SOCIO ECONOMIC CONDITIONS AND EMPLOYMENT STATUS OF AGRICULTURAL LABOURERS IN BATHINDA DISTRICT OF PUNJAB

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In

Development Economics

By

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DECLARATION

I declare that the dissertation entitled “SOCIO ECONOMIC CONDITIONS AND EMPLOYMENT STATUS OF AGRICULTURAL LABOURERS IN BATHINDA DISTRICT OF PUNJAB” has been prepared by me under the guidance of Dr. Naresh Singla, Assistant Professor, Centre for Economic Studies, School of Social Sciences, Central University of Punjab. No part of this dissertation has formed the basis for the award of any degree or fellowship previously.

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CERTIFICATE

I certify that HONEYMEET SHARMA has prepared her dissertation entitled "SOCIO ECONOMIC CONDITIONS AND EMPLOYMENT STATUS OF AGRICULTURAL LABOURERS IN BATHINDA DISTRICT OF PUNJAB", for the award of M.Phil. degree of the Central University of Punjab, under my guidance. She has carried out this work at the Centre for Economic Studies, School of Social Sciences, Central University of Punjab.

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ABSTRACT

"Socio Economic Conditions and Employment Status of Agricultural Labourers in Bathinda District of Punjab"

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The structural transformation process in Punjab has reduced income generation in rural economy. The worst sufferers are marginal and small farmers and agricultural labourers. The principal mode of production is shifting from cultivation of operational holdings to wage labour employment. This type of structural change in rural labour employment has wider social, economic and political implications that draw serious attention. It is in this context that an attempt has been made to study the socio- economic conditions of agricultural labourers and their employment pattern in Punjab. The study has been carried out in Bathinda district of Punjab as it is a major cotton growing area and cotton is more labour intensive as compared to other crops such as paddy and wheat. A sample of 100 agricultural labourers was taken with 50 respondents from two blocks each.

An analysis of socio – economic conditions of agricultural labourers shows that most of the agricultural labourers are illiterate, landless and unskilled and belonged to scheduled caste. Although they used electricity, but they have to either share it with their neighbours or stole it from main electricity wire. Similarly, they did not have any water supply connection, but they used water facilities from neighbours and common places such as *dharmsala* and *gurudwaras* etc. Only 27

per cent of agricultural labourers had cooking facilities. Level of indebtedness was higher among female agricultural labourers (46 per cent) as compared to that among male agricultural labourers (22 per cent). In order to come out of indebtedness, they had to sell their labour by working more on the landlord's farms. Male agricultural labourers carried out all the activities on farm, while female agricultural labourers did only some of the activities such as wheat harvesting, paddy transplanting, cotton picking, plucking of cotton bolls etc. All these works were mainly casual in nature. The average employment days in male agricultural labourers and female agricultural labourers were 234 and 110 in farm sector, and only 46 and 97 in non-farm sector respectively. There also existed wage disparities across Male agricultural labourers and female agricultural labourers. Thus, the study suggested that improving education and imparting skills will improve their bargaining power in labour market in both farm and non-farm sector. Since both male agricultural labourers and female agricultural labourers generally carried same work on farm, same wage should be provided to Male agricultural labourers and female agricultural labourers. Finally, the study concludes with some policy suggestions.

Honeymeet Sharma Dr. Naresh Singla

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LIST OF ABBREVIATIONS

S.No.	Full form	Abbreviation
1.	Agricultural Labourers	ALs
2.	Mahatma Gandhi National Rural Employment Guarantee Act	MGNREGA
3.	Below Poverty Line	BPL
4.	Self Help Group	SHG
5.	Gross Domestic Product	GDP
6.	Agricultural Labour Households	ALHs

Chapter 1
Introduction

1.1 Overview

Although agriculture and allied sectors in India contribute only 14 per cent to gross domestic product (GDP), its role in the economy is much bigger as about 58 per cent of the population is employed in this sector only (Economic Survey, 2012-13). In Punjab, about 67 per cent population depends on agriculture and allied activities (Khanna, 2011). The share of agriculture and allied sectors in GDP in Punjab is about 24 per cent in 2010-11 (GOP, 2012). The structural transformation process in Punjab has reduced income generation in the rural economy. The impact was more visible on marginal and small farmers. These farmers, finding their landholding inadequate to support the rising number of dependent family members, started to work as agricultural labourers. The principal mode of livelihood is thus shifting from cultivation of operational holdings to wage labour employment. During the last one and half decades, due to non-viability of farming, about two lakh marginal and small farmers have given up self-cultivation in Punjab (Singh, 2009). Thus, in order to earn their livelihood, they work as agricultural labourers. According to Census of India, 2011, there are about 8.61 crore agricultural labourers in India, out of which about 36 per cent are female and about 64 per cent are male workers.

Agriculture sector has been experiencing a downfall for the last two decades in terms of stagnating yields and rising costs (Ghuman, 2008). The growth rate in wheat and paddy declined to 2.09 per cent and 1.59 per cent respectively during last decade. Although in case of cotton, growth rate in productivity revived to 10.39 per cent largely due to emergence of Bt cotton (Sidhu *et al.*, 2011). The shrinking net income has led to economic distress. Unemployment in general and rural unemployment in particular has become serious phenomena in Punjab. In Punjab, there are around 11.68 lakh agricultural labourers (Table 1.1). Of these, about 87 per cent labourers are male and remaining 13 per cent labourers are female. Thus, about 13.8 per cent of the work force in Punjab is comprised of agricultural labourers.

Table 1.1

Structure of Work Force of Main Workers in Punjab

Workers	2011(in lakh)
Cultivators	18.03 (21.35)
Agriculture labour	11.68 (13.82)
Industrial workers	3.00 (3.56)
Other workers	51.78 (61.28)
Total workers	84.50 (100)

Source: Census of India, 2011

Agricultural labourers are also involved in government sponsored employment schemes such as Mahatama Gandhi National Rural Guarantee Act (MGNREGA). MGNREGA is a unique programme for providing livelihood security to the resource poor people in rural India. The Act was passed and implemented in 2005 with a provision to secure 100 days work in a year, which now has been revised to 150 days. In absence of work under MGNREGA, the job card holders are paid unemployment allowance.

The system of labour hiring is generally based on widespread use of long-term labour. There are three kinds of agricultural labourers. First, the casual workers who, like everywhere else in India, did all kinds of agricultural work on short-term (time-rated or piece-rated) contract basis. Second, the *siris*, are long-term workers and are also paid a share in produce as wage. Although *siris* were all men, the *siri* contract usually included the use of labour power of all family members of the *siri.* Farm servants (*naukar)* are the third type of agricultural workers. These usually under a long-term (typically annual) contract with a specified fixed wage paid mainly in cash. Farm servants were always men. Between the two types of long-term workers, *siris* and *naukars*, hiring *siris* is also widely used practice (Rawal, n.d.). Casual labourers are engaged generally during peak period for work. They are daily wage at the market rate. Agricultural male labourers usually work in irrigation, fertilizer application, spraying of pesticides, sowing and harvesting operations (Ghuman *et al*, 2007). Female labourers also assist their male counterparts. Women labourers also participate in harvesting, weeding, transplanting and irrigation management. The majority out of these performed operations along with men (Sidhu, 2011). With the fast growth of technology and

its application in agriculture, female labour participation in productive work has become more convenient and accessible like in handling of fodder cutter, sprinkler irrigation, tube well irrigation, weeding, threshing, floriculture, horticulture, seeds production etc. thereby, sparing male labour to do additional productive work (Rana *et al*, 2004).

Female participation in agriculture is mainly due to the economic conditions of their family and agriculture is an occupation which provides work opportunities to them according to their age and level of education (Goswami, 2013). For improving the economic conditions of their family, sometimes they work at lower wages in agricultural sector. It has also been argued that there is increase in female agricultural wages to high paid industry wages (Vepa, 2005). Thus, the women agricultural labourers also assume significant importance. Today, women plays a fundamental role in agricultural operations in some specific crops such as cotton, where female labour employed was about 25 per cent more than the male labour. The picking of cotton is almost exclusively done by females (Chattopadhyay, 1982).

A unique feature of female participation throughout India is that they are workers, labourers, cultivators, producers, traders besides performing all household duties which are considered as “unproductive”. Women are involved in some of the most arduous and hardest work is agriculture fields under different climate conditions and on lowest wage rate (Dommati and Chittedi, 2011). Agricultural labourers are living in poorest conditions and they work seasonally so they get employed for some months after this they mostly unemployed. They work with their family members in Zamindar’s field and get food grain in wheat harvesting instead of cash wages. They took advance from Zamindar in difficult conditions like treatment, marriage, accidents and other difficulties. The minimum wage fixed for agriculture labourers is Rs. 204 per day with food or Rs. 229.20 per day without food in Punjab (GOP, 2013).

In Punjab, both local and migrant agricultural labourers are involved in agricultural operations. Migrant labourers migrate from other states seasonally and/ or permanently with or without their families. The migrants were generally in age group of thirties and forties and mostly illiterates. They migrate because of low

wages, rain – fed agriculture in their native places and economic factors leading to migration while poverty, poor civic amenities, leading a poor life. Punjab farmers preferred migrant labour due to their timely availability, quality of work and low wages. Some farmers preferred local labourers due to their trust worthiness and adjustment for advance payments (Kaur *et al*, 2011). The negative aspect of migration is that influx of migrant labour depresses the wage rates and reduces the employment opportunities for the local agricultural labour which ultimately leads to their casualisation (Rangi *et al*, 2001).

The economic conditions of the farmers in the state have deteriorated mainly because of the fragmentation of the holdings. Fast mechanization of agriculture like use of tube wells, harvest- combines, tractors on a large scale in the last few years has replaced the human labour in agriculture. The machine costs of small and marginal farmers have been rising and are higher than those of big farmers, and as a result, the farmers are faced with an economic crisis and thus, enable to employ labour on permanent basis. In such a situation they are forced to engage in casual for different farm operations, ultimately leading to casualisation of agricultural labour in Punjab (Rangi *et al,* 2001). The farmers of Punjab have responded to the resulting economic pressures by replacing the permanent agricultural labour with the casually employed labour. This structural change in rural labour employment has wider social, economic and political implications that merit serious attention (Rangi *et al*, 2001).

1.2 Significance of the Study

The green revolution which occurred during mid sixties has affected both farmers and agricultural labourers involved in the production of various crops in the state. Due to the mechanization of farming, agricultural labourers are displaced out of agriculture, thus rendering them either unemployed or employed in non-farm sector at lower wages. Hence, it becomes essential to study socio- economic conditions of agricultural labourers and pattern of their employment in farm and non-farm operations.

. **1.3 Research Questions**

1. Is there any difference in wage rate of female and male agricultural labourers?
2. What are the different types of activities done by agricultural labourers?
3. Is there any difference in activities of male and female agricultural labourers?
4. How much is the participation of agricultural labourers in MGNREGA?
5. Is there any casualisation of agricultural labourers?

1.4 Hypotheses

1. There is no difference in wages of male and female agricultural labourers.
2. Since Punjab is an agrarian state, agricultural labourers are getting employment throughout the year.
3. Similar activities are carried out by male and female agricultural labourers.
4. Agricultural labourers prefer to work in farm operations only.
5. There is little contribution of female family members in assisting male agricultural labourers in fields.

1.5 Objectives

The main objectives of the study are given below:

1. To study the socio-economic conditions of agricultural labourers.
2. To study the major farm and non-farm activities carried out by the agricultural labourers.
3. To study the employment pattern and wage structure of agricultural labourers.
4. To study perceptions of the agricultural labourers for improving their livelihood.

1.5 Limitations of the Study

In this study, we have interviewed only local agricultural labourers, not migrant labourers. Because migrant agricultural labourers are seasonally migrant and when we interviewed all respondents, we did not find sufficient number of migrant

labourers in the study area. These migrant usually come during the transplanting of paddy in May and June. At that point of time, schedule was under preparation so the study did not cover the migrant labourers in analysis.

1.6 Chapter Scheme

Following this introductory chapter, Chapter 2 reviews the literature on socio economic status of agricultural labourers in the context of Punjab and national level. It also explains the nature of employment in farm and non-farm sector. Chapter 3 discusses data sources and methodology adopted for the study in detail. Result and discussion are given in chapter 4. This chapter compares the socio-economic features of male and female agricultural labourers. It also delves into the detailed analysis of nature of employment in farm and non-farm sectors. Wages are also compared across both male and female agricultural labourers. Finally, Chapter 5 describes the summarizes the study with some policy suggestions.

Chapter 2
Review of Literature

Singh (1997) carried out a study on bonded migrant labourers in Punjab agriculture. The study found that among migrant labourers, 84 per cent were from backward classes, 14 per cent were from schedule castes, while only 2 per cent belonged to upper castes. On an average, migrant labourers were paid 35 per cent less than the minimum wage fixed by the state labour department during the peak season. These migrant labourers were mainly involved in three major activities, that is, wheat harvesting, paddy transplanting and paddy harvesting. Further, the study also revealed that migrant labourers on one hand were displacing local labour and started working as attached labour; on the other, they were being displaced by combine-harvester in paddy harvesting-cum-threshing.

Gill (2001) conducted a study on diversification of agriculture and women employment in Punjab. The study examined the possibility of augmenting female employment in agriculture operations by diversifying crop structure in the state. The employment structure of women showed that the introduction of new technology in rural areas had displaced female labour. Another impact of modernization and mechanization at the rural level was proletarianisation of the poor/ small peasant, adding to the army of landless and agricultural labour. This had resulted in decrease in number of cultivators and increase in proportion of agricultural labour. Participation of female in agricultural work both as the cultivators and the agricultural labourers was virtually insignificant. The study also found that a woman was paid three-fourth of the male wage per day and the child was paid one- half of the male wage rate per day.

Narayanamoorthy and Deshpande (2001) carried out a state-wise analysis on “irrigation, agrarian relations and agricultural labourers” in India. The aim of the study was to relate the irrigation of different states with the socio-economic conditions of agricultural labour households of 17 major states at five points of time: 1974-75, 1977-78, 1983-84, 1987-88 and 1993-94. The results of the study indicated that 7 states namely Punjab, Haryana, Uttar Pradesh, Tamil Nadu, Jammu and Kashmir, Andhra Pradesh and Bihar fell under the group of densely

irrigated states, while the remaining 10 states were under the group of less irrigated states. The growth of agricultural labour households was higher in less irrigated states as compared to densely irrigated states during 1974-75 to 1993-94. Furthermore, the empirical results also confirmed that that there was no strong relationship between availability of irrigation and percentage of agricultural labour households. In addition, the study also examined that average amount of debt of agricultural labour households was comparatively higher for densely irrigated states than that in case of less irrigated states throughout the study period. Also, the real wage rate of both men and women labourers belonging to densely irrigated states was higher as compared to the less irrigated states at all five points of time.

Rangi et al. (2001) attempted to comprehend the causalisation of agricultural labour in Punjab. This study revealed that about two-thirds of agricultural workers were totally illiterate. Education level of agricultural labourers in Ludhiana district was higher as compared to the Mansa district. Almost all the agricultural labourers were landless. About 13 percent of agricultural labourers were under debt. Casual labourers also worked on contract basis in peak period. Permanent agricultural labourers received wages on annual basis, six monthly or on monthly basis. Further, about two-third of the agricultural labourers worked on casual basis, while one-third worked on permanent basis. Due to modernization in farm activities, the period of workload had reduced. Agricultural labourers were employed for only 138 days on casual basis. The peak period of employment was only of 50 days. The study also found that factors contributing to the casualisation of agricultural labour were: use of tractors in various farm operations, influx of migrant labour from neighbouring states, marginalization of farmers, increase in number of agricultural workers and slowdown of growth in agriculture.

Singh (2001) examined issues of gender and child labour under contract farming in Andhra Pradesh and Punjab. Girl children were preferred in cottonseed production because their wages were lower than adults' as they worked for longer hours and more intensively and were generally easier to control. Further, the study also pointed that banning the child labour in farm operations would not help much. Instead, efforts should be made to provide them education and other skills so as to release them and their families from vicious circle of poverty and exploitation. The

study also called for industry-regulated codes of conduct, along with legal provisions to increase the voice and influence of contract labourers.

Sharma and Kumar (2003) examined a study on agricultural labour market with functioning of market for casual labour and permanent labour. The study found that the permanent labour was better off as compared to casual labour in terms of per day wage earnings. The contract with the employer was oral, but two-thirds of the permanent labourers enjoyed no freedom in terms of working for others. More than half of the labour had borrowed money from their employers who extracted very high implicit rate of interest in terms of several small unpaid jobs. Per day average wage earned was significantly higher than the average wage rate in the casual labour system. The results of the logit model showed that higher family size household had higher probability of entering into such interlocked arrangements.

Rana et al. (2004) carried out a study on female labour participation in productive works in Dulehra village of Haryana state. It was observed that female participation in productive work had become more convenient and accessible in operations such as handling of fodder cutter, sprinkler irrigation, tube-well irrigation, weeding, threshing, floriculture, horticulture, seeds production etc. thereby sparing male labour to do additional productive work. The study also explained that share of female working hours to total working hours had been the lowest in the category of big farm households whereas, it was the highest in the category of marginal farm households.

Rangi and Sidhu (2004) examined that two-third of the agricultural labourers worked on casual basis and one-third on permanent basis. There was higher concentration of migrant farm labourers in Ludhiana as compared to Mansa district because paddy crop was not cultivated on large scale in Mansa. The farmers of Ludhiana district preferred the migrant labour for permanent employment. Further, the study also revealed that share of casual labour in the hired labour had increased significantly in case of paddy and wheat crops. The use of harvest combines for harvesting and threshing of wheat and paddy crops had squeezed the peak period of workload remitting negative impact on labour employment. The study pointed that influx of migrant agricultural labour had both positive and negative aspects. The positive aspect was that migrant labourers were able to

improve their economic position and acquired new skills in the farm sector. The negative aspect was that the influx of migrant labour depressed the wage rates and reduced the employment opportunities for the local agricultural labourers, which ultimately led to change in the structure of agricultural labour employment. The severe unemployment problem showed the non-absorption of labour in the secondary and tertiary sectors. Marginalization of farmers was one of the major factors accounting for structural change in rural employment resulting in causalisation of agricultural labour.

Sidhu and Singh (2004) carried out a study on the agricultural wages and employment in Punjab and found that human labour use in paddy fell by 45.6 per cent during 1981-99, while the use of machinery had increased by 65.74 per cent. The reason for substitution of human labour with machinery was both technical and economic. Medium and large farmers opted for mechanical harvesting and threshing due to the bigger size of their harvestable areas. Mechanical harvesting and threshing was more economical than manual operation. Demand for labour was on peak during harvesting and the wage rates tended to move higher. Technological changes combined with changes in the prices of various factor inputs led to shift in factor shares over time in the production of wheat and rice. Labour use decreased by 21.4 per cent in 1998-2001 compared with 1987-89. Family labour use contracted by 20.84 per cent, whereas hired labour use went up by 3.59 per cent.

Vepa (2005) did a study on feminization of agriculture and marginalization of their economic stake. Specifically, the study examined declining economic stake of women in agriculture and increasing contribution of women to agriculture. The workforce composition of rural India (main + marginal) showed a 4 per cent shift of rural workforce in favor of women. The census 2001 data showed that 39 per cent of the total workers in farming (cultivators + agricultural labour) were women. A total of 23.6 hours a week had been spent on economic activities by women on an average, but they received payment for only 60 per cent of their work. The number of marginal workers increased from 26.73 million in 1991 to 80.98 million in 2001. Among the marginal workers, there were more women than men. As per the 2001 Census, one third of the rural workers were agricultural labourers. The states of Punjab and Haryana had lower demand for human labour as the levels of

mechanization was high. In Andhra Pradesh and Tamil Nadu, both machine labour use and human labour use had been high. Depressed wages also contributed to the poverty and differential between male and female wages further showed declining economic stake of women.

Mehta (2006) carried out a study on employment availability for hired workers in Anand and Patan districts of Gujarat. The study found that demand for both male and female labour rose sharply at the time of paddy and tobacco transplanting, weeding, harvesting and threshing of crops. Labour use for cultivation of non-cereals was substantially higher than cereals with the exception of irrigated rice. Amongst the agricultural labourers, 64 per cent faced unemployment of more than 6 months. Only 5 per cent workers remained employed for more than 9 months. The study presented a strong case for non-farm employment generation that might in the long run arrest the widespread unemployment. Application of technology alone was not a sufficient condition for guaranteeing employment and high wages. This study showed that over supply of agricultural labour not only brought down the overall employment and wages, but inflexible wages offered by employers under conditions of labour over supply, set the stage for considerable unemployment and underemployment that was involuntary in nature. The study pointed that seasonality in agriculture had to be tackled through special employment programmes of the government.

Ghuman et al. (2007) examined a study on status of local agricultural labourers in Punjab. The study found that 67 per cent households were landless and about 33 per cent owned land. 69 per cent households did not had even a single member with qualification up to matric. The study found that demand for casual labour was more during sowing and harvesting periods. Employment of casual labour and the farm size had a positive relation. The study also pointed that marginal and small farmers employed labourers up to only 50 man-days during a year. The study also found that in a total sample, about 81 per cent were casual labourers and only 19 per cent were attached labourers. The extent of casualization of agricultural labour was highest in *Majha* region. The low wage in agriculture and rural area, along with non- availability of work, pushed the local rural labour out of agriculture. About 89 per cent agricultural labourers were under loan burden. The main source of loan was *zamindars* and local *kariana* shops. About 64 per cent labourers had to

work between 8 to 12 hours in a day. The study suggested that there was need to generate non-farm employment in the rural areas and need to start short term skill oriented courses for updating their skill and make them employable. There was need to chalk out suitable plans for the migrant as well as local labour and provision of social security for the rural labour was also imperative to take care of the education, health and marriage of their wards.

Toor et al. (2007) pointed out that significance of agriculture in terms of its capacity to absorb labour force in adequate numbers had been declining in Punjab i.e. it could not keep pace with the ever-increasing labour force. Casualisation of agricultural labour was witnessed in the case of both male and female workforce. Major reasons behind casualisation of farm labour had been mechanisation of major farm operations, inflow of migrant labour, slow down of agricultural growth and non-viability of small and marginal holdings. Further, the use of human labour in the production of wheat, paddy and cotton crops had also been declined over a period of time. The study stated that crop diversification policy of the state government was a good effort during the last decade which had led to better employment opportunities for agricultural labour, especially women in the rural areas. The policy of creating Rural Business Hubs (RBHs) would also be helpful in creating gainful employment in rural areas. Finally, the study concluded that these policy measures would go a long way in generating employment opportunities and improving the economic conditions of the rural economy of the state.

Nisha (2008) carried out a study related to women labour in agriculture in Palakkad district of Kerala state during 2007-08 with sample size of 120 women agricultural labourers. The results showed that the women labourers got maximum employment in agricultural activities during Kharif and Rabi season. In off season there was lack of employment opportunities, women labourers seek alternative employment sources like MGNREGS activities, construction work, tile making etc. The seasonal unemployment in agricultural activities had caused a severe impact on the income of labourers, family expenditure, their saving and debt position. It also caused migration of labourers to other activities and other places. The study suggested that SHG activities should be enhanced and training for developing entrepreneurial skills should be provided and existing wage rate should be increased.

Pramanik (2008) conducted a study on the condition of hired rural agricultural labourers in three villages in the Uttar Dinajpur district of West Bengal. The study highlighted the heterogeneity of labor contract even within the same region. The group labor was found to be gaining a continuous and gradual popularity in medium and small farmers. Each contract group differs from the other contract group in terms of employees and employers. Most of the agricultural laborers were observed as casual day labourers and group labourers. There was a direct correlation in the advancement in the level of development of villages and importance of group labor i.e. group labor was 50 per cent in highly developed, 43 per cent in moderately developed and 39.17 per cent in least developed villages. Group labor, semi-attached labor and opportunity cost of supervision were found to have a direct correlation with the level of development of the villages studied. Higher the level of development, higher was the group labor, semi-attached labor (7.35 per cent, 2 per cent and 1.67 per cent respectively in highly developed, moderate and least developed villages) and opportunity cost of supervision and vice-versa. Secondly, the percentage of agriculture labor families with land was negatively correlated with percentage of casual day laborers working on the time rate basis. The study also suggested that the inclination was more towards employing group laborers on part of the employers. Maintenance of timelines for different agricultural operations, given the number of peaks and problems of synchronization of management of crops were possible reasons for such preferences on part of employers.

Singh (2009) carried out a study on survivability of agricultural labourers in Punjab. The study pointed about 2,890 suicides committed in the state during 2000-08 by farmers and agricultural labourers. 39.2 per cent of them were agricultural labourers. The study found that there was large scale unemployment prevailing amongst the local labour due to immigration of about 4.2 lakh migrant labourers in the state. Due to the shrinking employment elasticity in agriculture, non-farm employment opportunities should be generated in the rural and semi-urban areas. Lower wage rates and lesser number of days of employment available had led to a deterioration of economic conditions of agricultural labourers and pushed them further into debt. Therefore, a debt waiver scheme like the one given to farmers should also be launched. Moreover, the MGNREGS must be

efficiently implemented in all the districts for increasing the number of employment days.

Sidhu et al. (2009) conducted a study on the migrant agricultural labour in Punjab. For this, 240 migrant labourers were selected with simple random sampling in Ludhiana, Jalandhar, Amritsar and Sangrur districts of Punjab. About 92 per cent of migrant labourers belonged to Bihar and about 64 per cent were scheduled caste. Around 73 per cent were illiterate and about 75 per cent were under debt. 64 per cent were landless and they migrated from their native state because of economic distress like unemployment, low wages (average wage rate Rs.50.71 per day) and low earnings from their land holdings. This study showed that Punjab farmers were dependent on migrant labour for transplanting paddy and the manual harvesting of wheat. This study also revealed that about 47 per cent of migrant labourers worked on a casual basis, about 24 per cent were seasonal migrant labourers and 29 per cent were on a yearly contract basis. Mechanization of agriculture replaced human labour with combine harvesters on large scale which had slowdown the growth rate of wages of migrant labourers and also declined labour's bargaining power. The average wage rate of permanently migrant labourers was Rs.1,915.46 per month and average wage rate of migrants was Rs.103.54 per day during the peak period in 2006-07.

Verma et al. (2010) did a study on socio cultural and economic changes in migrant agricultural labourers in Punjab. About 83 per cent of the local agricultural labourers were used to take intoxicants in the company of the migrants. About 91 per cent of the migrant agricultural labourers used to send their savings to support their families living at their native villages. And 11.42 per cent of migrants and 27.51 per cent of local had their saving accounts in banks or post offices. Poor living conditions such as unhygienic bathing and washing patterns, lack of proper sleeping facilities, lack of pure drinking water facility and poor and deplorable drainage system exposed the migrant agricultural labourers to various kinds of diseases. This study suggested that at village level every effort should be made to maintain their social dignity.

Dommatti and Chittedi (2011) did a study on socio-economic conditions of agricultural women labour in Andhra Pradesh. This study found feminization of

agriculture due to out-migration of male workers. The traditional gender division of labour ensured that women got on average 30 per cent lower wages than men. The study pointed that casualisation had been increasing which indicated uncertain and irregular work with no guaranteed minimum wage. There was low participation rate of female as compared to male in Karimnagar District. Male workers were more literate than female workers. Female workers participated in some agricultural activities such as planting, weeding, harvesting, threshing work etc. This study suggested that there was need to further intensify farm activities through adoption of double and multiple cropping practices to increase employment, encourage labour intensive techniques in farm activities, and minimum and equal wages by the state government. The study also suggested some training programmes for female workforce and alternative employment programmes should also be started.

Kaur et al. (2011) attempted to determine the causes and impact of labour migration in Punjab agriculture. The study found that after migration, income of 34.3 per cent migrants increased to more than Rs.50,000 per annum, while it was less than Rs. 10,000 per annum for 48.6 per cent migrants before migration on overall basis. Regarding wage rates, 80 per cent farmers reported a decline in the wage rate due to in-migration of labourers. About 23 per cent farmers reported preference for local labourers because of their better trust worthiness and about 6 per cent for repayment assurance of their advance payments. Paddy transplanting was the only operation in which farmers preferred migrant labour to local labour. Due to inflow of migrant labourers, wage rates declined by 30 per cent in transplanting of paddy and by 19 per cent in wheat harvesting. A general perception of the farmers regarding migration of labour was that migration of agricultural labourers resulted in increased supply of labour, decline in wage rates and increased social tension, crime, drug menace and cultural invasion etc. The study suggested that state should maintain a demographic balance by regulating the inflow of migrants and there was a need of government intervention to get the antecedents of migrant labour verified from their respective native states before employing in farm operations.

Roy et al. (2011) had analyzed the mechanism by which farmers try to cope with the supply-demand gap of agricultural labourers during busy agricultural seasons

in the face of growing shortage of agricultural labourers in Uttar Dinajpur district of West Bengal. The study had suggested that to cope with the situation of supply-demand gap of farm labour, there was no other alternative but to adopt selective mechanization of farm activities. Some level of mechanization was already there, which was visibly on the rise. There would be more inducement to undertake mechanical innovation to tackle the growing supply-demand gap in the farm labour in future.Whereas the attached labor got full time employment, fixed income and comparatively easy access to short term loans from the employer, the casual labor enjoyed more freedom to choose and change employer. In recent years, the labour was found to be heading towards casual labour as they could join or leave any occupation anytime and opt for other one (although this happened in the case of skilled labour in particular). The attached labour was switching to casual labour class category so as to utilize various centre and state government schemes such as MGNREGA, grant and subsidies for self-employment, self help groups, social welfare programs.

Sidhu (2011) carried out agro-climatic zone wise analysis of participation of women in farming activities in Punjab. For this about 2980 households from five agro-climate zones were studied. Maximum participation of the women was observed in harvesting and weeding. Overall women's average contribution was estimated at 55 per cent to 66 per cent of the total labour with percentages much higher in certain regions. This study suggested that special training programmes for women would enhance their skills and strengthen faith in them for effective and independent performance of farm operations.

Jatav (2012) examined that process of liberalisation had shown a radical change in rural workforce structure in India, especially during 2004-05 to 2009-10. The proportion of self-employed and regular workforce declined in rural areas with an unpredictably high increase in the share of casual workers particularly in construction and services sectors. During this period, the process of casualisation favoured greater participation of women workers. The women casual workers of all social groups in non-farm sector experienced a positive growth with a negative growth in farm sector simultaneously. Rural women moved from agriculture to other more remunerative but laborious works, especially in the construction and service sectors. Female workers of all social groups showed a very high value of

casualisation index as compared to that in case of female workers. The process of casualisation of rural non-farm workforce was found to be highly associated with low literacy and low households expenditure levels. The study also concluded that growth of casual workers in 2009-10 seemed to be a result of some distress push factors such as poverty, low levels of education, less amount of land owned etc. But, during the period of 2004-05 to 2009-10, there might have been some pull factors such as increasing demand of labour in some particular sectors like construction, mining and quarrying and services and the impact of employment generation schemes. An increase in government expenditure on education for the development of a qualitative training and learning system among rural workers might reduce the rate of casualisation in rural non-farm employment by facilitating sustainable, profitable, desirable and suitable jobs in future.

Singh (2012) examined a study on preference for migrant agricultural labour in Punjab. The commercial crops such as paddy, wheat and cotton squeezed the labour demand to a few peak periods that local labour failed to meet. The migration of labour from Bihar, eastern Uttar Pradesh, Jharkhand, Madhya Pradesh and other states worked in wheat harvesting in the month of April and paddy transplanting in May-June as the local labour was neither efficient nor keen to work at the low wage rates acceptable to migrant labour. Mahatma Gandhi National Rural Employment Guarantee Act had been introduced in the labour-surplus states, the supply of migrant labour had dwindled. Moreover, during the last five years agriculture had improved both in Bihar and eastern Uttar Pradesh, resulting in improvement of the wage rates, as also the expansion of employment opportunities, there. On the demand side, there was a severe squeeze in the number of days of employment available in Punjab agriculture. The Punjab farmers were trying desperately to acquire migrant labour even by offering wage rates 30 per cent to 40 per cent higher over the previous year.

Usami (2012) examined gender-wise wage rates for agricultural and non-agricultural activities. The consumer price index for agricultural laborers (CPIAL) (1986-87=100) and consumer price index for rural laborers (CPIRL) (1986-87=100) were used to deflate wage rates for agricultural labor and rural labor respectively. The occupation of ploughing, sowing, transplanting and harvesting were entirely done by male laborers and earned a real wage rate (at 1986-87

prices) of Rs. 30.7, Rs. 27.9, Rs. 28.9 and Rs. 30.8 respectively during 2010-11. Female labor were not employed in the above mentioned categories in Punjab. In the rural labor categories, the real wage rate for carpenter, blacksmith, mason and unskilled labor was Rs. 44.3, 41.0, 45.0, 28.7 respectively during 2010-11. The growth rate in wage rate between 2007-08 and 2010-11 was 13 per cent in ploughing, 9 per cent in sowing, 12 per cent in transplanting, 10 per cent in harvesting, 3 per cent for carpenter, 1 per cent for blacksmith, 3 per cent for mason and 8 per cent for unskilled rural labor (male) in Punjab. There was a stagnation or decline in agricultural wages due to drought conditions. The wage rates of agricultural laborers started to increase in 2007-08. All states showed an increase except Gujarat, Meghalaya and Tripura. Orissa recorded the highest annual growth rate of real wages between 2007-08 and 2000-01 followed by Andhra Pardesh, Tamil Nadu and Punjab. On the other hand, Gujarat, Meghalaya and Tripura showed a decline. The same pattern was observed in the case of unskilled labor. The real wage rate was at peak in 2000-01 and remained stagnant until 2006-07 and thereafter started rising. The growth rate was 2.2 per cent, 6.6 per cent, 2.9 per cent and 10.6 per cent for male labor in the year 2007-08, 2008-09, 2009-10 and 2010-11 respectively The same was recorded as 3.3 per cent, 6.9 per cent, 3.3 per cent and 10.4 per cent for female labor in the year 2007-08, 2008-09, 2009-10 and 2010-11 respectively. Orissa, once again, showed highest growth rate for male as well as female. Only Gujarat, Meghalaya and Tripura recorded negative growth rates for both male and female.

Goswami (2013) carried out a study on female agricultural workers in Darrang District of Assam by surveying about 140 households with stratified sampling for the year 2007-2008. The findings of the study suggested that the proportionate contribution of females had declined with increase farm size. This was due to economic conditions of their family. For poor families, women accepted any economic work to assist their family even under very inferior working conditions. They were mainly supplementary earners and stayed in labour force in temporary manner and their participation declined with improvement in the economic conditions of their families. The average income from wage employment on sample households was Rs. 2340.75 per annum. Women agricultural workers get

lower wages as compared to the male workers for equivalent work. Their status was low due to their limited access to economic resources.

Jatav and Sen (2013) carried out a study on drivers of non-farm employment in rural India based on NSSO data. The study found that rural non-farm sector had undergone major restructuring which had led to an increase in the share of casual labour in the non-farm sector accompanied by a continuous decline in the share of self and regular employment. The increase in casual wage labour in the rural non-farm sector (RNFS) in the last five years could probably be attributed to a large extent to the MGNREGS. The study concluded that though non-farm employment in rural areas was primarily distress-driven, there were some significant entry barriers for rural workers in the non-farm sector in terms of education, age and gender. Considering the overall deceleration of rural employment until 2009-10, the paper emphasized the importance of MGNREGS in rural employment generation and the consequent process of feminization of casual workforce in the non-farm sector which emerged in the last five years. Further, the results indicated that the crisis of joblessness would have been more acute without the MGNREGS. The overall quality of rural employment, driven by distress factors, had deteriorated in 2009-10 over 2004-05 in a significant way.

Narayanamoorthy and Bhattarai (2013) carried out a study on rural employment scheme and agricultural wage rate nexus. This study found that the wage rate grew at a rate of only 0.31 per cent per annum for male labourers during pre-MGNREGS period, whereas it registered a growth rate of 2.42 per cent per annum during post- MGNREGS period at the all- India level. The growth in real wage rate for male had been found very impressive in states like Andhra Pradesh (9.0 per cent), Odisha (5.0 per cent), Tamil Nadu (5.0 per cent), Punjab (5.0 per cent), Kerala (3.7 per cent) and Uttar Pradesh (3.4 per cent). The increased growth rate of real agricultural wages for male labour could be mainly due to the introduction of MGNREGS. Farm wages in India not only vary from male to female labourers but also widely vary from one operation to another in all major crops and in all states. Among the four operations, the wage rate had registered the highest growth in ploughing operation (2.84 per cent per annum), followed by transplanting(2.06 per cent), harvesting (2.58 per cent), and sowing (2.14 per cent) at the national level during post- MGNREGS period. In all these operations, the wage rate for male

labour was either negative or very low during the pre- MGNREGS period at the national level. The regression analysis had suggested that the average days of employment per household given through MGNREGS appears to be the dominant factor in influencing the growth rate of farm wage for both male and female labourers after the introduction of rural employment scheme in India.

Singh and Sangeet (2013) carried a study on economic conditions of agricultural labourers in three districts, namely Fatehgarh Sahib, Bathinda and Ferozepur of Punjab. The study found that every agricultural labour household had 3.10 persons as earners and about 26 per cent of agricultural labourers were living below the poverty line and 68 per cent of agricultural labour households were under debt and about 91 per cent of their loans from non- institutional sources, out of which major part came from the landlords and village money lenders who charged exorbitant rate of interest. This study recommended that flow of institutional credit must be increased at low rates of interest with easy repayment facilities to the vulnerable section of the society. There should be progressive increase in wage rates of agricultural labourers.

Venkatesh (2013) carried out a study on recent trends in rural employment and wages in India. The study pointed that a structural transformation had been taking place in India for the past three decades. However, rate of transformation was slow. Female workers were more dependent on agricultural sector than their male counterparts. The improvement in farm labour productivity due to technological developments and increased mechanization could be the major factors which forced the movement of labour from farm to non- farm sector. The percentage share of rural households self- employed in agriculture declined about three per cent points during the study period. The study had also discussed about trend in agricultural wages. The wage rate was the highest for masons followed by ‘carpenters’ and ‘agricultural labours’. The movement in the real wages for these occupations was almost parallel over these years. The wage rates gradually increased for masons and agricultural labours and were almost constant for carpenters. The wages for an agricultural labour were though the lowest, recorded the highest wage increase of Rs.41 per day from Rs.137 in 2002-03 per day to Rs.178 per day in 2011-12. The states were categorized into three groups based on agricultural wages of 2011-12 (1) high wage rate states (>Rs.220/ day) (2)

medium wage rate states (Rs.150- 220/day), and (3) low wage rate states (< Rs.150/day). The agricultural wage rates were highest in Kerala (Rs.483/day) and lowest in Madhya Pradesh (Rs.108/day). The wage determinant analysis had indicated that agricultural productivity influenced the agricultural wages, benefitting agricultural labours. This study also showed that the states with higher share of non- AgGDP in the total GDP paid higher wages, which implied that the growth of non- farm sector positively contributed to the agricultural wages.

Chapter 3
Nature of Data and Methodology

This chapter gives the detailed outline on the study area and respondents. The chapter also explains the sampling technique for the selection of the respondents.

3.1 Selection of Study Area and Respondents

3.1.1Selection of District

The Bathinda district is selected due to time and money constraint. The district is located in southern region of the Punjab (Map 3.1). The Bathinda district is ranked second to Ferozepur in terms of area and production of cotton in the state (GOP, 2012). The cotton is labour intensive crop as compared to other traditional crops in Punjab such as wheat and paddy. The proportion of agricultural labourers to the total workers in Bathinda district was 20.78 per cent as compared to only 13.8 per cent in the state. Apart from it, the proportion of Household Industry (HHI) workers to the total workers in Bathinda district was just 2.97 per cent in 2011(Census of India, 2011; DCP 2012-13). Moreover, the male literacy rate of Bathinda district was 73.79 per cent, while that of females, it was 61.94 per cent which was much lower than that at the state level (80.44 per cent in case of males and 62.52 per cent in case of females). Thus, Bathinda is comparatively less developed as compared to the other regions of the state.

3.1.2 Selection of Block

Two blocks namely Nathana and Talwandi Sabo were randomly chosen from the Bathinda district (Map 3.1). 50 agricultural labourers were taken from two blocks each.

3.1.3 Selection of Villages

Two villages from each block were selected randomly in Bathinda district for primary study. And from each village a sample of 25 agricultural labourers was also selected randomly. Thus, total number of sampled villages was four in the district. From Nathana block, two villages Chak Bakhtu and Lehra Khanna; and

from Talwandi Sabo block two villages Maiserkhanna and Jhanduke were selected.

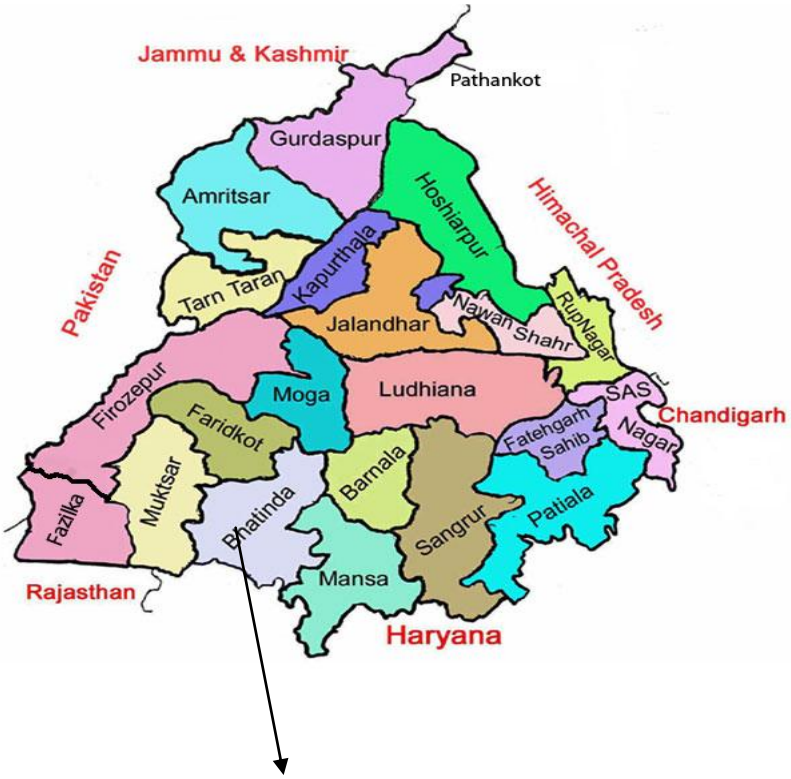
3.2 Sampling technique

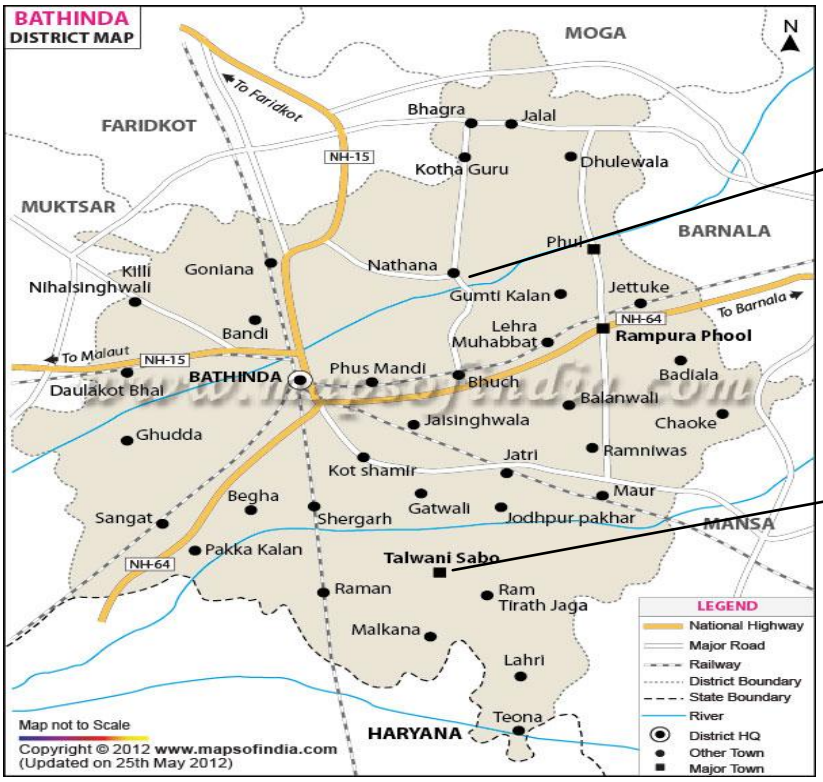
The data pertain to the agricultural year 2013-14. The necessary data is collected from the selected agricultural labourers. A detailed semi-structured schedule was prepared for collecting required information in the four sampled villages. A sample of 100 agricultural labourers (50 male and 50 female) was taken through multistage sampling technique. The data was collected from respondents regarding their socio-economic status, crop wise employment and unemployment days etc. The perceptions of agricultural labourers were also taken asked to improve their livelihoods.

3.3 Analysis of Data

The technique of tabular analysis is employed for calculating their education level, age, marital status, number of livestock, different activities done in farm and non-farm sector, the number of days employed in farm sector and non- farm sector, to assess the asset position of the labourers, working hours, wage rate in farm and non-farm sector in both male agricultural labourers and female agricultural labourers etc. Averages and percentages were mainly employed to analyze the data. The entire analysis has been done gender-wise.

Map 3.1 Location of the Study Area





Nathana Block

Chak Bakhtu

Lehra Khanna

Talwandi Sabo Block

Maiserkhanna

Jhanduke

Chapter 4
Results and Discussion

In consistence with the objectives of the study, the necessary data collected from the respondents is analyzed and interpreted in this chapter. The results obtained are presented under the following major headings:

1. Socio-Economic Status of Agricultural Labourers
2. Nature and Employment Pattern of Agricultural Labourers
3. Wage Structure and Income Level of Agricultural Labour Households
4. Perceptions of Agricultural Labourers about Working Conditions

1. Socio-Economic Status of Agricultural Labourers

1.1 Education Level

Most of the agricultural labourers were illiterate. Table 4.1 shows that 82 per cent male and 92 per cent female agricultural labourers were illiterate. Thus, the illiteracy rate was higher among Female agricultural labourers than that among male agricultural labourers. Agricultural labourers who studied only up to 5th standard were 4 per cent in case of Male agricultural labourers and 2 per cent in case of Female agricultural labourers. 6 per cent Female agricultural labourers and 2 per cent Male agricultural labourers studied 6th to 8th standard. Further, 12

Table 4.1

Distribution of Agricultural Labourers by Education Level

Education Level	Male agricultural labourers	Female agricultural labourers
Illiterate	41 (82)	46 (92)
Up to 5th standard	2 (4)	1 (2)
6th-8th standard	1 (2)	3 (6)
9th-10 standard	6 (12)	-
Average no. of years in school	8.66	7.25

per cent Male agricultural labourers also studied between middle class to matriculation. There were no Female agricultural labourers who studied higher than middle class. Lastly, the average number of years in school was 8.66 in case of Male agricultural labourers compared with 7.25 in case of Female agricultural labourers. Thus, it can be concluded that Male agricultural labourers were slightly better in education as compared with Female agricultural labourers.

1.2 Age

Majority of Male agricultural labourers (38 per cent) were in the age group of 41-50 years. In case of Female agricultural labourers , only 22 per cent were in the age group of 41-50 years. 18 per cent of Female agricultural labourers were relatively young i.e. in the age group of 20-30 years. Only 10 per cent of Male agricultural labourers were in this age group. 28-30 per cent of Male agricultural labourers and Female agricultural labourers each were in the age group of 31 to 40 years. 9-10 per cent Male agricultural labourers and Female agricultural labourers each belonged to 20 to 30 years. And another 20 per cent Male agricultural labourers and 26 per cent Female agricultural labourers were in age group of 51 to 60. 4 per cent Female agricultural labourers and Male agricultural labourers each were above 60 years. Thus, average age of both Male agricultural labourers and Female agricultural labourers was turned out to be approximately same (around 44 years) (Table 4.2).

Table 4.2

Distribution of Agricultural Labourers by Age Groups

Age (Years)	Male agricultural labourers	Female agricultural labourers
20-30	5 (10)	9 (18)
31-40	14 (28)	15 (30)
41-50	19 (38)	11 (22)
51-60	10 (20)	13 (26)
Above 60	2 (4)	2 (4)
Average	44.44	44.1

1.3 Marital Status

Table 4.3 shows that 96 per cent Male agricultural labourers were married and only 4 per cent was widower. However, 82 per cent Female agricultural labourers were married and 18 per cent were widow. Thus, the percent age of the widows/ers was higher in case of Female agricultural labourers than that among Male agricultural labourers .

Table 4.3

Distribution of Agricultural Labourers by Marital Status

Marital Status	Male agricultural labourers	Female agricultural labourers
Married	48 (96)	41 (82)
Widow	2(4)	9(18)

1.4 Caste

The caste-wise distribution of agricultural labourers is given in Table 4.4. 94 per cent of Male agricultural labourers and 98 per cent Female agricultural labourers belonged to scheduled castes. Only 2 per cent each of Male agricultural labourers and Female agricultural labourers belonged to backward class (*Julaha*). 4 per cent Male agricultural labourers also belonged to general category (*Jat* Sikh). Among scheduled castes in Male agricultural labourers , majority were *Majbhi* Sikh (44 per cent) followed by *Ramdasiya* Sikh (38 per cent) and *Bazigar* (12 per cent). However, in case of Female agricultural labourers , 64 per cent belonged to *Ramdasiya* Sikh caste, while 34 per cent were *Majbhi* Sikh.

Table 4.4

Distribution of Agricultural Labourers by Caste

Caste	Sub-caste	Male agricultural labourers	Female agricultural labourers
Scheduled caste	*Ramdasiya* Sikh	19 (38)	32 (64)
	Bazigar	6 (12)	-
	Majbhi Sikh	22 (44)	17 (34)
Backward class	*Julaha*	1 (2)	1 (2)
General	*Jat* Sikh	2 (4)	-

1.5 Type of House

All the ALs had their own houses. About 42-44 per cent of Male agricultural labourers and Female agricultural labourers each had *Kachha* houses. Another 38-40 per cent each of Male agricultural labourers and Female agricultural labourers had concrete houses. Male agricultural labourers and Female agricultural labourers with semi-concrete houses were 18 per cent each (Table 4.5).

Table 4.5

Distribution of Agricultural Labourers by Type of House

Type of house	Male agricultural labourers	Female agricultural labourers
Kachha	21 (42)	22 (44)
Concrete houses	20 (40)	19 (38)
Semi-concrete	9 (18)	9 (18)

1.6 Family Details

Table 4.6 shows that 56-58 per cent Male agricultural labourers and Female agricultural labourers each had nuclear families, while another 42-44 per cent each lived in joint families. In case of 94 per cent male Agricultural Labour Households (ALHs), head of the family was a male member. Only in case of 6 per cent male ALHs, head of family was a woman. In case of families of Female agricultural labourers, 80 per cent had male member as a head of the family. 20 per cent families of Female agricultural labourers had female as a head of the family. These families were headed by female member as these were mainly widows. The average number of male adults and children were more in case of Male agricultural labourers than that in case of Female agricultural labourers . The average number of female adults in the family was similar across both Male agricultural labourers and Female agricultural labourers . Thus, the average family size of the Male agricultural labourers was turned out more in case of Male agricultural labourers than that in case of Female agricultural labourers (Table 4.7).

Table 4.6

Distribution of Agricultural Labour Households (ALHs) by Type and Head of Family

Particular	Male agricultural labourers	Female agricultural labourers
Type of Family		
Nuclear	28 (56)	29 (58)
Joint	22 (44)	21(42)
Head of the Family		
Man	47 (94)	40 (80)
Woman	3(6)	10(20)

.

Table 4.7

Family Structure of Male and Female Agricultural Labourers

Family structure	Male agricultural labourers	Female agricultural labourers
Male adults	1.84	1.56
Female adults	1.72	1.72
Children	1.74	1.1
Family size	5.3	4.44

1.7 Basic Amenities and Household Assets

Table 4.8 shows that 83 per cent both Male agricultural labourers and Female agricultural labourers had proper electricity connections in their houses. Rest 17 per cent agricultural labourers used electricity facility by stealing it from main wire, sharing with neighbours. 95 per cent agricultural labourers had water supply connections. 5 per cent agricultural labourers obtained water for domestic use from their neighbours, religious places and from common places like *dharmshala, panchayat ghar*, etc. 82 per cent of agricultural labourers also had ration cards. 25 per cent agricultural labourers also possessed BPL cards. 75 per cent of agricultural labourers had the facility to use blue cards. 80 per cent of Male agricultural labourers also had mobiles. Only 64 per cent of Female agricultural labourers used mobile facility. Only 27 per cent of agricultural labourers had cooking gas in their house to cook the food. They mainly used traditional *chullahs* for cooking. Further, 51 per cent of agricultural labourers availed banking facilities. This facility was used by those agricultural labourers who were mainly working under National Rural Employment Guarantee Act (NREGA) (Table 4.8).

Table 4.8

Distribution of ALHs by Possession of Basic Amenities

Amenities	Male agricultural labourers (n=50)	Female agricultural labourers (n=50)	Total (n=100)
Electricity connections	42	41	83
Water supply	47	48	95
Ration card	43	39	82
BPL card	13	12	25
Blue card	40	35	75
Mobile	40	32	72
Cooking gas	12	15	27
Availing banking facilities	27	24	51

Fan, cooler, T.V, refrigerator and cycle etc; are the basic household assets of agricultural labourers. All agricultural labourers had fan as a basic asset. Only 11 per cent of agricultural labourers had air cooler in their house. 14 per cent of Male agricultural labourers and 8 per cent of Female agricultural labourers had air coolers. 55 per cent of agricultural labourers also had televisions for entertainment. 76 per cent of agricultural labourers also owned two wheelers. Surprisingly, 30 per cent of agricultural labourers also possessed refrigerator (Table 4.9).

Table 4.9
Distribution of ALHs by Household Assets

Assets	Male agricultural labourers (n= 50)	Female agricultural labourers (n=50)	Total (n=100)
Fan	50	50	100
Air cooler	7	4	11
T.V	29	26	55
Refrigerator	15	15	30
Two Wheeler	37	39	76

1.8 Ownership of Land and Livestock

All the agricultural labourers were land less labourers. Only 8 per cent of Male agricultural labourers and 2 per cent of Female agricultural labourers leased-in land. They mainly produced wheat, fodder and other food grains for domestic use only. Average size of land leased-in was 1.7 acres. 42 per cent of Male agricultural labourers and 32 per cent of Female agricultural labourers had buffaloes and only 2 per cent of Male agricultural labourers had goat as a livestock, but none of them had any income from them as they mainly consumed milk for domestic use only. 24 per cent of agricultural labourers had cow as a livestock and only 2 per cent of Female agricultural labourers had bull (Table 4.10).

Table 4.10
Distribution of ALHs by Ownership of Livestock

Livestock	Male agricultural labourers (n=50)	Female agricultural labourers (n=50)	Total (n=100)
Buffalo	21 (42)	16 (32)	37
Cow	12 (24)	12 (24)	24
Bullock	-	1 (2)	1
Goat	1 (2)	-	1

2. Nature and Employment Pattern of Agricultural Labourers

2.1 Type and Nature of Work

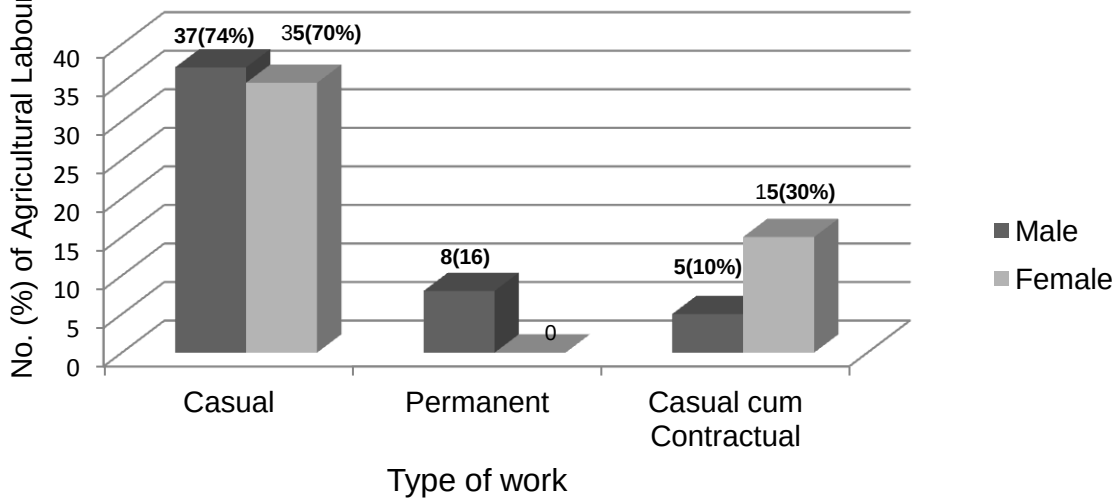
Agricultural labourers are mainly categorized in two categories- casual and permanent agricultural labourers. Permanent agricultural workers receive more job security as they get regular work, relatively higher wages and work benefits than do other casual waged agricultural workers. However, this does not mean that such workers are well- paid, relative to the average wage levels in a real terms, are generally lower than in cities and the hours of work are longer. Casual work refers to those employed and paid at the end of each day worked or on a task basis. Temporary work refers to those employed for a specific but limited period of time. Most seasonal, casual or temporary workers do not receive any form of social security or unemployment benefit, holidays with pay, or sickness or maternity leave. In some farm operations, crops like wheat harvesting and paddy transplanting, casual labourers also worked on contract basis and sometimes their family members including women and children also engaged in it. Table 4.11 shows that out of 50 Male agricultural labourers , 37 (74 per cent) worked on casual basis and 16 per cent worked as permanent agricultural labourers. Remaining 10 per cent worked as both casual and contractual labourers. In case of Female agricultural labourers , 35 (70 per cent) did only casual work and another 30 per cent were working as both casual and contractual agricultural labourers. None of the FAL worked as permanent labourer in farm sector (Figure 4.1).

Table 4.11

Distribution of Agricultural Labourers by Type of Work

Type of work	Male agricultural labourers	Female agricultural labourers
Casual	37 (74)	35 (70)
Casual-cum-Contractual	5 (10)	15 (30)
Permanent	8 (16)	-

Figure 4. 1
Type of Work of Agricultural Labourers



2.2 Employment Pattern of Male agricultural labourers in Farm Activities

Distribution of agricultural labourers by farm activities carried out is shown in Table 4.12. Activity-wise involvement of Male agricultural labourers in farm operations was highest in wheat harvesting (98 per cent) followed by cotton picking (92 per cent), weeding (84 per cent), spraying (78 per cent), harvesting in other crops (58 per cent), paddy transplanting (54 per cent), sowing of crops (46 per cent), plucking of cotton bolls (38 per cent), land preparation and removal of cotton sticks (34 per cent), irrigation (32 per cent) and fertilizer application (30 per cent), straw burning (16 per cent), paddy harvesting (8 per cent) and cob harvesting in maize (6 per cent). In case of Female agricultural labourers, activity wise their involvement in farm operations was highest in cotton picking (96 per cent) followed by wheat harvesting (76 per cent), plucking cotton bolls (70 per cent), weeding (62 per cent), paddy transplanting (48 per cent), Harvesting in other crops (18 per cent) and removal of cotton sticks (12 per cent). Average employment of Male agricultural labourers and Female agricultural labourers was highest in cotton picking with 56.4 days and 59.8 average employment days respectively. It is also pertinent to note that activities such as fertilizer applications, paddy harvesting, spraying, land preparation, sowing, straw burning and cob harvesting in maize

were carried by only Male agricultural labourers . Male agricultural labourers were involved in more farm activities (Table 4.12 and Figure 4.2). Table 4.12 shows that total average number of working days of Male agricultural labourers were 234.6, while that of Female agricultural labourers were only 110 in a year.

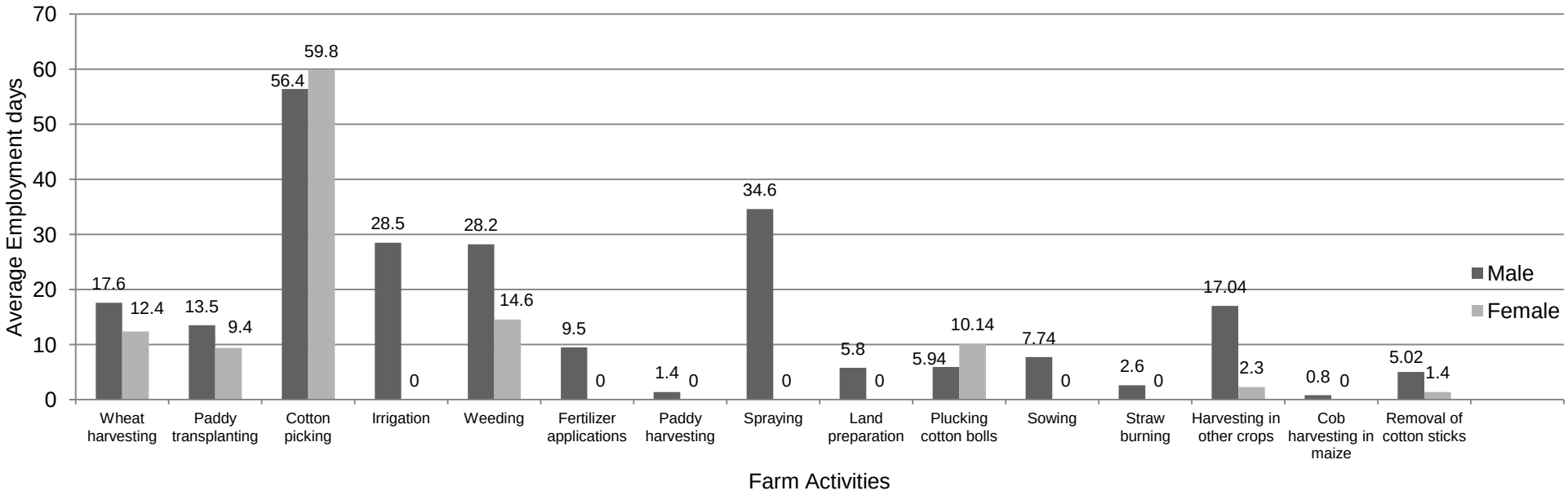
Table 4.12

Distribution of Agricultural Labourers by Farm Activities and Employment Days

Farm operations	Male agricultural labourers		Female agricultural labourers	
	No. of Labourers	Average Employment (in days)	No. of Labourers	Average Employment (in days)
Wheat harvesting	49 (98)	17.6	38 (76)	12.4
Paddy transplanting	27 (54)	13.5	24 (48)	9.4
Cotton picking	46 (92)	56.4	48 (96)	59.8
Irrigation	16 (32)	28.5	-	-
Weeding	42 (84)	28.2	31 (62)	14.58
Fertilizer applications	15 (30)	9.5	-	-
Paddy harvesting	4 (8)	1.4	-	-
Spraying	39 (78)	34.6	-	-
Land preparation	17 (34)	5.8	-	-
Plucking cotton bolls	19 (38)	5.94	35 (70)	10.14
Sowing	23 (46)	7.74	-	-
Straw burning	8 (16)	2.6	-	-
Harvesting in other crops	29 (58)	17.04	9 (18)	2.3
Cob harvesting in maize	3 (6)	0.8	-	-
Removal of cotton sticks	17 (34)	5.02	6 (12)	1.4
Average employment days	234.64		110.02	

Figure 4.2

Activity-wise Average Employment of Agricultural Labourers in Farm Activities



2.3 Employment Pattern of Male labourers in Non-Farm Activities

Most of the agricultural labourers were employed as casual workers. 46 per cent of Male agricultural labourers worked under national rural employment guarantee scheme (NREGS) during slack period in farm operations. The average wage obtained in NREGS was around Rs. 141 per day. 22 per cent of Male agricultural labourers also did as labour in construction of houses and buildings. 4 per cent Male agricultural labourers each rendered their services as driver and labourer in factory as a casual worker. 4 per cent of Male agricultural labourers also worked as sweeper on regular basis and earned on an average about Rs. 4,000 per month. Self employment among Male agricultural labourers during slack period was done by only 2 per cent of Male agricultural labourers and earned about Rs. 2,000 per month. Some of Male agricultural labourers worked as *paledars, banjaras* etc. Thus, the average non -farm employment days was only around 46 days among Male agricultural labourers (Table 4.13).

Table 4.13

Employment Pattern of Male Agricultural Labourers in Non-Farm Activities

Non- Farm operations	No. (%) of labourers	No. of days	Type of work	Average wage	
				Cash (Rs.)	Frequency
NREGS	23(46)	5.5	CL	141.08	Daily
Construction labour	11(22)	18.6	CL	236.36	Daily
Factory	2(4)	2.3	CL	300	Daily
Sweeping	2(4)	12	REG	4000	Monthly
Driving	2(4)	1.6	CL	375	Daily
Self employed	1(2)	0.4	SE	2000	Monthly
Paledari	1(2)	0.6	CL	500	Daily
Banjara	1(2)	3.6	CL	25	Daily
Average employment days		46.39			

2.4 Employment Pattern of Female labourers in Non- Farm Activities

Female agricultural labourers were also involved in non- farm activities. 68 per cent of Female agricultural labourers worked under NREGS during slack period in farm operations. The average wage obtained was around Rs. 143. And 26 per cent of Female agricultural labourers involved in domestic work like moping and sweeping in homes, cloth washing, removal of cattle's wastages on regular basis etc. The average wage earned was around Rs. 183.02. Another 10 per cent of Female agricultural labourers were self employed and only 2 per cent of Female agricultural labourers were involved in each mid day meal and sweeping in school on regular basis and earned Rs. 1200 and Rs. 800 per month respectively. Thus, average non-farm employment days were around 97 days among Female agricultural labourers (Table 4.14).

Table 4.14

Employment Pattern of Female Agricultural Labourers in Non-Farm Activities

Non-Farm operations	No.(%) of labourers	No. of days	Type of work	Wage	
				Cash (Rs.) per day	Frequency
NREGA	34(68)	7.9	CL	143	Daily
Domestic work	13(26)	76.3	REG	183	Monthly
Self employed	5(10)	2.7	CL	103	Daily
Worker in Mid Day Meal scheme	1(2)	6	REG	1200	Monthly
Sweeper	1(2)	4	REG	800	Monthly
Average no. of days		96.9			

Distribution of agricultural labourers by employment days is shown in Table 4.15. Employment days in a year in farm sector were 150-200 for 24 per cent Male agricultural labourers . Another 22 per cent Male agricultural labourers were also employed in farm sector for 100-150 days. About 18 per cent of Male agricultural labourers were generally employed all around the year in farm operations. These were mainly permanent labourers. Further, about 16 per cent Male agricultural labourers got the work for about 250-300 days. The working days in Female agricultural labourers were quite less as compared to the Male agricultural labourers. In case of Female agricultural labourers, 42 per cent were employed for only 100-150 days in farm operations. Another 32 per cent were engaged in farm operations for 50 -100 days only. 16 per cent Female agricultural labourers got the employment for 150-200 days. Further, 8 per cent Female agricultural labourers were employed for less than 50 days. Only 2 per cent Female agricultural labourers were able to get employment for more than 200 days.

Further, 76 per cent of Male agricultural labourers and 82 per cent of Female agricultural labourers also worked in non-farm operations during slack period in agriculture. 44 per cent of Male agricultural labourers and 56 per cent of Female agricultural labourers were employed for less than 50 days. About 18 per cent Female agricultural labourers were employed for 300-365 days as most of these were regularly employed in activities such as sweeping and moping. Another 18 per cent Male agricultural labourers and only 2 per cent of Female agricultural labourers were employed for 50-100 days. There were only 8 per cent Male agricultural labourers who were employed for 100-150 days. 2 per cent Male agricultural labourers were employed in non-farm operations for 150-200 days (Table 4.15 and Figure 4.3).

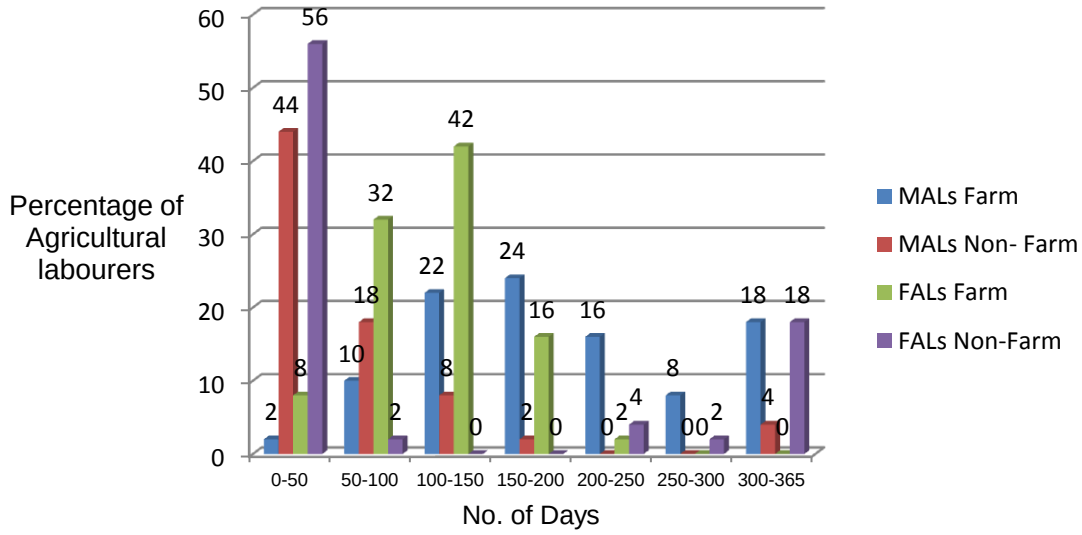
Table 4.15

Distribution of Agricultural Labourers by Employment Days in Farm and Non-farm Activities

No. of days	Male agricultural labourers		Female agricultural labourers	
	Farm	Non- Farm	Farm	Non-Farm
0-50	1 (2)	22 (44)	4 (8)	28 (56)
50-100	5 (10)	9 (18)	16 (32)	1 (2)
100-150	11 (22)	4 (8)	21 (42)	-
150-200	12 (24)	1 (2)	8 (16)	-
200-250	8 (16)	-	1 (2)	2 (4)
250-300	4 (8)	-	_	1 (2)
300-365	9 (18)	2 (4)	_	9 (18)

Figure 4.3

Employment Days of Agricultural Labourers in Farm and Non-farm Sector



2.5 Total Employment in Farm and Non-Farm Activities

Table 4.16 presents the average employment of agricultural labourers in farm and non-farm activities during a year. The employment was much higher among the Male agricultural labourers (281 days) as compare to that among Female

agricultural labourers (207 days). The employment in non- farm activities was also more than double in case of Female agricultural labourers (97 days) than that in case of Male agricultural labourers (46 days).

Table 4.16

Average Employment in Farm and Non-Farm Activities during a Year (in days)

Activity	Male agricultural labourers	Female agricultural labourers
Farm sector	234.64	110.02
Non-farm sector	46.39	96.9
Total	281.03	206.92

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2.6 Participation in National Rural Employment Guarantee Scheme (NREGS)

NREGS is a governmental scheme to provide employment to rural households. The scheme provides work for 100 days to the whole family. The results have shown that 46 per cent of Male agricultural labourers and 68 per cent of Female agricultural labourers also worked in NREGS. The average wage rate obtained by both Male agricultural labourers and Female agricultural labourers ranged between Rs. 141 to about Rs. 143 (Table 4.17). The perceptions of agricultural labourers towards the work under NREGS revealed that they wanted to do more work in NREGS because they had to work for 8 hours only at reasonable wages. In farm operations, they had to work for more than 8 hours and received less wages. Moreover, there was no gender wise discrimination in wage under NREGS.

Table 4.17

Distribution of Agricultural Labourers by Working in NREGS

Particulars	Male agricultural labourers	Female agricultural labourers
No. of workers in NREGS	23(46)	34(68)
No. of working days	11.95	11.58
Average wage (Rs.)	141.08	142.82

3. Wage Structure and Income Level of Agricultural Labour Households

3.1 Wage Rate of in Agricultural and Non- agricultural Activities

The wage of agricultural labourers in farm and non-farm activities is given in Table 4.18. In farm related activities, 56 per cent of Male agricultural labourers worked at wage in the range of Rs. 150-200 per day. While 20 per cent of Male agricultural labourers received wages between Rs. 200-250 per day. Wages were only Rs. 100-150 for 8 per cent of Male agricultural labourers. Female agricultural labourers were getting lesser wage as compared to the Male agricultural labourers. It was evident from the fact that 74 per cent Female agricultural labourers were getting wage in the range of only Rs.100-150 per day. There were only 24 per cent Female agricultural labourers who worked at a wage of Rs. 150-200 per day. There was only one FAL working at a higher wage of Rs. 200-250 per day. As already pointed out that only 76 per cent of Male agricultural labourers and 82 per cent of Female agricultural labourers were involved in non-farm activities. Of these, 18 per cent agricultural labourers got wages in the range of Rs. 150-200 per day. 16 per cent Male agricultural labourers worked at a lower wage of Rs. 100-150 per day. Another 6 per cent Male agricultural labourers each worked at a wage of Rs. 200-250 and Rs. 400-450 respectively, while 4 per cent were getting wage in non-farm sector in the range of Rs. 250-300 per day. 36 per cent of Female agricultural labourers received wages between Rs. 150-200 per day, while 26 per cent were in the range of Rs. 100-150 per day. There 10 per cent such Female agricultural labourers who were getting wage below Rs.100 per day. Thus, Female agricultural labourers were getting lower wages for non-farm work than their male counterparts. Thus, it can be concluded from the forgoing analysis that wages were quit higher in case of Male agricultural labourers than that in case of Female agricultural labourers.

3.2 Working Hours of Agricultural Labourers

All agricultural labourers were found to work in field more than 8 hours. 32 per cent Male agricultural labourers had to work for at least 13 hours a day, while another 26 per cent worked for 11 hours in a day. There were 18 per cent such Male agricultural labourers who worked for more than 12 hours. Of these 12 per cent

Table 4.18

Wage Rate of Agricultural Labourers in Farm and Non-Farm Activities

Wage rate (In Rs./ day)	Farm sector		Non farm sector	
	Male agricultural labourers	Female agricultural labourers	Male agricultural labourers	Female agricultural labourers
Less than 100	-	-	-	5(10)
100-150	4(8)	37(74)	8 (16)	13(26)
150-200	28(56)	12(24)	9(18)	18(36)
200-250	10(20)	1(2)	3(6)	3(6)
250-300	-	-	2(4)	2(4)
300-350	-	-	-	-
350-400	-	-	5(10)	-
400-450	-	-	8(16)	-
450-550	-	-	3(6)	-

worked for 15 hours. In case of Female agricultural labourers , 74 per cent Female agricultural labourers had to work for 9 hours in a day. Another 14 per cent worked for 11 hours. While 8 per cent of Female agricultural labourers had to work for at least 10 hours in a day. 4 per cent were working for 12 hours. Thus, it is clear that all Male agricultural labourers and Female agricultural labourers worked more than stipulated working hours. Although the per day working hours were lower in case Female agricultural labourers than that in case of Male agricultural labourers , but since Female agricultural labourers had also to take care of their domestic works, the works were relatively much higher given the wage paid (Table 4.19).

3.3 Advance Payments

Table 4.20 shows that 86 per cent of Male agricultural labourers and 88 per cent of Female agricultural labourers had to take advance payments from their landlord/employer for their domestic needs. These were either subsequently deducted from their salaries/wages or repaid by the agricultural labourers. Only 14 per cent of Male agricultural labourers and 12 per cent Female agricultural

labourers reported that they did not avail receive any advance payment or wage from their employer.

Table 4.19

Distribution of Agricultural Labourers by Working Hours

Working hours	Male agricultural labourers	Female agricultural labourers
8	-	-
9	8(16)	37(74)
10	4(8)	4(8)
11	13(26)	7(14)
12	16(32)	2(4)
13	1(2)	-
14	2(4)	-
15	6(12)	-

Table 4.20

Distribution of Agricultural Labourers by Advance Payments received (%)

Advance payment	Male	Female
Yes	86	88
No	14	6

3.4 Monthly Income of Agricultural Labour Households

The monthly income earned by the agricultural labour households (ALHs) is given in Table 4.21. The table shows that 30 per cent of male ALHs earned income in range of Rs. 6,000 to 8,000, while 28 per cent female ALHs and 26 per cent male ALHs earned livelihood in the range of Rs. 4,000-6,000 per month. Family income

in range of Rs. 6000-8000 was earned by 24 female ALHs. Another 18 per cent female ALHs and 8 per cent male ALHs earned per month income between Rs. 2,000 to 4,000. 4 per cent female ALHs earned below Rs. 2000 per month. Some of ALHs in case of both male and female labourers earned family income more than Rs. 10,000 as these families were generally bigger in size and number of members working in farm as well as non-farm activities were also more as compared to the smaller families.

Table 4.21

Distribution of Agricultural Labour Households by Family Income

Family Income (Rs./month)	Male agricultural labourers	Female agricultural labourers
Up to 2,000	-	2(4)
2,000 – 4,000	4(8)	9(18)
4,000 – 6,000	13(26)	14(28)
6,000 – 8,000	15(30)	12(24)
8,000 – 10,000	9(18)	4(8)
10,000 – 12,000	4(8)	-
12,000 – 14,000	1(2)	3(6)
14,000 – 16,000	3(6)	4(8)
16,000 – 18, 000	-	1(2)
18,000 – 20,000	1 (2)	1(2)

3.5 Debt Condition of Agricultural Labourers

About 22 per cent of Male agricultural labourers and 46 per cent of Female agricultural labourers were under debt. They were mainly indebted to their landlord who was also their employer. It was evident from the fact that 20 per cent of Male agricultural labourers and 42 per cent of Female agricultural labourers were under debt with their landlord. Another 4 per cent Female agricultural labourers and 2 per cent Male agricultural labourers were indebted to bank and local shopkeeper respectively (Table 4.22). Table 4.23 shows the distribution of agricultural labourers by purpose for availing credit. It shows that 6 per cent Male agricultural

labourers and 12 per cent Female agricultural labourers availed credit for construction and renovation of their house. While another 12 per cent Female agricultural labourers and only 2 per cent Male agricultural labourers also took loan during their illness. Another 12 per cent Female agricultural labourers and 2 per cent Male agricultural labourers availed loan for marriage of their children and other family member. Loan for day-to-day daily expenditure was also taken by 6 per cent Female agricultural labourers and 2 per cent Male agricultural labourers. 2 per cent each Male agricultural labourers and Female agricultural labourers also took credit for the study of their children. While 2 per cent each Male agricultural labourers and Female agricultural labourers availed the loan to buy some land. Loan for delivery of their family was also reported by one of the Male agricultural labourers . Average debt on Male agricultural labourers was about Rs. 31,090 and while that on Female agricultural labourers , it was about Rs. 29,411.

Table 4.22

Distribution of agricultural labourers by source of debt

Source of indebtedness	Male agricultural labourers	Female agricultural labourers
Landlord	10(20)	21(42)
Bank	-	2(4)
Local shopkeeper	1(2)	-

Table 4.23

Distribution of Agricultural Labourers by Purpose for availing Credit

Purpose for availing credit	Male agricultural labourers	Female agricultural labourers
Construction and renovation of house	4 (8)	8 (16)
Health	1 (2)	6 (12)
Marriage of their children and relative	1 (2)	4 (8)
Day-to-day expenditure	1 (2)	3 (6)
Education of their children	1 (2)	1 (2)
Purchasing land	1 (2)	1 (2)
Delivery	1 (2)	-

Note: multiple responses

4. Perceptions of Agricultural Labourers about Working Conditions

Some of the suggestions reported by agricultural labourers for improvement in their work condition are given in Table 4.24. All the agricultural labourers argued that they should be regulation in their working hours. As already pointed out they had to work for more than stipulated working hours. They reported exploitation by landlords without any non-regulation of working hours. Also all agricultural labourers wanted credit cheaper rates from government agencies which would help them to overcome their problems regarding their work and social life. As of now most of the agricultural labourers took credit from landlords and paid higher interest. 82 per cent of Male agricultural labourers and 86 per cent of Female agricultural labourers suggested that for improvement in their skills, there should be some short time period training programmes so that they could also be employed outside the farm sector on a regular basis. It will also improve their bargaining position. All Female agricultural labourers and 70 per cent of Male

agricultural labourers reported wage disparities. Female agricultural labourers were paid less wage as compared o the Male agricultural labourers, although both carried out the similar farm activities. Therefore, in order to reduce the disparity in wages across both Male agricultural labourers and Female agricultural labourers, same wage should be paid. All Female agricultural labourers and 62 per cent of Male agricultural labourers suggested that SHG activities should be enhanced to develop entrepreneurial skills. This will help them to gain self employment and good income. 86 per cent of Female agricultural labourers and 82 per cent of Male agricultural labourers suggested that in off season in agriculture, agricultural labourers were unemployed for most of the days. Some labourers were involved in employment guarantee programmes and also other non- farm activities, but only for a few days. So steps should be taken to provide non- farm employment for more number of days. 68 per cent of Female agricultural labourers and 46 per cent of Male agricultural labourers suggested that the MGNREGS programme should be implemented properly assuring 100 days of work in a year. 54 per cent of Male agricultural labourers and 32 per cent of Female agricultural labourers suggested that there should be more opportunities in MGNREGS for those who have not job cards under MGNREGS, but they are interested to do work under MGNREGS.

Table 4.24

Perceptions of labourers for Improvement in their Working conditions (%)

Perceptions of agricultural labourers	Male Agricultural labourers	Female Agricultural labourers
Regulation in working hours	50(100)	50(100)
Cheaper credit	50(100)	50(100)
Start Short term training programme	41(82)	43(86)
Reduction in wage disparity	35(70)	50(100)
SHG activities	31(62)	50(100)
Work in Non-farm sector	41(82)	43(86)
Proper implementation of MGNREGS	23(46)	34(68)
Work opportunity in MGNREGS	27(54)	16(32)

Note: multiple responses

Chapter 5

Summary and Policy Suggestions

5.1 Summary

The importance of the agriculture and allied sectors in Punjab can be judged from the fact that it employed about 67 per cent of the population although its share in GSDP is continuously declining (Khanna, 2011). Punjab agriculture has contributed significantly during green revolution. The structural transformation has reduced the income generation of the rural economy. The worst suffers were small and marginal farmers; and agricultural labourers. The small and marginal farmers, finding their landholding inadequate to support the rising number of dependent family members, started to work as agricultural labourers. The principal mode of livelihood is thus shifting from cultivation of operational holdings to wage labour employment. During the last one and half decades, due to non-viability of farming, about two lakh marginal and small farmers have given up self-cultivation in Punjab (Singh, 2009). Fast mechanization of agriculture like use of tube wells, harvest-combines, tractors on a large scale in the last few years has replaced the human labour in agriculture. The machine costs of small and marginal farmers have been rising and are higher than those of big farmers, and as a result, the farmers are faced with an economic crisis and thus, unable to employ labour on permanent basis. In such a situation they are forced to engage in casual labour for different farm operations, ultimately leading to casualisation of agricultural labour in Punjab (Rangi *et al,* 2001). The farmers of Punjab have responded to the resulting economic pressures by replacing the permanent agricultural labour with the casually employed labour. This structural change in rural labour employment has wider social, economic and political implications that merit serious attention (Rangi *et al*, 2001). It is in this context that an attempt has been made to study the socio economic conditions of agricultural labourers and their employment pattern in Punjab.

The study has been carried out in Bathinda district of Punjab as it is major district in production of cotton in the state and cotton is a more labour intensive as compared to other crops such as wheat and paddy. Two blocks namely Nathana and Talwandi Sabo were purposefully chosen from the Bathinda district. These blocks were chosen to give a representation to the district as Nathana block is in

north, while Talwandi Sabo is in south of the district. Two villages from each block were selected randomly in Bathinda district for primary study. And from each village, a sample of 25 agricultural labourers was selected randomly. From Nathana block, two villages Chak Bakhtu and Lehra Khanna; and from Talwandi Sabo block two villages, Maiserkhanna and Jhanduke were selected. Thus, the study has been carried out with 100 agricultural labourers.

Most of the agricultural labourers were illiterate as about 92 per cent female agricultural labourers and 82 per cent male agricultural labourers were illiterate. All the respondents were landless and unskilled. Both Male agricultural labourers and Female agricultural labourers were in middle age (around 44 years). 96 per cent of Male agricultural labourers and 82 per cent of Female agricultural labourers were married and only 4 per cent of Male agricultural labourers and 18 per cent of Female agricultural labourers were widow/widower. More than 95 per cent belonged to scheduled caste. 86 per cent agricultural labourers resided in *Kuccha* houses. Average family size of Male agricultural labourers was 5.3 while that of Female agricultural labourers was 4.4. 83 per cent of agricultural labourers had the facility of electricity, but most of them had stolen it or shared with their neighbours. 95 per cent of agricultural labourers had water from their neighbours, common places like *dharmshala, Gurudwara* etc. Only 27 per cent of agricultural labourers had cooking gas facilities. Only 25 per cent of agricultural labourers had BPL cards. Only 54 per cent of Male agricultural labourers and 48 per cent of Female agricultural labourers availed banking facilities mainly because of working under MGNREGS. 37 per cent of agricultural labourers had buffalo and 24 per cent of agricultural labourers had cow as a livestock but they had no income from them. Most of the agricultural labourers got only casual works in farm operations. Male agricultural labourers were involved in all different kinds of farm operations, while Female agricultural labourers generally participated in activities such as wheat harvesting, paddy transplanting, cotton picking, weeding, plucking of cotton bolls, harvesting in other crops, removal of cotton sticks etc. Thus, the average employment days in farm operations were 234 in case of Male agricultural labourers and only 110 in case of Female agricultural labourers . Some of the Male agricultural labourers and Female agricultural labourers supplemented their farm income by doing various non-farm operations but they involved less in non-

farm activities as compared to farm activities because of they were unskilled and illiterate. The non-farm employment was however higher in case of Female agricultural labourers (97 days) as compare to the Male agricultural labourers (46 days). Thus, Male agricultural labourers were employed for 281 days while Female agricultural labourers were employed for 207 days.

74 per cent of Female agricultural labourers received wages between Rs.100-150/day, while 56 per cent Male agricultural labourers received wage between Rs.150-200/day in farm sector. Another 20 per cent Male agricultural labourers got wages in Rs. 200-250/day. The wages varied across both Male agricultural labourers and Female agricultural labourers according to the activity carried out by them. They received wages in cash for all operations except for wheat harvesting where, they received wheat as a kind wage. 74 per cent Female agricultural labourers worked for 9 hours and 58 per cent of Male agricultural labourers worked for 11-12 hours in farm sector. 68 per cent Female agricultural labourers and 46 per cent Male agricultural labourers also worked in NREGS and average wage obtained was about Rs.142/day. 87 per cent of agricultural labourers took advance payments from their landlord for their domestic needs. Indebtedness was higher among Female agricultural labourers than that among Male agricultural labourers as about 46 per cent of Female agricultural labourers were indebted as compared with only 22 per cent in case of Male agricultural labourers . This is also one of the reasons indentified for working of Female agricultural labourers as agricultural labourers. A large number of them are in the grip of village landlords, as 31 per cent of agricultural labourers took credit from their landlord. Landlord exploited the labourers by charging exorbitant rate of interest for the credit. Thus, agricultural labourers had to repay it by selling their labour. Thus, the study pointed that there existed wage disparities in farm activities for the same work done. There is casualisation of all the farm operations which indicated uncertain and irregular work with no guaranteed minimum wage.

5.2 Suggestions to Improve Conditions of Agricultural Labourers

In consistent with the results, the study recommends following few suggestions in order to improve the livelihoods of the agricultural labourers.

- ***Reduction in wage disparity:*** Female agricultural labourers were paid less wage as compared o the Male agricultural labourers , although both

carried out the similar farm activities. Therefore, in order to reduce the disparity in wages across both Male agricultural labourers and Female agricultural labourers , same wage should be paid.

- ***Providing education facilities and improving skills:*** An increase in government expenditure on education for the development of a qualitative training and learning system among rural workers might reduce the rate of casualisation in rural non-farm employment by facilitating sustainable, profitable, desirable and suitable jobs in future (Jatav, 2012). The skills of the agricultural labourers should be enhanced by providing short term training programmes so that they could also be employed outside the farm sector on a regular basis. It will also improve their bargaining power in labour market.

- ***Regulation of working hours:*** It is also necessary to regulate the working hours of the agricultural labourers as most of the agricultural labourers are working much more than the stipulated working of 8 hours. In certain cases, where agricultural labourers are indebted to their landlords, they are repaying the loans by selling their labour.

- ***Providing more working days and work in MGNREGS***: Majority of them suggested that the MGNREGS programme should be implemented properly assuring them 100 days of work in a year.

Bibliography

Census of India (2011). Ministry of Home Affairs, Office of the Registrar General and Census Commissioner, India.

Chattopadhyay, M. (1982). Role of Female Labour in Indian Agriculture. *Social Scientist*, 10 (7), 43-54.

Dommati, D. and Chittedi, K. R. (2011). Socio-economic conditions of agricultural women labour in Andhra Pradesh: a case study of Karimnagar district. *International Journal of Business Economics and Management Research*, *2*(3), 115-135.

Economic Survey of Punjab (2012-13). Economic Adviser, Government of Punjab.

Ghuman, R. S., and Dua, P. K. (2008). NREGA and Rural Employment in Punjab: An Evaluative Study of Hoshiarpur District. In *Conference on Employment Opportunities and Public Employment Policy in Globalising India, Organised by Centre for Development Studies, Thiruvananthapuram, April* (pp. 3-5).

Ghuman, R. S., Singh, I., and Singh, L. (2007). Status of Local Agricultural Labour in Punjab. *Mohali: The Punjab State Farmers Commission*.

Gill, K. K. (2001). Diversification of agriculture and women's employment in Punjab. *Indian Journal of Labour Economics*, 44(2), 259-267.

GOP(2012). Statistical Abstract of Punjab. Economic and Statistical Organisation. Government of Punjab.

GOP(2013). Punjab Minimum Wages, Department of Labour, Government of Punjab.

Goswami, C. (2013). Female Agricultural Workers in Assam: A Case Study of Darrang District. *International Journal of Scientific and Research Publications*, 3(2), 1-5.

Jatav, M. (2012). Extent of casualisation in rural non-farm workforce of India: what does recent national sample survey data reveal?, *Journal of Social and Economic Development,* 14 (1): 65-84.

Jatav, M., and Sen, S. (2013). Drivers of Non-Farm Employment in Rural India: Evidence from the 2009-10 NSSO Round. *Economic and Political Weekly,* 68 (26 and 27), 14-21.

Kaur, B., Singh, J. M., Garg, B. R., Singh, J., and Singh, S. (2011). Causes and impact of labour migration: A case study of Punjab agriculture. *Agricultural Economics Research Review*, 24 (Conference Number), 459-466.

Khanna, K (2011). Growth and structural changes in Punjab economy: A study of post of green revolution period, *Political Economy Journal of India*, 20(1):1-9.

Mehta, N. (2006). Employment Availability for Hired Workers: A Comparative Study of Two Villages. *Indian Journal of Labour Economics*, 49(3), 497-515.

Narayanamoorthy, A and R. S. Deshpande (2001).Irrigation, Agrarian Relations and Agricultural Labourers: A State-wise Analysis. *Indian Journal of Labour Economics*, 44(4), 827-841.

Narayanamoorthy, A., and Bhattarai, M. (2013). Rural Employment Scheme and Agricultural Wage Rate Nexus: An Analysis across States. *Agricultural Economics Research Review*, 26(conference issue), 149-163.

Nisha, N. (2008). *Woman Labour in Agriculture–An Economic Analysis* (Doctoral dissertation, University of Agricultural Sciences, Dharwad).

Pramanik. R.N.(2008). Changing Terms and Conditions of Employment of Agricultural labourers in West Bengal. *Economic and Political Weekly*. 43(15),73-77.

Rana, A.S.,Singh, J., and Singh, K. (2004). Female Labour Participation in Productive Work. *Man and Development*, *26*, 167-174.

Rangi, P. S., and Sidhu, M. S. (2004). New farm technology and changing structure of agricultural labour employment in Punjab. *Man and Development*, 26(4), 61-80.

Rangi, P. S., Sidhu, M. S., and Singh, H. (2001). Casualisation of Agricultural Labour in Punjab. *Indian Journal of Labour Economics*, 44(4), 957-970.

Rawal (n.d.). Agricultural Labour and Unfreedom: Siri Workers in a Village in Western Haryana. Accessed at www.cpim.org/marxist/200402_agri_labour_haryana.doc on 05.04.2014.

Roy, T. K., Bagchi, K. K., and Sarkar, C. (2011). Coping with the Supply-Demand Gap of Agricultural Labourers: A Case Study of Uttar Dinajpur District of West Bengal. *Agricultural Economics Research Review*, (2011).24(conference number), 537-543.

Sharma.H.R. and Kumar.V.(2003). Functioning of agricultural labour market: Micro evidence from an agriculturally developed region of Himachal Pradesh. *Indian Journal of Agricultural Economics*, 58(4), 695-714.

Sidhu, K. (2011). Agro-climatic zone-wise analysis of women in farming in Punjab. *Journal of Human Ecology-New Delhi*, 33(1), 47-52.

Sidhu, R. S., and Singh, S. (2004). Agricultural wages and employment. *Economic and Political Weekly*, 39 (37), 4132-4135.

Sidhu, R.S., Vatta, K. and Kaur, A. (2011). Instability in Crop Yields and Variability across Different Farm Size Categories in Punjab. *Journal of Agricultural Development and Policy,* 21 (1), 9-20.

Sidhu,M.S.,Joshi.A.S.,and Kaur.I.P.,(2009). Migrant agricultural labour in Punjab. *Man and Development*, 31(4), 67-84.

Singh, M. (1997). Bonded migrant labour in Punjab agriculture. *Economic and Political Weekly*, 32 (11), 518-519.

Singh, S. (2001). Labour under contract farming in India: Issues of gender and child labour. *Indian Journal of Labour Economics*, 44(4), 843-852.

Singh, S. (2009). Survival of agricultural labour in Punjab: a burning question. *Economic and Political Weekly*, 44(29), 24-25.

Singh, S. and Sangeet (2013). "Economic Conditions of Agricultural Labourers and Public Policies in Punjab" in R.S. Ghuman and Sukhvinder Singh (eds.): Rural Local Self-Government in India: Some Developmental Experiences, Centre for Research in Rural and Industrial Development, Chandigarh, PP: 207-216.

Singh,M. (2012). Preference for Migrant Agricultural Labour in Punjab. *Economic and Political Weekly,*47 (29),27-28.

Toor, M.S., A.S. Bhullar and I. Kaur (2007), Agriculture-led Diversification and Labour Use in Punjab: Potentials and Constraints, *Indian Journal of Labour Economics*, 50 (4): 737-746

Usami (2012). Recent trends in wage rates in rural India. *Review of Agrarian Studies*, 2 (1),171-181.

Venkatesh, P. (2013). Recent Trends in Rural Employment and Wages in India: Has the Growth Benefitted the Agricultural Labours? *Agricultural Economics Research Review*, 26 (conference issue), 13-20.

Vepa, S. S. (2005). Feminisation of agriculture and marginalisation of their economic stake. *Economic and Political Weekly*, 40 (25), 2563-2568.

Verma, A., Singh, G., and Singh, B. (2010). An Analysis of Socio-Cultural and Economic Changes in Migrant Agricultural Labourers in Punjab. *Social Change*,40(3), 275-301.