.99	1.50
Rajasthan	53787 (14.35)	65250 (14.49)	76536 (12.37)	1.95	1.61	1.78

Uttar Pradesh	65648 (17.51)	738701 (16.41)	135726 (21.93)	1.19	6.62	3.70
Madhya Pradesh	9431 (02.52)	6181 (01.37)	13810 (02.23)	-4.14	8.37	1.92
West Bengal	6673 (01.78)	8380 (01.86)	15349 (02.48)	2.30	6.24	4.25
Jammu & Kashmir	15131 (04.04)	18286 (04.07)	24084 (03.87)	1.91	2.79	2.35
Total of eight states	374872 (92.64)	450182 (90.52)	618852 (93.13)	1.85	3.23	2.54
Total Punjab	404657 (100.00)	497312 (100.0)	664468 (100.00)	2.08	2.94	2.51

Estimates of Migrant Labour in Rural Punjab

The pattern of migrant inflows in rural economy of Punjab as ascertained from 36 sampled villages is presented in table 4. The analysis of the table 4 reveals that there are two types of migrant workers working in the agrarian economy of Punjab. One, the workers engaged in regular kind of activities being done by agriculture households and enter into a contract for one year or beyond are called attached or regular workers. Two, the workers hired by the farm households during the peak season, that is, harvesting and sowing are called casual workers. The highly developed villages of Punjab hire major proportion of both types of migrant workers, that is, regular and casual. The hiring pattern of casual workers across village development levels clearly shows that level of development of village and hiring practices are positively correlated. This pattern also holds true across farm size classes. Region wise distribution of regular/attached migrant workers and casual migrant workers brings out the fact that more than 75 per cent of migrant workers work in *Malwa* region. *Majha* region attracted more than 16 per cent of the migrant workers both regular and casual. The migration inflows in rural areas of *Doaba* region are quite low.

Table 4: Migratory attached and casual labour in sampled villages across the regions and development levels in Punjab

Labour Characteristics		Number of attached labourers		Number of casual labourers	
		Total	Per village	Total	Per village
1.	Low	146	12.17	618	51.50
2.	Medium	80	6.67	793	66.08
3.	High	162	13.50	841	70.08
Total		388		2252	
Size of Holdings		Total	Per	Total	Per

			operational holding		operational holding
1.	Upto 2.5	13	0.03	51	0.10
2.	2.5-5.0	101	0.18	305	0.55
3.	5.0-10.0	99	0.17	455	0.79
4.	10.0-15.0	51	0.22	343	1.48
5.	15 and above	124	0.40	1095	3.54
Total		388		2252	
Regions		Total	Per village	Total	Per village
1.	<i>Majha</i>	62	6.89	375	41.67
2.	<i>Doaba</i>	33	5.50	117	19.50
3.	<i>Malwa</i>	293	13.95	1760	83.81
Total		388	10.78	2252	62.56

Source: Field survey.

On the basis of inflows of migrant workers in the 36 villages of Punjab, we have estimated total number of migrants from other states to rural Punjab and the same are presented in table 5. Total estimated number of migrant workers working in rural areas of Punjab comes out to be 8,19,254 persons. This is 23.04 per cent of the agricultural workforce engaged in the agriculture sector activities. It comes out to be 58.35 per cent of the rural agricultural labour in Punjab. The casual migrant workers working in agriculture sector of Punjab were 6,95,615 persons. The casual or seasonal migrant workers alone come out to be 19.57 per cent of the total agricultural workers of Punjab. Their proportion in rural agriculture labour comes out to be 49.54 per cent. The higher migrant inflows were recorded in *Malwa* region of Punjab.

This region has hosted 6,01,944 persons both regular and casual. *Majha* region is ranked 2nd as far as the migration inflows are concerned. The total number of migrant workers which came to *Majha* region were 1,32,236 persons in the survey year. The proportion of the estimated number of migrant workers of *Majha* region comes out to be more than 16 per cent. The incidence of casual migrant inflows of workers is quite low in the *Doaba* region. The proportion of regular migrant workers hired by the *Doaba* region was 15.14 per cent of the total estimated number of regular/attached migrant workers. This proportion is nearly equivalent to the *Majha* region. The perusal of the table 5 shows that the high degree of concentration of migration inflows in the *Malwa* region. This is because of the fact that the size of villages, farm size and geographical area is large. Therefore, the inflows of migrant workers are also higher.

Table 5: Estimated number of migrant workers across the regions in Rural Punjab

Regions	Types of workers	Regular/attached workers in numbers	Casual/seasonal workers in numbers
<i>Majha</i>		19,019	1,13,217

	(15.38)	(16.28)
<i>Doaba</i>	18,716 (15.14)	66,358 (09.54)
<i>Malwa</i>	85904 (69.48)	5,16,040 (74.18)
Total	1,23,639 (100.00)	6,95,615 (100.00)

Note: Figures in parentheses are percentages.

The estimates of number of migrant workers are based on the actual data collected from 36 sampled villages spread over to 12 districts of Punjab. From the actual number of migrant workers, we have derived the average number of migrant workers employed in a village in each region of Punjab. This derived average, then was multiplied with the total number of villages of each region to arrive at the estimated number of total migrant workers employed in Punjab. It needs to be mentioned here that the mechanization, new variety of seeds and use of herbicides have squeezed the peak period of employment of farm labour in Punjab.

Our study shows that peak season employment of casual labour in a year is at the maximum between 50 to 75 days, across the operational holdings. More than 90 per cent of the casual workers can only get employment up to 50 days in rural Punjab. Another study (Rangi, Sidhu and Singh, 2004) also shows nearly the same results. The study of the migrant workers from other states of India is being continuously reduced due to the shrinkage of the peak period work in rural Punjab. This fact needs to be taken care of when one views the implications of the influx of migrant farm labour in Punjab.

Concluding Remarks

It is a widely held view that migration and economic development are closely connected. The workforce, especially of poorer households and relatively poorer regions, migrates in search of better employment opportunities. Punjab state has been continuously receiving substantial amount of migrant work force since the ushering in of green revolution. The total number of migrants increased from 8,72,377 in 1981 to 17,52,718 persons in 2001. The growth rate of migrant population during the period 1981-2001 was 3.55 per cent per annum. The inflow of migrants increased at a fast rate during the 1990s compared with the eighties. Uttar Pradesh and Haryana were the major sources, which have supplied migrants to Punjab state. The growth of migrants also increased in Punjab from Bihar but still their proportion remained quite less compared with the proportion of migrants from Uttar Pradesh and Haryana. However, the urban migrants are predominantly from Uttar Pradesh and Bihar. The proportion of Uttar Pradesh, among the eight major sender states, migrants in urban areas of Punjab was 40 per cent and that of Bihar was only 19.42 per cent in the year 2001. Haryana and Uttar Pradesh remained predominant so far as rural-rural

migrants from other states to Punjab are concerned. The rural to rural migration has increased but at a lower pace compared with influx of migrants to urban areas of Punjab. It is generally believed that Census do not record migrants whose stay in the state is less than six months. Therefore, this leads to an under estimation of migrant inflows.

The study has attempted to provide estimates related to regular/attached and casual workforce coming to Punjab in search of earning livelihood. The total estimated number of migrant labourers working in agriculture sector in Punjab comes out to be 8,19,254 persons. This is 23.04 per cent of the agricultural workforce in the state. The regular/attached labourers were just 1,23,639 persons. However, the large chunk of migrant workforce comes to Punjab as casual labourers. The estimated number of casual migrant labourers is 6,95,615 persons. The majority of these migrant workers (more than 90 per cent) are able to find work in agriculture only up to 50 days in a year. There are three peak seasons - wheat harvesting, paddy sowing and paddy harvesting – when the migrant workers are most needed in Punjab and after the peak season they usually go back to their respective native places. Some of them shift to urban areas of Punjab, during the lean season of agriculture.

References

Deshpande, R. S., P. Mehta and Khalil Shah (2007) 'Crop Diversification and Agricultural Labour in India', *Indian Journal of Labour Economics*, Vol.50, No.4.

Gill, Anita and Lakhwinder Singh (2006) 'Farmers Suicides and Response of Public Policy: Evidence, Diagnosis and Alternatives from Punjab', *Review of Agriculture, Economic and Political Weekly*, Vol. XLI, No. 26, June 30-July7.

Gill, Sucha Singh (2002) 'Agriculture, Crop Technology and Employment Generation in Punjab', in S.S. Johl and S.K. Ray (eds.) *Future of Agriculture in Punjab*, Chandigarh: CRRID Publishers.

Haan, Arjan de (2007), 'International Migration in an Era of Globalisation: Has it Come Out of its Marginality?' in George Mavrotas and Anthony Shorrocks (eds.) *Advancing Development: Core Themes in Global Economics*, Hampshire: Palgrave Macmillan.

Jolly, Richard (1970), 'Rural-Urban Migration: Dimensions, Census, Issues and Policies', in *Prospects for Employment Opportunities in Nineteen Seventies*, Cambridge: Cambridge University Press.

NCEUS (2007), *Report on Conditions of Work and Promotion of Livelihood in the Unorganised Sector*, National Commission on Enterprises in the Unorganised Sector, Government of India, New Delhi.

Rangi, P.S., M.S. Sidhu and Harjit Singh (2004), 'Casualisation of Agricultural Labour in Punjab', *The Indian Journal of Labour Economics*, Vol. 44, No. 4, 957-970.

Sidhu, R.S. and S.S. Johl (2002) 'Three Decades of Intensive Agriculture in Punjab: Socio-Economic and Environmental Consequences' in S.S. Johl and S.K. Ray (eds.) *Future of Agriculture in Punjab*, Chandigarh: CRRID Publishers.

Sidhu, R.S. and Sukhpal Singh (2004) 'Agricultural Wages and Employment', *Economic and Political Weekly*, Vol. XXXIX, No.37.

Singh, Lakhwinder and Sukhpal Singh (2002) 'Deceleration of Economic Growth in Punjab: Evidence, Explanation and A Way Out' *Economic and Political Weekly*, Vol.XXXVII, No. 6, February 9.

Singh, Ram (2006), *Migrant Labour in India*, New Delhi: Classical Publishing Company.

Tadaro, M.P. and S.C. Smith (2003), *Economic Development*, Delhi: Pearson Education.

Toor, M.S., A. S. Bhullar and Inderpreet Kaur (2007) 'Agriculture-Led Diversification and Labour Use in Punjab: Potentials and Constraints', *Indian Journal of Labour Economics*, Vol.50, No. 4.