IAMR Report No. 2/2013

Rural Non-Farm Employment: A Study in Punjab



Institute of Applied Manpower Research Planning Commission, Government of India

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Acknowledgements

The Institute of Applied Manpower Research (IAMR) is thankful to the members of the Standing Committee on Research Programme (SCRP) of IAMR for approving the study on Rural Non-farm Employment (RNFE) and giving its valuable guidance to conduct the study. The study was organised in four states Uttar Pradesh, Gujarat, Tamil Nadu and Punjab in close collaboration with Giri Institute of Development Studies, Lucknow; Centre for Research in Rural and Industrial Development (CRRID), Chandigarh; Institute of Development Alternatives, Chennai, and Gujarat Institute of Development Research, Ahmedabad. IAMR is grateful to all of them for making valuable contributions.

Institute's faculty Dr. Rashmi Agrawal, Director (overall in-charge), Dr. Shachi Joshi, Dy. Director, Dr. G. P. Joshi, Dy. Director and Dr. Partha Saha, Dy. Director, were involved in coordinating with the state teams in finalization of survey methods, development of tools, sampling and organising fieldwork and focus group discussions at various places across the states. They were also involved in preparing a framework for report writing. The institute put on records sincere gratitude to all of them.

Besides the above faculty, Dr P. K. Saxena, Joint Director, Shri D. Indrakumar, Asst. Director, Shri Radhey Shyam, Asstt. Director and Shri Sanjay Kumar, Young Professional were also involved in supervising the data collection at field level. Special thanks to all the staff of IAMR who played important roles in completing the primary survey.

Thanks are also due to Sh. Sudershan Kumar for providing the secretarial assistance and Mrs. Dipika Sen for editing the reports. Shri Dipayan Nandi, Mrs. Shagum Barwal and Mrs. Vaishali Rana, Asstt. Systems Analysts helped in developing software, guiding state teams and in the analysis of data. We are thankful to all of them for their efforts.

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Executive Summary

The shift of labour from farm to non-farm sector is generally viewed as an indicator of economic development. It is largely in this context, that the development of non-farm sector is generally recommended to overcome the problem of unemployment and poverty. Keeping in view the declining labour absorption capacity of farming sector and ever-rising problem of unemployment in rural areas of Punjab, the development of rural non-farm employment is of paramount importance and pressing urgency. For that, a need was felt to understand the nature and extent of the rural non-farm employment (RNFE) in Punjab and how it differs from area to area and also among different socio-economic groups.

Objectives of the Study

- 1. To map the RNFE activities in sample rural areas.
- 2. To analyse the extent of RNFE compared to that of the agricultural employment.
- 3. To examine the differences across caste and gender in the RNFE.
- 4. To assess the number of days of employment in RNFE.
- 5. To determine the wage income levels of various RNFE activities in the select villages.
- 6. To study the resource endowment of the households and the nature of RNFE.
- 7. To evaluate the activity status of all the women in each of the households.
- 8. To determine the source of demand for rural non-farm activities and their linkages in the rural economy.
- 9. To determine the factors which encourage employment in rural non-farm sector
- 10. To analyse the constraints that inhibit the growth of rural non-farm sector.

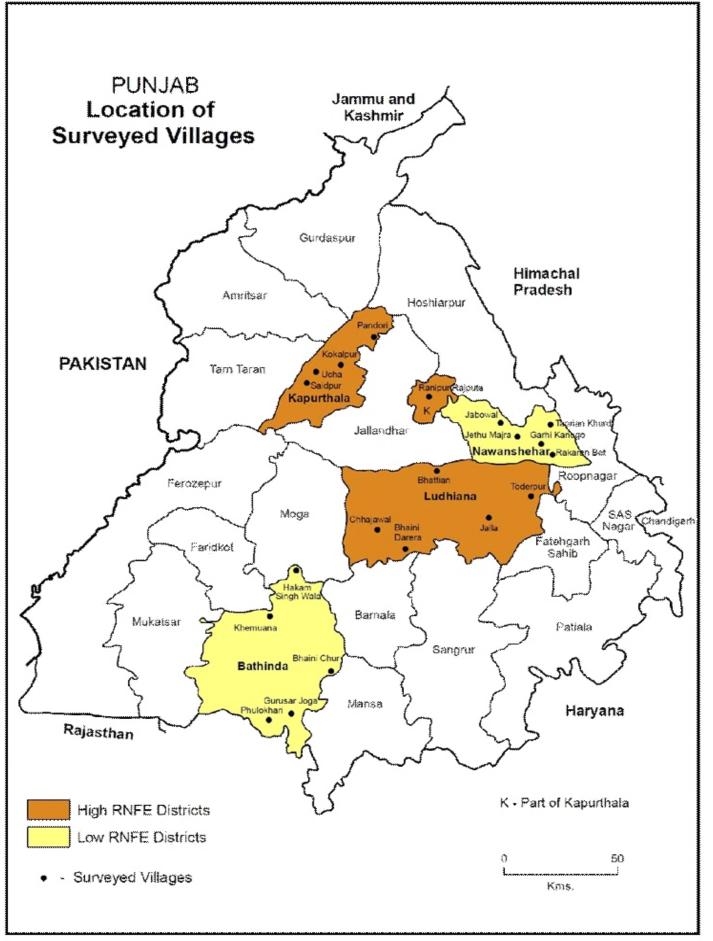
Methodology and Sampling Technique

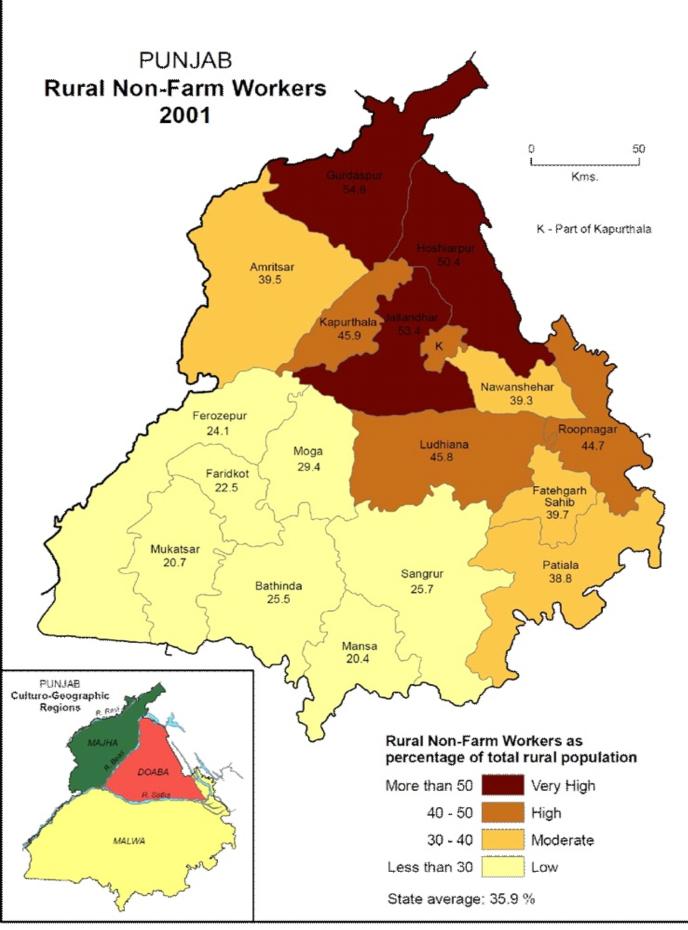
This study is primarily based on primary data collected from 6,380 households belonging to 20 villages selected from 4 different districts of Punjab. However, wherever necessary secondary data from different sources, such as reports and tables published by Census of India for various years; Statistical Abstract of Punjab, 2011, published by the Economic Advisor, Government of Punjab; and NSSO Reports (selected years) published by the Ministry of Statistics and Programme Implementation, Government of India, were also used.

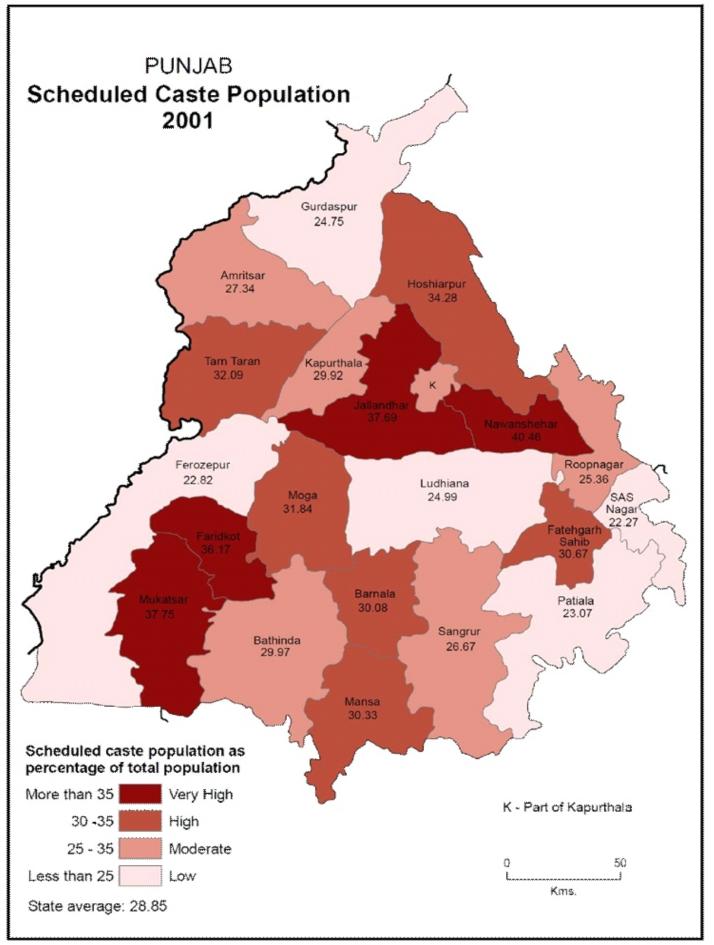
Major Findings of the Study

Findings of the study show that most farmers in this region have small or marginal landholdings which are economically unviable. The situation in sub-mountainous belt (Kandi area) is even worse because land productivity in this tract is comparatively low. Thus, people are forced to look for employment in rural non-farm sector. On the other hand, easy accessibility to nearest town and neighboring villages facilitated by good roads is also contributing very significantly to the growth of RNFE. A large majority (61.5%) of the persons who are self-employed in non-agricultural activities are located within their villages. About 30 percent of such persons work outside their villages but within the district. Only about 9 percent of the self- employed in non-agricultural activities is working outside the district. It reflects that people in Punjab try to remain in the vicinity for various activities.

Mostly the activities in which they are employed are confined to shop-keeping, truck driving, mechanic and repair workshops and others.







CHAPTER I

Introduction

The shift of labour from farm to non-farm sector is generally viewed as an indicator of economic development. It is largely in this context, that the development of non-farm sector is generally recommended to overcome the problem of unemployment and poverty. Although agriculture and its allied activities still continue to be the largest single source of labour absorption, yet unemployment in rural areas is rising continuously because the labour absorption capacity of agriculture is on the decline (Bhalla, 1987, 1989, Gill, 2002, GOI, 1990). Punjab, which till recently, was a leading state in the growth of state domestic product and per capita income now finds itself in the grip of an agrarian crisis and decelerating growth rate largely due to overdependence of its economy on agriculture. No doubt, in the initial years of the green revolution, employment in agricultural sector did increase in Punjab due to intensification of farming and expansion of cultivated area, but it soon started declining due to mechanisation of farming operations and decelerating returns from farming. As per the Census of India data, 79.5 percent of the rural workforce was engaged in farming and its allied activities in 1971, which declined to 64.1 percent in 2001 (Table1.1). This shows that dependence of rural workforce on farming and its allied sectors is gradually declining. The NSSO data also confirms the declining dependence of rural workers on agriculture. Among all the usually employed workers in rural areas of Punjab, 77.0 percent of males and 92.2 percent of females were engaged in agricultural activities during 1983 (Table1.2). From 77.0 percent in 1983, the proportion of males in agricultural sector declined to 68.8 percent in 1987-88, further to 68.1 percent in 1993-94 and finally to 63.7 percent in 1999-2000. The proportion of females engaged in this sector however, declined from 92.2 percent in 1983 to only 90.6 percent in 1999-2000 - a drop of only 1.6 percentage points in about 17 years.

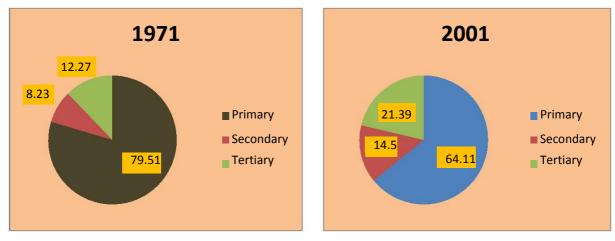
The state also experienced structural transformation in its economy. The contribution of primary sector towards NSDP decreased from 59.33 percent in 1960-61 to 40.32 percent in 2000-01. The secondary sector improved its share from 14.85 percent to 24.03 percent during the same period. The tertiary sector increased to 35.65 percent in 2000-01 from 25.18 percent in 1960-61. The share of the main workers in agriculture increased from 57.00 percent in 1961 to 63.60 percent in 1971, but dropped to 45 percent in 2001. The share of agricultural workers remained pegged at 55 percent during 1961-91, but decreased to 39 percent in 2001.

Keeping in view the declining labour absorption capacity of farming sector and ever-rising problem of unemployment in rural areas of Punjab, the development of rural non-farm employment is of paramount importance and pressing urgency. For that, there is a need to understand the nature and extent of the rural non-farm employment (RNFE) in Punjab and how it differs from area to area and among different socio-economic groups.

Sector	1971	1981	1991	2001
Cultivators	53.64	47.72	42.81	35.09
Agricultural labourers	24.79	28.52	30.75	18.85
Livestock, forestry, fishing, plantations, orchards	1.05	0.96	0.67	10.17
and allied activities				
Subtotal: Primary	79.51	77.2	74.23	64.11
Mining & quarrying	0.02	0.03	0.01	0.03
Manufacturing, processing, servicing and repairs				
Household industry	3.42	2.28	1.17	2.74
Other than household industry	3.25	5.09	5.47	7.47
Construction	1.54	1.55	1.87	4.26
Subtotal: Secondary	8.23	8.95	8.52	14.50
Trade & commerce	3.17	3.96	4.09	5.48
Transport, storage & communication	1.30	2.30	2.57	3.05
Other services	7.81	7.59	10.59	12.86
Subtotal: Tertiary	12.27	13.85	17.25	21.39
Grand total	100.00	100.00	100.00	100.00

Source: Director, Census Operation, Punjab (1971, 1981, 1991, 2001)





Source: Registrar General of Census

Sector		Rural	Males		Rural Females							
	1983	1987- 1988	1993 - 1994	1999 - 2000	1983	1987- 1988	1993 - 1994	1999 - 2000				
Agricultural	77.0	68.8	68.1	63.7	92.2	91.6	92.7	90.6				
Mining & quarrying	-	-	-	-	0.1	0.1	-	-				
Manufacturing	6.2	9.7	6.2	7.7	4.2	2.8	1.3	2.3				
Electricity, gas, water,	0.7	1.1	1.5	1.1	-	-	0.2	0.2				
etc.												
Construction	2.9	4.0	4.7	7.8	0.1	-	-	0.1				
Trade, hotel &	4.1	4.5	6.3	8.1	0.6	1.1	1.0	1.1				
restaurants												
Transport, storage,	3.3	3.8	3.6	5.6	0.1	0.1	-	-				
communication etc.												
Finance, insurance	0.3		0.6	0.5	-		-	-				
services		7.2				4.2						
Public administration,	5.1]	9.0	5.5	2.1		4.8	5.7				
community services												
Total	100.00		100.00	100.00		100.00	100.00	100.00				

Tables 1.2: Percentage Distribution of Usually Working Rural Persons in the UPSS by
Broad Industrial Categories in Punjab

Source: NSSO, (1987, 1990, 1997, 2001)

1.1 Main Objectives

The main objectives of this study are:

- 1. To map the RNFE activities in sample rural areas;
- 2. To assess the extent of RNFE as compared to the agricultural employment;
- 3. To assess the differences across caste and gender in the RNFE;
- 4. To assess the number of days of employment in RNFE;
- 5. To assess the wage income levels of various RNFE activities in the selected villages;
- 6. To assess the resource endowment of the households and the nature of RNFE;
- 7. To assess the activity status of all the women in each of the households.
- 8. Analyse the source of demand for rural non-farm activities and their forward and backward linkages in the rural economy.
- 9. Analyse the factors which encourage employment in rural non-farm sector.
- 10. Analyse the constraints that inhibit the growth of rural non-farm sector.

1.2 Hypothesis

The following hypothesis was tested to fulfil the above stated objectives:

RNFE activities would be related to caste and gender;
 Higher the level of education, higher will be the days of employment in non-farm activities;

- 2. Wages and earnings will be higher in rural non-farm activities as compared to that in the agricultural sector;
- 3. Better infrastructure (roads, communication, power) leads to diversification in RNFE;
- 4. Low/High agricultural productivity leads to high/low diversification in RNFE;
- 5. Participation of women in RNFE is lower than that of men;
- 6. Poorer households would be diversifying more into non-farm activities as compared to richer households.

1.3 Research Design and Methodology

This study is primarily based on primary data collected from 6,380 households belonging to 20 villages selected from four different districts of Punjab (Table 1.3). However, wherever necessary secondary data from different sources, such as, reports and tables published by Census of India for various years; Stastical Abstract of Punjab, 2011, published by the Economic Advisor, Government of Punjab; and NSSO Reports (selected years) published by the Ministry of Statistics and Programme Implementation, Government of India, were also used.

The households were selected following a multi-stage random sampling technique.

- Punjab is first divided into two parts, i.e. northern region and southern region as per NSSO classification.
- From each region, one district with high RNFE and one district with low RNFE were selected. From northern region Kapurthala and Nawanshehar and from southern region Ludhiana and Bhatinda were selected.
- Whereas Kapurthala and Ludhiana are high RNFE districts, Nawanshehr and Bhatinda are low RNFE districts.
- From each district, five villages were selected using stratified random sampling technique.
- Out of the 20 villages selected for the survey, 40 percent are located at a distance of 0-5 km from the nearest town, 25 percent at a distance of 6-10 km. and 35 percent at a distance of 11-15 km.
- The total number of households in these 20 villages is 6,380 and the number of households in these villages varies from minimum of 205 to maximum of 527. The average household size for these villages is 319.
- All the households in the selected villages were first mapped and then classified into farmers and non-farming households. The non-farming households were further divided into following categories:

Rural Labour Households Self-employed in non-agriculture with hired labour Self-employed in non-agriculture without hired labour Services

District	Village	No. of Households in the Village	No. of Sample Households	% of Sample Households
		High RNFE Distric	ts	
	Bhaini Darera	236	50	21.18
	Bhattian	344	45	13.08
Ludhiana	Chajjawal	527	100	18.97
	Jalla	242	50	20.66
	Todarpur	230	55	23.91
	Total	1579	300	18.99
Kapurthala	Kokalpur	254	52	20.47
	Pandori	467	93	19.91
	Ranipur Rajputan	316	64	20.25
	Saidpur	301	61	20.26
	Ucha	338	72	21.30
	Total	1676	342	20.40
High RNFE Distr	icts Total	3255	642	19.72
		Low RNFE Districts		4
	Hakam Singh Wala	269	56	20.81
Bhatinda	Bhaini Chuhar	338	63	18.63
	Phullo Khari	345	69	20.00
	Guru Sar Jga	261	54	20.68
	Khemuana	515	100	19.41
	Total	1728	342	19.79
	Garhi Kanugo	232	53	22.84
	Jabbowal	347	73	21.03
	Jethu Majra	304	62	20.39
	Rakaran Bet	429	90	20.97
	Taprian Khurd	205	52	25.36
Nawanshehar	Total	1517	330	15.16
Low RNFE Distr	icts Total	3245	672	17.62
	All districts	6500	1314	20.21

Table 1.3: List of Villages surveyed by Districts

1.4 Review of Literature

Hymer and Resnic (1969) were the first economists to give a comprehensive treatment to the rural non-agricultural activities in their model of an agrarian economy of an under-developed country. They pointed out that, apart from agriculture non-agricultural activities are also carried out in the rural areas to satisfy the needs of the people for various goods other than food. They called these non-agricultural activities as Z-activities and postulated that as an economy grows it substitutes food for Z-goods in production and M-goods (manufactured goods from an urban or foreign sector) for Z-goods in consumption. Instead of showing the potential of these non-farm activities in engaging rural workforce productively, the Hymer-Resmick's treatment

of it reinforced the significance of the large scale urban-based industrialization for employment generation.

The monsoon economy hypothesis (Choe, 1986; Oshima, 1986a; 1986b), which pertains to the phenomenon of cyclically repeating peak and slack seasons in farm labour utilization in monsoon agriculture, explains the structural significance of rural non-farm activities in the Asian monsoon economy. This model identifies two types of unemployment of farm labour: absolute underemployment and seasonal underemployment. Choe (1986) emphasised that because of cyclic nature of agriculture in monsoon economy and limited labour absorption capacity of urban industries, it is not possible to increase the labour productivity of farmers without increasing the productive use of labour during the slack season through non-farm/off-farm activities and diversification of agriculture.

Ranis and Steward (1993) improved upon the model given by Hymer and Resnick. They suggested a more sophisticated characterisation of rural non-farm sector that includes both traditional processes as described in the Hymer-Resmick model and modern influenced activities such as metal working and machinery repair shops. They further stated that while the traditional activities would be crowded out during the process of market integration, modern rural non-farm activities may prosper during the process of economic development.

The realisation that the exclusive focus on urban-led industrialisation was quite unable to solve the problems of unemployment and poverty prompted a re-evaluation of the large scale, capital-intensive development strategy and a new strategy emerged placing greater emphasis on small scale firms, rural non-farm activities and farm/ non-farm linkages (Meyer and Larson, 1978, Joshi, 1978). Meyer and Larsen (1978) presented evidence to suggest that small-scale firms and rural non-farm activities employ a substantial amount of labour, while using modest amounts of capital and foreign exchange.

Johnston and Kilby (1975) and Mellor (1976) theorized that a broad-based agricultural development by creating and strengthening numerous forward and backward linkages with the non-agricultural sectors of rural economy of a developing country was quite capable not only in productive employment of rural force but also giving a kick-start to the industrial development by developing and broadening of domestic demand base.

The worsening employment situation in the developing economies during 1960-90 (1992) which is reflected in the low rate of labour transfer into modern industrial and services sectors in many developing economies and a realization that there were severe limitations in the capacity of the agricultural sector to absorb the existing supply of rural labour force productively (Vyas and Mathai, 1978, Shand 1983, Jaisuriya and Shand 1986, Islam 1986, Bhalla, 1987, 1988, 1989, 1990, 1992; Saith, 1992) renewed interest in rural non-farm activities.

Chadha (1986) and Grewal (1994) provide some insight into the rural non-farm employment in Punjab. Some studies (Ghuman et al., 2002; Ghuman, 2005) based on primary data reveals that the magnitude of rural non-farm employment (RNFE) in Punjab is much less than what the Census of India, 2001 data show. These studies further reveal that more than 90 percent of the self-employed workers in RNFS were found to be engaged in petty activities which give them

very low level of earnings. However, a recent study (Singh, 2011) which is based on a much larger and more representative sample from different blocks of the state shows that the incidence of RNFE is much higher (51.87%), which is more than 5 percentage points higher than the level reported by Census of India in 2001. This study further revealed that majority of rural households belonging to sampled villages were having one or more of their family workers engaged in various non-farm activities within village or outside village or urban towns. A study by Toor (2002) shows that the participation of rural households in non-farm activities is due to push and pull factors.

Studies of Islam (1984); Vaidyanathan (1986); Parthasarthy et al., (1998); Simmons and Supri (1995); Ghuman (2005); and Ranjan (2009) report that growth of non-farm activities is largely distress induced. However Jodhka (2002); Shylendra and Thomas (1995); Chadha (1986); Bhalla (1993a, 1993b); Basu and Kashyap (1992); and Basant (1994) contend that distress is not the main driving force behind the growth of the rural non-agriculture sector.

Bhalla and Hazell (2003) also observed that the expansion of rural non farm sector in India has resulted in an increase in productivity in agriculture also. They also pointed out that the real wages have increased both in agriculture as well as in non-agricultural occupations and the wages in non-agricultural occupations are significantly higher than in agriculture. Fisher et al. (1997) also noted that rural non farm sector jobs, on the average, are superior to those in agriculture.

Wide variations in levels of employment and income shares across countries and regions within the same country are another feature of rural non-farm sector. Lenjouw and Shariff (2004) show that the share of non-farm income is the highest in the state of Himachal Pradesh, North East, West Bengal and Tamil Nadu. In these states non-farm sources account for more than 45 percent of the total income. By contrast, the share of income from non-farm sources was below 25 percent in Gujarat, Madhya Pradesh, Andhra Pradesh, Maharashtra and Karnataka. The share of income from non-farm sources in the remaining states was between 25 to 45 percent.

Chuta and Liedholm (1979), on the basis of a review of many country-specific studies, show that manufacturing range from 22 to 46 percent, commerce ranges from 11 to 35 percent, while services range from 10-50 percent of total rural non-farm employment. Other non-farm activities such as construction, transport and utilities generally account for less than 25 percent of rural non-farm employment.

Rosegrant and Hazell (2000) revealed that rural non-farm employment in India accounted for 23 percent of the total rural employment and out of rural non-farm jobs 42.3 percent were accounted for by manufacturing and construction, 53.1 percent by services and 2.2 percent by others. Thus, the service sector is the dominant sub-sector of rural non-farm employment.

Singh (2011), who surveyed 300 RNF household in Punjab found that workers from these households were engaged in 81 RNF activities. Out of these, 48 activities were in the domain of self-employment and the remaining 33 in wage employment. Self-employment was in pursuits such as flour mills, scooter/cycle repair, tractor workshops, quilt filling, labour

contractors, wheat-reaper trading, livestock trading, grain traders or commission agents (Arhtiyas), transporters of various hues, and so on. Alongside the traditional occupations like quilt filling, hair cutting, tailoring, *sepi*. etc., modern activities like generators and auto repair shop, sound service, selling and repairing mobile phones, labour contractor-ship was also there. Similar variety was also found in wage employment activities. The study further reveals that maximum concentration of RNF workers in Punjab is in services like photography, hair-cutting/barber, tailoring, medicine shops, medical practitioners, education, health, entertainment, and government and private services. He classified the RNF activities into six broad industrial categories and the concentration of workers in each category was as follows:-

Mining and querying	0.22%
Manufacturing, processing, servicing and repair	22.57%
Construction	13.05%
Trade and commerce	8.63%
Transport, storage & communication	12.61%
Other services	42.92%

This shows that services, manufacturing, processing and repair; construction, transport, storage & communication are the major sectors of employment for RNF workers. In other terms the secondary sector including construction absorbed over one-third (35.62%) and the tertiary sector nearly two-thirds (64.16%) of the RNF workers in the state.

The above mentioned studies provide a fairly good account of the nature and extent of RNFE in India and Punjab. However, none of these studies provides any insight into the role of cast hierarchy and *jajmani* system in the growth of RNFE in India or Punjab. The growth of RNFE in any part of India cannot be understood properly without understanding the role of caste hierarchy and jajmani system in that area. It is in this context that a brief comment on the caste hierarchy and jajmani system in Punjab is provided below.

The rural society in Punjab, as elsewhere in India, was earlier divided into two main classes, that is, the land owners and the service providers. The latter generally specialized in various caste based arts and crafts or menial services. The socio-economic relations between these two groups were governed by the Jajmani system. Under this system, the land owners were called as jajmans (patrons) and the non-land owners as Kamins (service provider). The land owners paid to the service providers for their services in kind (grains, fodder, etc.) at the time of crop harvesting. The system provided very low income to the service providers but ensured sustenance to them and their families. However, the system supported only a limited number of service providers from each category. Thus, many service providers, whose services were not required within the village, were compelled to leave the village. They either migrated to other villages or to the nearby towns.

The jajmani system which grew up during the ancient phase of Indian history maintained its vitality till the medieval period. It started declining during the colonial period and it is almost non-existent at present. Although the jajmani system in rural Punjab is no more existing, yet, it is very much alive in the minds of the people which act as a major hurdle in the growth of non-farm sector in the state.

In the rural society, especially in Punjab, the landowning castes are considered superior to nonland owning castes. In fact, the term 'kamin', which is used for the service providers or the non-land owning castes, is also used to demean someone.

Thus, the son of a Jat (the major land owning caste in Punjab) is reluctant to adopt any nonfarm activity, like tailoring, furniture making, hair cutting, shoe making etc., as these activities are associated with castes which are placed lower than the Jats in the caste hierarchy of Punjab. Most Jats in Punjab are even reluctant to grow vegetables (except potato) as vegetable cultivation in Punjab is associated mainly with Sainis and Kambojs who, within land owning castes are considered inferior to Jats. Even within the service castes (non-land owning castes), there is a hierarchy and the person who is placed at a higher position in that hierarchy is reluctant to adopt the profession/activity which is associated with the caste which is placed below him in the caste hierarchy. Thus, the son of an ironsmith or a carpenter, who are placed at a higher place in the caste hierarchy of non-farm owning castes, will not adopt the profession of a tailor, a barber or a mochi (shoe-maker) who are placed at a much lower position in the caste hierarchy of the area. By contrast, it has been observed that a person is too willing to adopt the profession/activity which is associated with a caste which is placed at a higher position than his own caste in the caste hierarchy of the area. Thus, a person who belongs to a caste which is placed at the lowest rank in the caste hierarchy has the maximum choices to adopt the rural non-farm activity. By contrast, the person who belongs to a caste which is at the top of the caste hierarchy has the minimum choices to adopt RNF activity.

Although most of the newly emerged activities are secular, yet here also one can see preferencefor certain activities on the basis of caste. For example, manufacturing and repair of modern agricultural machinery; repair of trucks, cars, motorcycle, scooters etc., are largely monopolised by the persons belonging to the artisan castes.

Thus, any programme which is chalked out for the promotion of RNFE must take into account these cultural prejudices and preferences.

1.5 The Study Area

This study pertains to Punjab state which is located in the north-western part of the country. It has a state of Jammu & Kashmir to its north, Himachal Pradesh to its east, Haryana to its south and Pakistan to its west. It has a total area of 50,362 square kilometers (km) and a population of 2, 77, 04, 236 as per census, 2011. Out of this population, 37.49 percent are living in urban centres and 62.51percent in rural areas. The literacy rate of population of the state is 76.7 percent. It is 81.5 percent among males and 71.3 percent among females. The literacy rate among males and females is higher in urban areas as compared to the rural areas. For example, 87.28 percent of males and 79.62 percent of females in rural areas. The state has a sex ratio of 893 for total population and 846 for child population (0-6 years), which is less than the national average.

Barring a narrow strip of hilly tract (Shivalik range) along its border with Himachal Pradesh in the north-east and isolated sand dunes here and there in the south-western part of the state, Punjab has a flat topography which is gently dipping from north-east to south-west. It is mainly drained by Satluj and Beas rivers and partly by Ravi and Ghaggar rivers.

The state receives an average rainfall of about 500 mm. However, it is comparatively more in the north-eastern part and as one moves from north-east to south-west it goes on declining. In fact, desert like climatic condition prevails in the south-western part of the state. Bulk of the rainfall in the state is received during monsoon months (July, August and September). Some rainfall is also received during winter months. From the beginning of April to middle of June and from the beginning of October to middle of December are comparatively dry periods. Because of its continental location the state experiences extremes of temperature during summer and winter. Day temperature during summer (May and June) often crosser 43°C mark and night temperature during December and January months generally remain below 5°C and often touches the freezing point. Ground frost and fog are common during winter.

Because of its plain topography, fertile alluvial soils, very high percentage (82.61%) of net area sown and 97.84 percent of its net area sown being irrigated, Punjab is agriculturally one of the most developed states of India. However, the industry in the state is not that developed. Lack of minerals and power resources, too much distance from the seaports, its location near a hostile neighbouring country (Pakistan) and non-availability of cheap land to set up industry are some of the main reasons for the low development of industrial sector in the state.

As per the latest information (for the year 2010), the state has 17287 registered working industrial units; out of which 14,371 are registered under section 2 m (i &ii) and 2,916 under section 85. A total of 6,11,844 workers are working in these units, which comes to 2,130 workers per lakh of projected population as on 1st March, 2010.

The National Sample Survey Organization data show that like many other major states such as Gujarat, Haryana, Maharashtra and Rajasthan, the participation of rural female workers in non-farm activities is very low (Table1.4). In 1999-2000, only 9.3 percent of female workers in Punjab were engaged in non-agricultural sector. By contrast, in West Bengal 47.4 percent and in Kerala 39.4 percent of rural female workers were engaged in non-agricultural activities. As compared to rural female workers, the participation of rural male workers in non-agricultural sector in Punjab (36.08%) was fairly good. But as compared to Kerala (57.0%), this percentage was quite low. The table further reveals that participation of total rural workers in non-agricultural sector in Punjab increased from 17.4 percent in 1983 to 27.1 percent in 1999-2000. Here also the increase was comparatively more (13.7 percentage points) among the male workers than the female workers (2.1 percentage points). The participation of total rural workers in non-agricultural activities during 1999-2000 was comparatively less than Kerala (51.2%), West Bengal (37.0%), Assam (32.3%), Tamil Nadu (31.7%) and Haryana (30.2%).

State		Manufacturing						No	n-Agı	ricultu	·e				
	Year	lear M			F P			F		P		Μ	0	F	Р
	1983	77.1	83	3.4 <i>′</i>	79.9	8.	.0	7.	.6	7.7	7	22.	6	16.3	19.7
Andhra	1993-94	75.6			79.3	7.1		7.	7.4		.3 24		4	16.3	20.7
Pradesh	1999-00	74.4	84	4.4 <i>′</i>	78.8	6.	.2	6.	.1	6.2	2	25.	6	15.6	21.2
	1983	78.6	79	9.8 <i>′</i>	78.8	3.	.3	9.	.2	4.4	Ļ	21.	2	18.0	20.0
Assam	1993-94	77.7	82	2.9 ′	78.7	4.	.0	1(0.5	5.4	Ļ	22.	3	17.1	21.2
	1999-00	64.5	79	9.3 (57.7	4.	.2	1(0.0	5.4	Ļ	35.	5	20.7	32.3
	1983	78.9	92	2.0	34.4	7.	.4	3.	.3	5.7	7	20.	3	7.1	14.8
Gujarat	1993-94	71.0	9().6 <i>′</i>	78.6	12	2.9	4.	.2	9.5	5	28.	8	9.4	21.3
-	1999-00	71.9	92	2.2	30.4	1	0.2	2.	.1	6.8	3	28.	1	7.8	19.6
	1983	71.2	89	9.5 [°]	76.8	7.	.6	3.	.8	6.1		28.	5	9.9	22.3
Haryana	1993-94	60.8	93	3.0 <i>′</i>	71.8	6.	.5	1.	.5	4.8	3	39.	2	6.8	28.1
	1999-00	59.5	92	2.7	59.8	10	0.5	2.	.1	7.9)	40.	5	7.3	30.2
	1983	57.6	7(0.4	52.8	12	2.6	17	17.7		14.5 42		42.3 2		36.9
Kerala	1993-94	52.8	62	2.8	56.1	10	0.7	/ 19.4		13.6 47		47.	1	37.1	43.9
	1999-00	43.0	6().6	48.8	1	1.6	20.2		14	14.4 57		0	39.4	51.2
	1983	79.5	92	2.7	35.6	6.	.9	2.7		5.0	5.0 20		2	7.0	14.2
Maharashtra	1993-94	75.3	91	1.2	82.6 7		.2	3.1		5.3 2		24.7		8.8	17.4
	1999-00	73.9	94	4.0	82.8	2.8 7.6		2.2		5.2 26		26.	1	6.0	17.2
	1983	77.0	92	2.1	32.0	2.0 7.		4.2		6.3	3	22.	3	7.2	17.4
Punjab	1993-94	68.0	92	2.7 ′	74.6	7.5		1.3		5.9		31.	9	7.3	25.9
-	1999-00	64.0	9().7 <i>°</i>	72.9	10	0.0	3.	.0 7.7		7 36		0	9.3	27.1
	1983	80.7	94	4.0	36.6	5.	.7	7 2.5		4.2		19.0		6.0	13.3
Rajasthan	1993-94	69.5	93	3.0 <i>′</i>	79.8	6.	.9	1.5		4.6		30.4		7.0	20.2
	1999-00	67.1		92.1	77.	.9	6.4		2.9		4.8		32.9	7.9	22.1
	1983	68.7		81.7	74.	.4	12.5		5 9.9		10.9		31.2	2 18.2	25.1
Tamil Nadu	1993-94	63.8		78.4	70.	.3	14.0)	13.1		13.6		36.2	2 21.6	29.6
	1999-00	62.6		76.4	68.	.3	14.4	l I	14.4		14.4		37.4	23.6	31.7
Wast	1983	73.0		74.8	73.	.4	9.3	16.6		<u>,</u>	11.1		26.8	3 24.8	26.3
West Bengal	1993-94	64.8		59.6	63.	.5	12.8	}	30.3	3	17.0	17.0 3		40.4	36.4
	1999-00 ral Male, F = Ri	66.0		52.6	63.		11.9)	38.0)	17.7		34.0) 47.4	37.0

Tables 1.4: Sectoral Distribution of Usual Status Rural Workers across Major Indian States by Sex: 1983, 1993-94 and 1999-2000

Note: M = Rural Male, F = Rural Female, P = Rural Persons

Source: Government of India, Sarveksana, Vol. XIV, No. 1 & 2 Oct-Dec. 1990; NSSO, Various rounds

It may be noted that whereas the NSSO data show that 27.3 percent of rural workers in Punjab in 1999-2000 were engaged in non-agricultural pursuits, the census data (2001) show that this

portion among the rural workers was almost 36 percent and among the total main workers (both rural as well as urban) almost 55 percent. The share of non-agricultural workers in Punjab increased from 36.40 percent in 1971 to 43.93 percent in 1991 and further to 54.77 percent in 2001. This shows that whereas the shift in workforce from agriculture to non-agricultural sector was of only 7.53 percentage points during 1971-91, it was of 10.84 percentage points during 1991-2000.

The census data for the year 2001 shows that there are vast spatial variations in the proportion of RNFE in the state at the district level. This proportion varies from 20.4 percent in district Mansa to 54.8 percent in district Gurdaspur. In fact, in all the districts located to the north of river Satluj or in other words in the Majha (area between Beas and Ravi rivers) and Doaba tracts (area between Satluj and Beas rivers) the percentage RNFE is higher than the state average. By contrast, in nearly two-thirds of the district in the Malwa tract (area to the south of river Satluj), all of which are located in the south western part of the state, this percentage is less than the state average. (see Table 1.3 and also Map 2)

A reference has been made above to three regions of Punjab that is, Majha, Doaba and Malwa. It will not be out of place to discuss here the main characteristics of these regions and how these characteristics effect the growth of RNFE in each region.

Majha

The tract between river Beas and river Ravi is called as Majha or Bari Doab. It is now divided between India and Pakistan. The part which is in India extends between river Beas and international boundary between India and Pakistan. For some distance in the north-west this boundary runs along river Ravi. Since the area of this tract which is now in India is the upstream part of the Doab (area between two rivers), it is also called as Upper (upstream) Bari Doab. In 2001 this tract had only two districts, namely, Amritsar and Gurdaspur. At present, there are four districts in this tract. District Tarn Taran was carved out of Amritsar district a few years back and district Pathankot has been carved out of district Gurdaspur very recently. Whereas Pathankot district covers the sub-mountainous northern part of this tract, Tan Taran district covers the southern part of Majha. Before the partition of the country in 1947, Majhahad was a central location in undivided Punjab. It was the most developed part of Punjab with the cities like Lahore and Amritsar as the main centres of economic activity. But after the partition the location of Majha within Indian part of Punjab changed from central to peripheral, that too along the border of Pakistan. As a result, the area became unfavourable for investments in industry, real estate and trade. Amritsar, which was the largest urban centre of Punjab in 1951, soon lost its position to Jallandhar and Ludhiana. The two wars with Pakistan (in 1965 and 1971) and about 10 years of militancy (from mid-1980s to mid-1990s) during which the area remained the main hub of the separatist movement, further shook the confidence of investors in this area.

Despite all these odds district Gurdaspur (including newly carved district of Pathankot) recorded the highest percentage of RNFE in the state. This proportion was also significantly higher than the state average in Amritsar district (including newly carved district of Tarn Taran). This could largely be due to the following factors: (i) No. of small, medium and large

scale industrial units at Amritsar, Batala, Dhariwal, Goindwal Sahib and at few other places; (ii) very small size of landholdings coupled with low productivity of land in the submountainous northern part of the tract (Pathankot district) is unable to provide sustenance to the farming families. Thus, one or more members of most families adopt activity or employment in non-farm sector; and (iii) villages along the major roads, especially those where rural link roads joins the major roads are emerging new centres of non-farm economic activity all over Punjab, including Majha area. Many such villages have grown into small size towns. Many persons from the same settlement as well as adjoining villages, both from the farming and non-farming families, have set up their commercial establishments along the road at such places.

The growth of RNFE in this tract largely depends upon the trade relations between India and Pakistan. If the volume of trade between the two countries through Attari-Wagah border improves, it will certainly provide impetus to RNFE in this area.

Doaba

The triangular area between river Satluj in the south, river Beas in the north-west and the Shivalik hill range in the north-west is called as Bist Doab or just Doaba. It comprises of four districts, namely Jallandhar, Hoshiarpur, Kapurthala and Nawanshehar (now renamed as SBS Nagar). All these districts in 2001 recorded percentage of RNFE higher than the state average.

Region	State/District	Percentage of rural	Percentage of SCs		
		workers in NFE	in total population		
		(2001)	(2001)		
	Punjab	35.9	28.85		
	Gurdaspur	54.8	24.75		
Aajha	Amritsar	39.5	27.34		
	Tarn Taran	-	32.09		
	Hoshiarpur	50.4	34.28		
	Kapurthala	45.9	29.92		
Doaba	Nawanshehar (SBS	39.3	40.46		
	Nagar)				
	Jallandhar	53.4	37.69		
	Ludhiana	45.8	24.99		
	Roopnagar	44.7	25.36		
	Fatehgarh Sahib	39.7	30.67		
	Patiala	38.8	23.07		
Aalwa	Moga	29.4	31.84		
	Sangrur	25.7	26.67		
	Bathinda	25.5	29.97		
	Ferozepur	24.1	22.82		
	Faridkot	22.5	36.17		
	Mukatsar	20.7	37.75		
	Mansa	20.4	30.33		
	SAS Nagar	-	22.27		
	Barnala	-	30.08		

 Table 1.5: District-wise Distribution of Workers in Rural Non-Farm Employment and

 Scheduled Caste Population in Punjab: 2001

Source: Census of India 2001, Stastical Abstract of Punjab, 2011

The main characteristics of this region which have a direct bearing on RNFE are as follows:

Small Landholdings: Most farmers in this region have small or marginal landholdings which are economically unviable. The situation in sub-mountainous belt (Kandi area) of the area is even worse because land productivity in this tract is comparatively low. Thus, people are forced to look for employment in rural non-farm sector.

Presence of Industrial Centres: Jallandhar, Phagwara, Kapurthala, Kartarpur, Hamira, Goraya and some other places are important industrial centres of this region. Jallandhar is famous for sports goods, leather tanneries and engineering goods. Phagwara has a cotton textile mill, sugar mill and a large number of small scale engineering units. Kapurthala has a rail coach factory. Kartarpur is famous for furniture manufacturing. Hamira has a distillery. Goraya has foundary works. There are sugar mills at Nawanshehar, Bhagpur, Dasuya and Mukerian. These industrial units provide employment to fairly large number of workers.

High Percentage of SC Population: Punjab has no ST population but has fairly high percentage (28.85) of SC population (as per Census 2001 data). Within Punjab concentration of SC population is comparatively high in Doaba region (35.75%). Within Doaba region their concentration is comparatively more in Nawanshehar (40.46%) and Jallandhar (37.69%) districts (Table 1.4). There is also marked difference in their proportion in rural and urban areas. Whereas they constitute 39.85 percent of the rural population in this area, their proportion in urban areas is 27.21 percent. Most SCs are landless. Many of them work as agricultural labourers. But some of the SCs also work in non-farm sector.

Large number of NRIs: Doaba, because of small landholdings has traditionally remained an area of out-migration. Earlier, migration from rural areas of this region was to the urban centres within the region as well as to the other parts of Punjab. But from the early 1960s migration is happening to the other countries as well. Although no data regarding the area of origin of NRIs from Punjab is available, yet it will not be wrong to say that the largest number of NRIs from Punjab belongs to Doaba region. There is hardly any village which does not have an NRI. In some of the villages most of the families have one or more family members settled in UK, USA, Canada, Italy, Germany and other countries. Many of these NRIs keep on sending remittances back home which has promoted self-employment in non-farm sector among the family members of the NRIs.

Malwa

From the point where the river Satluj comes out of the hills in the east (at Ropar) to the international border with Pakistan in the west, river Satluj flows roughly in east to west direction. The entire area in the south of this river is called as Malwa. Of the three regions of Punjab Malwa is the largest one. In fact, area of Malwa (32,806 sq. Km.) is almost double the area of Majha (8660 sq. km) and Doaba (8896 sq. km.) put together. There were eleven districts in this tract in 2001. Two more districts were added into this list subsequently.

Most of this tract, except the eastern part, receives irrigation through canals. Of course, the tube wells supplement the canal irrigation everywhere. The western half of Malwa is a cotton belt of

Punjab. The eastern half is mainly wheat-rice growing area. The ground water in the western part of Malwa is brackish which poses many problems for irrigation. Mukatsar and Fazilka districts in the south western corner of Punjab face an acute problem of water logging.

Only four districts of Malwa, namely Ludhiana, Roopnagar, Patiala and Fatehgarh Sahib all located in the eastern half, have percentage of RNFE above the state average. In rest of the districts percentage of RNFE is less than the state average. High percentage of RNFE in the above mentioned four districts is due to the fact that Ludhiana city is the largest industrial centre of Punjab. The industry is not only located in the city but also along the Ludhiana – Ambala National Highway beyond the city limits. Apart from that, there are other industrial centres along the same road between Ludhiana and Ambala, such as, Doraha, Khanna, Mandi Gobindgarh and Rajpura. In addition to that, SAS Nagar (Mohali) is an industrial town and there is an industrial estate at Chanalon (near Kurali). Moreover, there is a lot of construction activity going on in the vicinity of Chandigarh and Ludhiana.

Industrial development in rest of the districts of Malwa is comparatively low. Even construction activity in these districts is comparatively low. The border districts of Ferozepur and Fazilka face the same problems as are faced by the districts of Majha tract. All these factors are responsible for the low percentage of RNFE in most districts of Malwa.

Opening of trade with Pakistan through Hussainiwala border can change the economy of western part of Malwa which can promote RNFE in this area.

CHAPTER II

Background of Surveyed Villages

This chapter provides a brief overview of the socio-economic characteristics of the surveyed villages and the status of infrastructure available in these villages.

2.1 Distribution of Villages by Distance from Nearest Town

Since towns provide opportunities for non-farm employment, distance of a village from the nearest town play an important role in determining the proportion of rural workers in non farm sector among the total rural workers. Keeping this fact into mind the sampled villages were selected from different distance zones from the urban centres. Out of the 20 villages selected for this study, eight (40%) are located in distance zone of 0-5 km. 5 (25%) in a distance zone 6-10 km. and seven in the distance zone of 11-15 km. from the nearest town, whereas the selection of villages from the above mentioned three distance zones in the high RNFE districts was in the ratio of 50 percent, 20 percent and 40 percent respectively. In the low RNFE districts, it was in the ratio of 30 percent, 30 percent and 40 percent respectively. The main purpose of selecting villages from different distance zone from the nearest urban centres was to take the sample which is a true representation of the ground reality.

	High RNFE Districts						Low RNFE Districts							Grand	
Distance	Luc	lhiana	Kapu	ırthala	Total		Bhatinda		Nawanshehr		Total		Total		
	Ν	%	Ν	%	N	%	Ν	%	%	Ν	%	Ν	%		
0-5	2	40.0	3	60.0	5	50.0	2	40.0	1	20.0	3	30.0	8	40.0	
6-10	1	20.0	1	20.0	2	20.0	1	20.0	2	40.0	3	30.0	5	25.0	
11-15	2	40.0	1	20.0	3	30.0	2	40.0	2	40.0	4	40.0	7	35.0	

Table 2.1: Distribution of Villages by Distance from Nearest Town

Source: Primary Survey, 2012

2.2 Social Composition of Households

While selecting households for the survey at the village level, effort has been made to include all the social groups in the sample and give representations to each group proportionate to their strengths in the total population. The sample includes 34.12 percent SC households. This proportion is almost equal to the proportion of SCs in the rural population in Punjab. The representation of OBCs and general castes in the sample is also more or less in the proportion of their strengths in the rural population of the state. Of course, there are some variations in their proportion in the sample at the district level. For example, in the sample selected from high RNFE districts, the representations of SCs is comparatively more than the one taken from the low RNFE districts. Similarly, representations of OBCs in the sample taken from the low RNFE districts are much higher than the one taken from the high RNFE districts. The proportion of the other castes, however, remains more or less same in the both types of districts.

			igh RN stricts					L	ow RN	FE Dist	ricts			
	Lud	hiana	Kapı a	urthal	thal Total		Bha	tinda	Nawa	nshehr	Т	otal	Gran Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
SC														
households	584	33.80	585	38.56	1169	36.02	487	30.84	562.0	33.53	1049	32.23	2218	34.12
OBC														
households	136	7.87	517	34.08	653	20.12	692	43.83	573.0	34.19	1265	38.86	1918	29.51
Other														
households	1008	58.33	415	27.36	1423	43.86	400	25.33	541.0	32.28	941	28.91	2364	36.37
Total number of	1728	100.0	1517	100.0	3245	100.0	1579	100.0	1676	100.0	3255	100.0	6500	100.0
Households														

Table 2.2: District-wise Social Composition of Households

2.3 Religious Composition of Households

In rural Punjab, Sikhs are the most dominant group who form around 60 percent of the rural population. Hindus are the second largest religious groups with 37 percent of their share in the rural population in the state. The other religious groups like the Muslims, Jains and Christians form only a microscopic minority in the rural population of the state, however, there are marked spatial variations in the religious composition of the state at the district and lower levels. The religious compositions of the selected households also reflect almost the same reality. Whereas nearly 86 percent of the total households profess Sikh faith, a little over 13 percent of the households are Hindus. Other religious minorities constitute less than 1 percent of the total households. At the district level Hindus have a comparatively high percentage in Kapurthala district (24.5%) moderate in Nawanshehr (16.7%), low in Bhatinda (8.1%) and Ludhiana district (6.1%)

Religions		I	HGH R	NFE Dist	trict			LO	OW RN	FE Dist	rict				
	Ludhi	Ludhiana Kapurthala Total						la	Naw	anshehr	r	Fotal	otal G. Total		
	Ν	%	Ň	%	Ν	%	N	%	N	%	N	%	N	%	
Hindu population	605	6.07	1689	24.52	2294	13.62	605	8.11	1537	16.72	2142	12.87	4436	13.24	
Muslim population	111	1.12	3	0.04	114	0.68	77	1.03	40	0.44	117	0.70	231	0.69	
Jain population	39	0.39	0	0.00	39	0.23	0	0.00	-	-	-	-	39	0.12	
Others	9205	92.42	5195	74.44	14400	85.47	6776	90.8 6	7613	82.84	14389	86.43	28789	85.95	
Total	9960	100.00	6887	100.00	16847	100.00		100.0 0	9190	100.00	16648	100.00	33495	100.00	

 Table 2.3: District-wise Religious Composition of Households

2.4 Distribution of Households according to Type of Houses

Overall scenario of Punjab in respect to the construction of houses in the rural areas shows that there is hardly any kutcha house which still remains to be seen. The data pertaining to the surveyed households reflect the same reality as more than 97 percent of the houses are Pucca and only less than 3 percent are kutcha house. This indicates that almost all households in the rural areas have sufficient income to own a pucca house. The first preference of all the households is to construct good house for quality living.

Type of	Lud	HI(lhiana		FE Distric ırthala		otal	Bha	L(atinda	otal	G. Total				
Houses	N	%t	N	%	N	%	N	%	N	%	N	%	N	%t
No. of Pucca houses	1686	97.57	1486	97.97	3172	97.75	1548	98.03	1919	96.60	3167	97.30	6339	97.52
No. of Kutcha Houses	42	2.43	31	2.04	73	2.25	31	1.93	57	3.40	88	2.70	161	2.48
Total Houses	1728	100.00	1517	100.00	3245	100.00	1579	100.00	1676	100.00	3255	100.00	6500	100.0 0

 Table 2.4: District-wise Distribution of HHs by Type of Houses

Source:Primary Survey, 2012

2.5 Distribution of Households according to Ownership of Agricultural Land

Out of the total surveyed households, only about 37.5 percent own agricultural land. However, at the district level there are vast variations in the percentage of households having agricultural land. Even with the high RNFE and the low RNFE districts there are marked variations in the household having agricultural land. For example, in the high RNFE districts Ludhiana has more than 49 percent households having agricultural land, while in Kapurthala only 23.8 percent household owns agricultural land. Similarly, in the low RNFE districts, while Bhatinda has 44.5 percent households owning agricultural land, in Nawanshehr only 31.2 percent households own agricultural land.

Agricultural Land		HIG	H RNI	FE Distr	ict			LO	W RN	FE Dis	trict			
	Ludh	Ludhiana Kapurthala '		Total		Bhat	inda	Nawan	shehr	Total		G. To	tal	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
HH having Agri. land	848	49.07	361	23.80	1209	37.26	703	44.52	523	31.21	1226	37.67	2435	37.46
HH not having Agri. land	880	50.93	1156	76.20	2036	62.74	876	55.48	1153	68.79	2029	62.33	4065	62.54
Total	1728	100.0	1517	100.0	3245	100.0	1579	100.0	1676	100. 0	3255	100.0	6500	100. 0

Table 2.5: District-Wise Distribution of HHs according to Ownership of Agricultural Land

Source-Primary Survey 2012

2.6 Status of Road Connectivity of Villages with Nearest Town

Punjab is in much better condition as far as the road connectivity of its villages with the nearest town is concerned. Almost 100 percent of the villages in the state have been provided connectivity with the nearest town as well as the nearby villages through metalled road. In fact, many villages have more than one road connections. The minimum width of these metalled roads is 11 feet. In many cases this road width has been increased to 16 feet or in certain cases to even 22 feet. These roads have made a major contribution in the success of green revolution in Punjab and transforming the socio-economic life of the people in the rural areas, now locations along these roads are emerging as most favoured site for the establishment of non-farm activities. Easy accessibility to nearest town and neighbouring villages facilitated by these roads is also contributing very significantly to the growth of RNFE. These observations are also equally true in the case of 20 villages selected for this study as these villages have been provided metalled road connectivity with the nearest town. Upgradation of these roads and their proper maintenance can go a long way in promoting the economy of the state which on its part can promote RNFE.

2.7 Availability of Electricity

Punjab completed electrification of its villages long time back. However, the problem is to provide uninterrupted power supply to these villages. Punjab is a power deficient state. It has to purchase power from other states to meet its urgent requirements. Power cuts for industry, agriculture sector as well as for domestic use are a common feature. Uninterrupted power supply is must for the economic growth of the state. Our survey of the 20 villages revealed that 15 percent of the villages received power between 6-12 hours per day while the remaining 85 percent of the villages reported receipt of power for more than 12 hour per day.

No. of hours for which power supply is made	А	ll Villages
available	N	Percent
13 or more hrs.	17	85.00
6 - 12 hrs.	3	15.00
A11	20	100.00

Table 2.7: Status of Po	ower Supply to V	Villages
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Source-Primary Survey 2012

2.8 Source of Drinking Water

With rising scarcity of water due to depletion of underground water, the traditional water sources used in villages, such as wells and hand pumps have become redundant. The drinking water sources (groundwater and canal water) have also become unusable in many areas due to high level of contamination. Thus, supply of safe drinking water in all the villages of the state have become a necessity. The state government is implementing a World Bank sponsored scheme to provide safe drinking water in villages. Already a large number of villages have been covered under this scheme. Some villages are also covered under other state or central sponsored schemes. In areas where groundwater is saline, provision of RO system is also made. All the 20 villages which have been selected for the survey have been covered under one or the other scheme. The source of drinking water used for each village is provided in Table 2.8.

Facilities		High I	RNFF	E District				Low	RN	FE Distri	ct		G	. Total
	Lu	dhiana	Ka	purthala	1	otal	B	hatinda	Naw	anshehr		Total		
	Ν	%	Ν	%	N	%	Ν	%	Ν	%	Ν	%	Ν	%
Water SRC Cooking														
Govt Tube (water														
Backs)	-	-	-	-	-	-			-	-				
							1	20.00			1	10.0	1	5.00
Govt Tubewell direct	-	-	-	-	-	-	1	20.00	1	20.00	2	20.0	1	5.00
supply														
Hand pump, water	-	-	-	-	-	-	-						1	5.00
works														
Pumps	-	-	-	-	-	-	1	20.00	1	20.00	2	20.0	2	10.00
Pumps,water works	-	-	1	20.00	1	10.00	1	20.00			1	10.0	2	10.00
RO system	2	40.00	-	-	2	20.00	-						2	10.00
Water works	-	-	-	-	-	-	1	20.00	1	20.00	2	20	2	10.00
Waterbox, handpumps,	1	20.00	-	-	1	10.00							1	5.00
RD systems														
Waterworks pumps	-	-	-	-	-	-			1	20.00	1	10	1	5.00
Waterworks	1	20.00	-	-	1	10.00							1	5.00
R.Dsystems														
Water supply	1	20.00	2	40.00	3	30.00							3	15.00
Public health dept	-	-	-	-	-	-			1	20.00	2	20	2	10.00
Waterbox, pumps	-	-	2	40.00	2	20.00		1				1	2	10.00
All	5	100.0	5	100.00	10	100.0	5	100.00	5	100.00	10	100	20	100.00
		0				0								

Table 2.8: District-wise Sources of Drinking Water

2.9 Distribution of SHGs

To promote self-employment among unemployed youth and to financially empower women, especially these belonging to SCs and poor families, people are encouraged to form Self Help Groups (SHGs) to start some economic activity like weaving, dairy farming, bee keeping, etc. such help groups are provided with financial help in the form of bank loan and subsidy under various schemes. The position of SHGs in the surveyed villages, however, is not very encouraging. Out of 20 villages only four villages, two each from district Ludhiana and district Bhatinda reported presence of SHGs. This shows that people are either not fully aware of the benefits of forming SHGs to start some economic activity or are just not interested to work in groups. There is a need to know the real cause of poor presence of SHGs in the surveyed villages and find appropriate solutions/strategies to promote SHGs in Punjab.

		High R	NFE]	Districts				Low RN	FE Distr	ricts			Grand		
SHG	Ludl	Ludhiana Kapurthala			Т	'otal	Bł	natinda	la Nawanshehr		Т	otal	total		
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
YES	2	40.0	-	-	2	20.0	2	40.0	-	-	2	20.0	4	20.0	
NO	3	60.0	5	100.0	8	80.0	3	60.0	5	100.0	8	80.0	16	80.0	
All	5	100.0	5	100.0	10	100.0	5	100.0	5	100.0	10	100.0	20	100.0	

Table 2.9: Distribution of SHGs by districts

2.10 Distribution of Commercial Establishments

Although agriculture and allied agricultural activities are the main activities in most villages of Punjab, yet there is always some population which is engaged in meeting the requirement of village population for the various non-farm goods and services. Almost every village has some commercial establishments for meeting the daily requirement of its population for goods and services. Our survey revealed the presence of 328 commercial establishments in the 20 selected villages. The largest number of shops is that of grocery (37.2%), followed by repair shops (18.6%). Establishments dealing in traditional occupations such as tailoring, hair cutting, atta chaki (flour milk), oil extraction, quilt filling, fruit and vegetable selling, meat shops, making and selling of earthen pots etc., as well as modern occupations, such as, photography, selling and repair of mobile phones, manufacturing of fancy grills and iron gates, tent stores, modern furniture manufacturing, etc. are listed under the category of others. Such establishments constitute one-third of the total establishments. Tea shops/restaurants account for about 5 percent of the commercial establishments. There are some differences in the relative proportion of each type of commercial establishment in the total establishments between high RNFE districts and low RNFE districts as well as within the districts in high as well as low RNFE districts as are shown in Table 2.10. A very high percentage of grocery shops and repair shops in three out of four districts show that consumption pattern and life style of the people in rural areas have changed a lot.

		Hig	h RN	FE Dist	tricts			Lov	v RNI	FE Dist	ricts			
Commercial Establishments	Lud	hiana	Карт	urthala	Г	`otal	Bha	atinda	Jawai	ıshehr	Т	otal	Gra	und total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Repair Shops	10	21.28	17	22.08	27	21.77	12	24.0	22	14.29	34	16.67	61	18.60
Grocery Shops	25	53.19	32	41.56	57	45.97	23	46.0	42	27.27	65	31.86	122	37.20
Tea Restaurants	1	2.13	7	9.09	8	6.45	3	6.0	6	3.90	9	4.41	17	5.18
Other shops	11	23.40	21	27.27	32	25.81	12	24.0	84	54.54	96	47.06	128	33.02
All	47	100.0	77	100.0	124	100.0	50	100.0	154	100	204	100.0	328	100.0

Table 2.10: Distribution of Commercial Establishments by Districts

Source-Primary Survey 2012

2.11 Distribution of Farming Households according to Size of Landholdings

The economic status of a farmer is directly related with his size of holding. Income of a farmer within a specific region is generally directly proportionate to his size of landholding. His capacity to invest on agricultural machinery, land improvement, installation of deep tube well, lying of underground pipes for conveyance of irrigation water, purchase of fertilizers, pesticides, HYV seeds etc. depends upon his income which itself is dependent on his size of landholding. In Punjab, the proportion of landholding in different size categories is as follows:

Category of Farmers	%
Marginal (Less than 1 ha)	13.42
Small (1-2 ha)	18.22
Medium (4-10 ha)	29.45
Semi-Medium (2-4 ha)	31.85
Large (More than 10 ha)	7.06
	Marginal (Less than 1 ha) Small (1-2 ha) Medium (4-10 ha) Semi-Medium (2-4 ha)

Source: Statistic Abstract, Punjab, 2011

This shows that over 61 percent of the landholdings in Punjab are of 2-10 hectare size. It may also be not out of place to mention here that the terms marginal, small, medium and large to indicate the size of landholdings have been used differently in this survey than Punjab. In this survey, for less than 1 hectare size holding the term marginal and small has been used. Medium

has been used for 1-2 hectare size holdings and all holding larger than 2 hectares have been termed as large sized holdings.

In the villages selected for this survey there are 25.36 households which have been termed as farming households. The district-wise distribution of these households according to size of landholding has been provided in Table 2.11 which shows that about 11.5 percent of the totals farming households are landless. The proportion of landless households in the total farming households is highest (20.5%) in Bhatinda (low RNFE district) and lowest (6.1%) in Ludhiana (high RNFE district). This shows that landless persons opt for farming when they have less opportunity in RNFE. They leave farming as soon as they get employment opportunity in RNF sector. Marginal and small householders (less than 1 hectare) constitute about 30.8 percent of the total farming households. As compared to low RNFE districts, the proportion of small and marginal landholders in high RNFE district is much higher. In fact, in district Kapurthala, more than 47 percent of the farming households have landholding of less than 1 hectare size. High percentage of small landholding in Kapurthala and Ludhiana may be one of the reasons for high RNFE in these districts.

Medium size landholdings (1-2 hectare) account for 24.9 percent of the total holdings. Their proportion is comparatively more in low RNFE districts (30.4%) than high RNFE districts (19.9%). The large-size holdings (more than 2 hectare) account for about 32.9 percent of the total holdings. Their proportion is comparatively more in high RNFE districts than low RNFE districts. However, the difference between the two is of only about 3.5 percentage points.

		High F	RNFE	Distric	ts			Low R	NFE I	Districts				
Size of Landholdings						Bhatii	nda	Nawa	anshehr	Total		Grano	l total	
	N	%	Ν	%	Ν	%	N	%	Ν	%	Ν	%	Ν	%
Landless Cultivators	55	6.09	60	14.25	115	8.69	128	20.45	48	8.19	176	14.52	291	11.47
Marginal and Small holdings 0-1 ha	315	34.88	198	47.03	513	38.75	108	17.25	159	27.13	267	22.03	780	30.76
Medium Holdings 1-2 ha	173	19.16	91	21.61	264	19.94	188	30.03	180	30.72	368	30.36	632	24.92
Large Holdings >2 Ha	360	39.87	72	17.11	432	36.62	202	32.27	199	33.96	401	33.09	833	32.85
Total	903	100.0	421	100.0	1324	100.0	626	100.0	586	100.0	1212	100.0	2536	100.0

 Table 2.11: Distribution of Farming Households according to Size of Landholdings

Source: Primary Survey 2012

2.12 Pattern of Labour Migration

The villagers reported that about 1,800 migrant labour visited their villages during the past season (Kharif season of 2011) and about 2,700 during the past one year (2011). Almost all migrant labourers come for agriculture work. In rice cultivating villages these workers mainly come at the time of paddy plantation (June and July) and paddy harvesting (September-October). In the cotton growing villages they come during cotton picking time (October-November); wheat harvesting time (April-May) is another season during which migrant labourers come to Punjab. It has also been reported that most of the migrant labour stay in the village for about 45 to 60 days. However, some workers stay in the village upto 90 days. This shows that migrant labour is mostly seasonal.

2.13 Average Wage Rate

Table 2.13 shows that the prevailing rates of agricultural and non-agricultural workers in the surveyed villages. The table shows that average wage rates of non-agricultural workers are comparatively higher than the agricultural workers by about Rs. 50 in district Ludhiana (high RNFE district) and district Bhatinda (low RNFE district), whereas these rates are almost same for both the categories in the remaining two districts. However, wages in some villages (in Nawanshehar district) are comparatively higher than Kapurthala district by about Rs. 50.

Nature of Work	High RNI	FE Districts	Low RN	F Districts
	Ludhiana	Kapurthala	Bhatinda	Nawanshehar
Agricultural	RS. 150-250	Rs. 200	Rs. 150-200	Rs. 200-250
Non-Agricultural	Rs. 150-300	Rs. 200	Rs. 200-250	Rs. 200-250

 Table 2.13: Average Wage Rate of Agricultural and Non-Agricultural Workers

Source: Primary Survey, 2012

2.14 Development Schemes implemented in Villages by Districts

The flagship schemes e.g. Indra Awas Yojana, Mahatma Gandhi National Rural Employment Gurantee Act and old age pension are implemented in all the districts regardless of high & low. The coverage of these schemes are normally cannot be overlooked in any of the village because of the provisions made under the schemes. The beneficiaries under these schemes are almost present in all the selected villages, so data also shows that 100 percent coverage is made in the entire selected district.

		High RNFE Districts						Low RNFE Districts					Grand	
Government schemes	Ludhiana		Kapurthala		Total	Bhatinda		Nav	Nawanshehr		Total		Total	
	Ν	%	N	%	Ν		N	%	Ν	%	Ν	%	Ν	%
24 –A IAY, MGNREGA, Shagun Scheme, Old Age Pension	5	100.0	5	100.0	10	100.0	5	100.0	5	100.0	10	100.0	20	100.0
All	5	100.0	5	100.0	10	100.0	5	100.0	5	100.0	10	100.0	20	100.0

 Table 2.14: Government Schemes implemented in Selected Villages by Districts

CHAPTER III

Characteristics of Households

3.1 Socio-economic Background of Households

The focus of this chapter is on the socio-economic and demographic characteristics of households as well as on the employment scenario in the selected village. For that purposes 1,314 households out of 6,500 from the already identified 20 villages were selected. About half of the households were selected from farming households and the other half from the non-farming households. The specific characteristics of these households and their employment status are as provided below:

3.2 Size of Households

As per Census 2011, 18.7 percent of the rural households in Punjab have household size of 1-3 persons and 44.9 percent of 4-5 persons. This means that small sized households (1-5 persons) constitute 63.6 percent of the total rural households. The medium (6-8 persons) and large (more than 8 persons) sized households constitute 29.55 percent and 6.83 percent of the total households respectively. At the district level the proportion of small size of households (1-5 persons) is almost equal to that of the state average in district Bhatinda and more than the state average in other districts.

The census data (2001) further reveal that 64.0 percent of the rural households comprised of single married couples and 9.1 percent without any married couple. The latter probably are those households which comprised of unmarried children living with single parent or alone. Single member households which are 1.8 percent of the total rural households are also counted among households without any married couple. The households with two married couples, which, in most cases comprised of married son or daughter living with his or her parents, accounts for 19.9 percent of the total households. The households comprising 3 or more married couples (the joint families in the real sense) account for only 7.0 percent of the total rural households.

The relative proportion of small, medium and large sized households in the surveyed households is not much different from their proportion in the total rural households in the state, accept that the proportion of small sized households in the sample is slightly more (67%) and that of medium and large size household is slightly less (33%) than their share in the state which is about 64 percent and 36 percent respectively. There is no significant difference in the proportion of households of different size categories between high RNFE districts and low RNFE districts. Two main findings emerge from the analysis of the size of household data. These are:-

- 1. The small household size of more than two-thirds of surveyed households and about 64 percent of the rural households in the state indicate that family planning programmes in the state have met with great success.
- 2. The joint family system is being replaced by the nuclear family system.

Size of	State	High RNFE		Low RNF	E Districts		Total
households		District					
(persons)	Punjab	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	
1-3	18.69	20.02	21.67	20.48	18.64	25.30	21.14
4-5	44.92	44.81	45.32	44.95	44.52	45.25	44.79
6-8	29.55	28.66	27.35	28.30	29.44	25.10	27.82
9+	6.83	6.51	5.66	6.27	7.39	4.35	6.26

 Table 3.1 (a): Size of Rural Households in Punjab and Selected Districts (%)

Source: Census of India 2011

Household	High	n RNFE Distr	icts	Lo	w RNFE Distri	cts	Grand
size	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
1-3	63	69	132	52	85	137	269
	(21.1)	(20.2)	(20.59)	(15.2)	(25.8)	(20.35)	(20.5)
4-5	130	171	301	153	157	310	611
	(43.5)	(50.0)	(46.95)	(44.6)	(47.6)	(46.06)	(46.5)
6-9	92	88	180	123	79	202	382
	(30.8)	(25.7)	(28.08)	(35.9)	(23.9)	(30.01)	(29.1)
Above 9	14	14	28	15	9	24	52
	(4.7)	(4.1)	(4.36)	(4.4)	(2.7)	(3.56)	(4.0)
Total	299	342	641	343	330	673	1314
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Table 3.1 (b): Distribution of Households by Districts and Size

Source: Primary Survey, 2012

Note- figures in parenthesis are percentages to the total

3.3 Distribution of Households by Social Groups

Out of the total surveyed households 25.6 percent belongs to SCs, 20.8 percent to OBCs and 53.6 percent to other castes. No household belong to STs. The caste composition of households included in the sample is not much different from the caste composition of the population residing in the rural areas of the state.

The data show much variation in the spread of caste based population in the sampled district. In case of SC, Ludhiana district shows 19 percent variation whereas the Nawanshehr depicts 31.2 percent SC population. Even within high & low district the variation exists with 4.7 percent and 3.5 percent respectively. Data relating to OBC also shows significant variation within high RNFE district and in low RNFE. The variation also exist upto 3.6 percent.

The variation in spread of other category population within and between the high & low district also persists. There is a significant difference of 33.6 percent within the district of Ludhiana (69.9 %) and Kapurthala (36.3 %).

As per Census 2001, about one-third of the total rural population of Punjab comprises of SCs and the remaining two-thirds of OBCs and General Castes. There is no STs in Punjab. The proportion of SCs in the four selected districts is as under:

High RNFE Districts			Low R	NFE Districts		Grand
Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
36.63	34.11	35.94	32.70	41.61	36.07	35.99

 Table 3.1 (c): Percentage of SC's in Rural Population of selected Districts (2001)

Source: Census of India 2001

This shows that proportion of SC's in Bhatinda district is nearly equal to their proportion in the rural population of the state, whereas in other three districts their proportion is higher than the state average. Their proportion in district Nawanshehar is more than 8 percentage points higher than the state average. The difference in the proportion of SCs within high RNFE districts is very small (about 2.5 percentage points) but within low RNFE districts this difference is very high (about 8.9 percentage points). However, there is not much difference in the proportion of SC's in high RNFE districts and low RNFE districts.

However, the social compositions of surveyed households are much different from that of the state as well as of the selected districts. The SCs constitute only about one-fourth of the total surveyed households as against their 36 percent share in the rural population of the selected districts. In fact, in each of the four districts their proportion in the surveyed households is more than 10 percentage points less than their share in the rural population of the respective districts. The gap in the proportion of SC's in the surveyed households and in the rural population of that district was highest (17.63 percentage points) in district Ludhiana.

The share of OBCs in the surveyed households is about one-fifth of the total. However, at the district level this share varies from minimum of 11.0 percent to maximum of 39.8 percent. Incidentally, both these districts fall in high RNFE districts. Since census data with regard to percentage of OBCs in rural population of the selected districts of the state is not available, no comparison of their proportion in the surveyed households and in the rural population of the respective districts or the state can be made. However, the share of the OBCs and the other castes together in the surveyed households is more than their share in the rural population of the selected districts as well as of the state.

High RNF	E Districts		Low RNFF	E Districts		Grand
Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
57	82	139	95	103	198	337
(19.0)	(23.7)	(21.68)	(27.7)	(31.2)	(29.42)	(25.6)
0	0	0	0	0	0	0
(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
33	136	169	47	57	104	273
(11.0)	(39.8)	(26.36)	(13.7)	(17.3)	(15.45)	(20.8)
209	124	333	201	170	371	704
(69.9))	(36.3)	(51.95)	(58.6)	(51.5)	(55.12)	(53.6)
299	342	641	343	330	673	1314
(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
	Ludhiana 57 (19.0) 0 (0.0) 33 (11.0) 209 (69.9)) 299	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	LudhianaKapurthalaTotal 57 82 139 (19.0) (23.7) (21.68) 0 0 0 (0.0) (0.0) (0.0) 33 136 169 (11.0) (39.8) (26.36) 209 124 333 $(69.9))$ (36.3) (51.95) 299 342 641	LudhianaKapurthalaTotalBhatinda 57 82 139 95 (19.0) (23.7) (21.68) (27.7) 0 0 0 0 (0.0) (0.0) (0.0) (0.0) 33 136 169 47 (11.0) (39.8) (26.36) (13.7) 209 124 333 201 (69.9)) (36.3) (51.95) (58.6) 299 342 641 343	LudhianaKapurthalaTotalBhatindaNawanshehr 57 82 139 95 103 (19.0) (23.7) (21.68) (27.7) (31.2) 0 0 0 0 0 (0.0) (0.0) (0.0) (0.0) (0.0) 33 136 169 47 57 (11.0) (39.8) (26.36) (13.7) (17.3) 209 124 333 201 170 $(69.9))$ (36.3) (51.95) (58.6) (51.5) 299 342 641 343 330	LudhianaKapurthalaTotalBhatindaNawanshehrTotal 57 82 139 95 103 198 (19.0) (23.7) (21.68) (27.7) (31.2) (29.42) 0 0 0 0 0 0 0 (0.0) (0.0) (0.0) (0.0) (0.0) (0.0) 33 136 169 47 57 104 (11.0) (39.8) (26.36) (13.7) (17.3) (15.45) 209 124 333 201 170 371 $(69.9))$ (36.3) (51.95) (58.6) (51.5) (55.12) 299 342 641 343 330 673

Table 3.3: Distribution of Households by Districts and Social Groups

Source: Primary survey, 2012

3.4 Religious Composition of Households

As per Census 2001 data, Sikhs account for 59.91 percent and Hindus for 36.94 percent of the total population in Punjab. Other religious groups account for only 3.15 percent of total population. However, the relative proportion of Hindus and Sikhs in rural and urban areas of the state is markedly different. Whereas, in rural areas of the state, Hindus and Sikhs account for 25.25 percent and 79.86 percent of the population respectively; in urban areas their proportion is 59.71 percent and 36.61 percent respectively. This shows that while Sikhs are mainly located in rural areas, Hindus are concentrated mainly in urban areas. The proportion of Hindus and Sikhs in rural, urban and total population, however, varies from district to district. There are some districts where Hindus form majority even in rural areas. Striking differences can be noted in the relative proportion of Hindus and Sikhs even in the four districts selected for the survey (Table 3.3a).

	Punjab	Punjab		FE Dis	tricts Low RNFE Districts					Total		
				Ludhiana		Kapurthala		Bhatinda		nehr	-	
	Hindus	Sikhs	Hindus	Sikhs	Hindus	Sikhs	Hindus	Sikhs	Hindus	Sikhs	Hindus	Sikhs
Rural	25.25	71.86	11.86	86.65	26.71	70.72	10.50	88.40	58.50	39.75	21.29	77.11
Urban	59.71	36.61	61.78	34.48	61.15	36.27	58.48	40.19	74.59	22.93	61.66	35.12
Total	36.94	59.91	39.74	57.52	37.96	59.46	24.76	74.07	60.72	37.42	38.52	59.18

Table 3.3a: Percentage of Hindus and Sikhs in Rural, Urban and Total Population of Punjaband Selected Districts

Source: Census of India, 2001

Table 3.3a shows that whereas Hindus form less than one-fourth of the total population in Bhatinda district, they account for nearly 61 percent of the total population in Nawanshehr district. In fact, Hindus form majority even in the rural population of Nawanshehr district. By contrast, population of Hindus in rural population of Bhatinda and Ludhiana districts is very low. Hindus also form majority in urban population of all the four selected districts. The composite picture of the fourdistricts shows that Hindus have comparatively less representation than the state average in rural areas and slightly more representation than the state average in rural areas and slightly less representation than the state average in rural areas and slightly less representation than the state average in rural areas and slightly less representation than the state average in rural areas and slightly less representation than the state average in rural areas and slightly less representation than the state average in rural areas and slightly less representation than the state average in rural areas and slightly less representation than the state average in rural areas and slightly less representation than the state average in the urban areas.

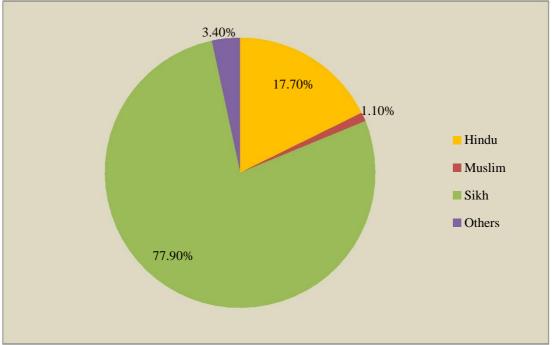
The religious composition of the surveyed household's shows that the proposition of Sikh households in the surveyed households is almost equal to the proportion of Hindus households but it is comparatively less than their proportion in the rural population of these districts by about 3.6 percentage points. The data in Table 3.3a also show that those districts which have low percentage of Hindu population in rural population (Nawanshehr) also has a high percentage of Hindus in the surveyed households. However, in all the districts the proportion of Hindus in the surveyed households is less than their share in the rural population; whereas, the proportion of Sikhs in the surveyed households is more than their shares in the rural population of each district.

There is no household in the surveyed households from among the Christians, Jains and Buddhists. Muslims account for 1.1 percent of surveyed households (Figure 3.1). Households belonging to other religious sects like Radhaswamis, Premis (followers of Dera Sacha Saudha, Sirsa, Haryana), etc., account for 3.4 percent of the surveyed households. However, it can be said that the religious composition of the surveyed households is more or less similar to the religious composition of the rural population of the selected four districts.

Religions	High	n RNFE Distric	ts	Lo	w RNFE District	S	Grand
	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Hindu	7	51	58	17	157	174	232
	(2.3)	(14.9)	(9.04)	(5.0)	(47.6)	(25.85)	(17.7)
Muslim	6	2	8	6	0	6	14
	(2.0)	(0.6)	(1.24)	(1.7)	(0.0)	(0.89)	(1.1)
Sikh	268	274	542	308	173	481	1023
	(89.6)	(80.1)	(84.55)	(89.8)	(52.4)	(71.47)	(77.9)
Christian	0	0	0	0	0	0	0
	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Others	18	15	33	12	0	12	45
	(2.9)	(4.4)	(5.14)	(3.5)	(0.0)	(1.78)	(3.4)
Total	299	342	641	343	330	673	1314
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.00	(100.0)

Table 3.3b: Distribution of Households by Districts and Religion

Figure 3.1: Religious Composition



Source: Primary Survey, 2012

3.5 Distribution of Non-Farm Households by Principal Mode of Livelihood

Nearly 50 percent of the total surveyed households were selected from among the non-farm households. Out of the total 650 non-farm households the principal mode of livelihood of more than half (53.54%) is non-farm labour. About 27.5 percent are self-employed. However, almost 94

percent of the self-employed do not use any hired labour which indicate that they have only petty enterprises which give them very small income. This confirms the findings of Ghuman, et al. (2002) who found more than 90 percent of the self-employed workers in rural non-farm sector engaged in petty activities with a low level of earnings. These self-employed persons are either engaged in tradition crafts such as hair cutting, tailoring, shoe-making, etc. or in newly emerged activities like auto-repair, tractor repair, sale and repair of mobile phone, repair of electrical gadgets, electrical fittings, welding works, making of iron grills, iron gates and cooler etc.

Government and Private Service provide livelihood to nearly one-fifth of the rural non-farm households. The inter-district differences in the principal mode of livelihood of rural non-farm households are not very significant.

Principal livelihood	High RNFF	2 districts		Low RNF	E districts		All
	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Non-Farm Labour	79 54.11%	87 51.47%	166 52.70%	78 49.37%	104 58.76%	182 54.33%	348 53.54%
Self Emp. with hired labour	5 3.42%	1 0.59%	6 1.90%	5 3.16%	0.0%	5 1.49%	11 1.69%
Self Emp without hired labour	35 23.97%	50 29.59%	85 26.98%	39 24.68%	44 24.86%	83 24.78%	168 25.85%
Service	27 18.49%	31 18.34%	58 18.41%	36 22.78%	29 16.38%	65 19.40%	123 18.92%
Total	146 100.0%	169 100.0%	315 (100.0)	158 100.0%	177 100.0%	335 100.0%	650 (100.0)

Table 3.5: Distribution of Non-Farm Households by Districts and Principal Livelihood

Source-Primary Survey 2012

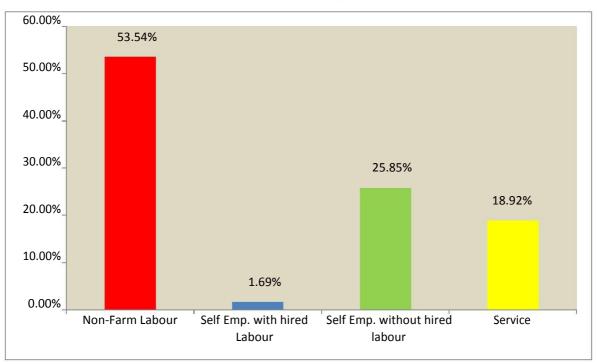


Figure 3.2: Principal Livelihood

3.6 Distribution of Households by Land Ownership

Out of the total surveyed households, about 37.1 percent are landless and 62.9 percent own land. The and owners are further divided into four categories, that is, those owning land up to 2.5 acres (marginal land owners), 2.5-5.0 acres (small land owners), 5-10 acres (medium landowners) and more than 10 acres (large owners). Whereas marginal landowners have a poor representation in the sample (only 3.8%), the other three categories have almost equal representation in the sample (ranging from 18.8 to 20.8 percent of the total households).

The proportion of landless households in the surveyed households is comparatively low (27.8 percent) in Ludhiana districts (high RNFE district). In other three districts their proportion varies from 37.3 percent (Bhatinda district) to 42.4 percent (Nawanshehar district). Incidentally, both these districts are low RNFE districts. The percentage of households having landholding upto 2.5 acre in the surveyed households is very low, except in district Ludhiana. Whereas households having landholding upto 2.5 acre account for 9.0 percent of the total households in Ludhiana district, the proportion varies from 1.7 percent to 2.7 percent in other districts. Among the households owning land the highest percentage in Nawanshehr (30%) and Kapurthala (24%) districts, both located in the Doaba tract of the state, own land between 2.5 to 5.0 acres. In Ludhiana, largest percentage (25.8%) own 5-10 acres and in Bhatinda, 28.9 percent own more than 10 acres of land. This shows that landholdings are comparatively large in Malwa tract and small in Doaba tract.

Land	High RNFE Dis	stricts		Low RNFF	E Districts		All
Ownership	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
(in acre)							
Landless	83	136	219	128	140	268	487
	(27.8)	(39.8)	(34.16)	(37.3)	(42.4)	(39.82)	(37.1)
Upto 2.5	27	8	35	6	9	15	50
	(9.0)	(2.3)	(5.46)	(1.7)	(2.7)	(2.22)	(3.8)
2.5-5	48	82	130	44	99	143	273
	(16.1)	(24.0)	(20.28)	(12.8)	(30.0)	(21.25)	(20.8)
5-10	77	64	141	66	50	116	257
	(25.8)	(18.7)	(21.99)	(19.2)	(15.2)	(17.23)	(19.6)
Above 10	64	52	116	99	32	131	247
	(21.4)	(15.2)	(18.09)	(28.9)	(9.7)	(19.46)	(18.8)
Total	299	342	641	343	330	673	1314
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

Table 3.6: Distribution of Households by Districts and Land Ownership

Source: Primary survey, 2012

3.7 Distribution of Households by Type of Landholding

All the surveyed 1,314 households own homestead land but the land other than homestead is owned only by 827 (62.9%) households. However, all those households which own land are not cultivating it themselves. Some of them lease out their land, fully or partially, to others. Out of 827 landowners, 147 (17.8%) reported that they lease out their land, partially or fully. The numbers of households who are actually cultivating the land is 779 which are 59.3 percent of the total surveyed households and 94.2 percent of the landowners. To make their operational holding viable 29.9 percent of the cultivators also lease in land. Table 3.7 further reveals that 96 percent of the land owners have irrigated land.

At the district level Ludhiana has the highest percentage of households owning land as well as cultivators; and Nawanshehar has the lowest percentage of land owning households as well as cultivators. The percentage of land owning households and cultivators in the remaining two districts is only marginally higher than that in Nawanshehar district. The magnitude of land lease in and lease out is also comparatively higher in Ludhiana district. This may be due to the fact that 9 percent of the households in Ludhiana district own less than 2.5 acres of land. Many such landowners either lease out their land or lease in land to make their operational unit economically viable. Ludhiana also has the lowest percentage of landowners having irrigated land. This too is related to high percentage of marginal land holdings. Persons who have very small landholdings cannot afford installation of deep tube wells.

Land	High RNFE	Districts		Low RNFE	Districts			
Holdings (in acre)	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehar	Total	All Total	
Total	299	342	641	343	330	673	1314	
surveyed	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	1514	
households	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)		
Fotal land	216	206	422	215	190	405	827	
owning	(72.2)*	(60.2)*	(65.8)	(62.7)*	(57.6)*	(60.2)*	(62.9)*	
households	(*===)	(0012)	(0010)	(0217)	(0,10)	(0012)	(0=1>)	
Fotal	188	199	387	207	185	392	779	
cultivators	(62.9)*	(58.2)*	(60.4)*	(60.3)*	(56.1)*	(58.2)*	(94.2)*	
	(87.0)**	(96.6)*	(91.7)*	(96.3)**	(97.4)*	(96.8)*	(59.3)**	
Homestead	299	342	641	343	330	673	1314	
and	(100.0)*	(100.0)*	(100.0)*	(100.0)*	(100.0*)	(100.0)*	(100.0)	
holders								
cultivators								
who leased	79	45	124	57	52	109	233	
in land	(42.0)#	(22.6)#	(32.0)#	(27.5)#	(28.1)#	(27.8)#	(29.9)#	
Land	60	19	79	50	18	68	147	
owners	(27.1)**	(9.2)**	(18.7)**	(23.3)**	(9.5)**	(16.8)**	(17.8)**	
who leased								
out land								
Irrigated	197	204	401	211	182	393	794	
and	(91.2)*	(98.0)*	(95.0)**	(98.1)**	(95.8)**	(97.0)**	(98.6)*	
owners								

Table 3.7: Distribution of Households by Districts and Types of Landholding

Note: * as percent of total surveyed households; ** as percent of landowners; # as percent of cultivators Source: Primary Survey, 2012

3.8 Distribution of Households by Cropping Pattern

Out of the total 779 cultivators, 644 (82.7%) cultivate either paddy or maize during Kharif and 647 (83.1%) either wheat or mustard during Rabi as their main crop. However, paddy during Kharif and Wheat during Rabi is the main choice of the farmers as paddy is preferred by 86.6 percent of the farmers during Kharif and wheat by 98.5 percent of the farmers during Rabi. Apart from those farmers who are cultivating mainly paddy, wheat, maize or mustard, 266 farmers (34.1% of the total cultivators) also cultivate cotton or grams as a cash crop. Between cotton and grams over 89 percent cultivate cotton and only about 11 percent cultivate grams.

Table 3.8 shows that there is hardly any difference in the cropping pattern of the four districts during Rabi season, but during Kharif season of Nawanshehar district stands out differently from other districts. Whereas only a very small proportion of cultivators cultivate maize in Ludhiana, Kapurthala and Bhatinda districts, 45.4 percent of the households in Nawanshehar district cultivate maize. By contrast, only 54.6 percent of the cultivator in Nawanshehar district cultivate paddy as

compared to between 94.4 to 97.1 percent in other districts. With regard to cash crops, Bhatinda district has the highest percentage of cultivators cultivating cotton and Ludhiana district has the lowest percentage. The difference between the two is of more than 17 percentage points. By contrast only about 3.3 percent cultivators in Bhatinda district grow grams against 20.5 percent in Ludhiana district. This impact is very surprising because Bhatinda district, at one time, was the leading gram producing area of Punjab.

Crops grown	High RNFF	E Districts		Low RNFE	Low RNFE Districts			
	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	All Total	
Total number of Cultivators	188	199	387	207	185	392	779	
Kharif								
1.Paddy	147	167	314	167	77	244	558	
	(95.5)	(94.4)	(94.86)	(97.1)	(54.6)	(77.95)	(86.6)	
2.Maize	7	10	17	5	64	69	86	
	(4.5)	(5.6)	(5.13)	(2.9)	(45.4)	(22.04)	(13.4)	
Total	154	177	331	172	141	313	644	
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	
	(81.9)*	(88.9)*	(85.52)*	(83.1)*	(76.2)*	(79.84)*	(82.7)*	
Rabi								
1.Wheat	145	176	321	170	146	316	637	
	(94.8)	(99.4)	(97.28)	(100.0)	(99.3)	(99.68)	(98.5)	
2.Mustard	8	1	9	0	1	1	10	
	(5.2)	(0.0)	(2.72)	(0.0)	(0.6)	(0.32)	(1.5)	
Total	153	177	330	170	147	317	647	
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	
	(81.4)*	(88.9)*	(85.27)*	(82.1)*	(79.5)*	(80.86)*	(83.1)*	
Cash crop	1	- L		1				
1.Cotton	70	30	100	87	50	137	237	
	(79.5)	(88.2)	(81.96)	(96.7)	(92.6)	(95.14)	(89.1)	
2.Gram	18	4	22	3	4	7	29	
	(20.5)	(11.8)	(18.03)	(3.3)	(7.4)	(4.86)	(10.9)	
Total	88	34	122	90	54	144	266	
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	
	(46.8)*	(17.1)*	(31.52)*	(43.5)*	(29.2)*	(3[6.73)*	(34.1)*	

Table 3.8: Distribution of Households by Districts and Cropping Pattern

Note: *as percent of total cultivators Source: Primary Survey 2012

3.9. Distribution of Household Members by Age and Sex

Table 3.9 shows that the total number of household members of surveyed households is 6,693, out of which 3,523 are males and 3,170 females. The household members have been divided into different age groups, such as, 1-5, 6-14, 15-24, 25-40, 41-59 and 60 & above. The minimum percentage (7.1%) is in age group 1-5 years and maximum (24.9%) in 25-40 age group. The percentage of households in each age group gradually increases from 1-5 age groups to 25-40 age groups. After that, it starts declining. The table further reveals that children below 14 years of age constitute 20.1 percent of the total population. The young people in the reproductive age group (15-40 years) constitute 45.3 percent of the total population. The percentage of persons in age group 15-24 years. The working population (15-59 years) or the economically productive population constitutes 65.5 percent of the total population.

The old persons (60 & above age group) forms 14.4 percent of the total population. The old and the children, who are mainly dependents, constitute 34.5 percent of the total population. The sex ratio of the surveyed population is 900. However, it differs in different age groups. Whereas, sex ratio is most balanced in age groups 25-40 and 41-59 years (980 and 991 respectively), it is most unbalanced in age groups 1-5 and 6-14 years (706 and 768 respectively). The low sex ratio in 6-14 and 1-5 age groups clearly show that female foeticide is rampant in Punjab. The inter-district differences in the proportion of population in different age groups are very small.

				High RNF	E Districts		Low RNFI	E Districts		
ex	Male	Age								All
		(Binned)		Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
			1-5	57	63	120	88	59	147	267
				7.0%	7.2%	7.06%	8.8%	7.1%	8.05%	7.6%
			6-14	111	152	263	143	105	248	511
				13.5%	17.3%	15.47%	14.4%	12.7%	13.60%	14.5%
			15-24	169	170	339	201	172	373	712
				20.6%	19.3%	19.95%	20.2%	20.7%	20.44%	20.2%
			25-40	187	209	396	261	186	447	843
				22.8%	23.8%	23.30%	26.2%	22.4%	24.45%	23.9%
			41-59	181	172	353	166	160	326	679
				22.1%	19.6%	20.77%	16.7%	19.3%	17.87%	19.3%
			60 &	115	113	228	136	147	283	511
			above	14.0%	12.9%	13.42%	13.7%	17.7%	15.51%	14.5%
			Total	820	879	1699	995	829	1824	3523
				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.09

Table 3.9: District-wise Distribution of Household Members by Age and Gender

Fei	male Age (Bii	nned)	1-5	39 5.4%	61 7.3%	100 6.42%	67 7.6%	38 5.2%	105 6.51%	205 6.5%
			6-14	78 10.7%	104 12.5%	182 11.68%	107 12.1%	72 9.9%	179 11.10%	361 11.4%
				148 20.4%	174 20.9%	322 20.67%	189 21.4%	140 19.2%	329 20.40%	651 20.5%
				187 25.8%	220 26.4%	407 26.12%	219 24.8%	200 27.4%	419 25.99%	826 26.1%
				178 24.5%	169 20.3%	347 22.27%	167 18.9%	159 21.8%	326 20.22%	673 21.2%
		4		96 13.2%	104 12.5%	200 12.83%	134 15.2%	120 16.5%	154 9.55%	454 14.3%
				726 100.0%	832 100.0%	1558 100.0%	883 100.0%	729 100.0%	1612 100.0%	3170 100.09
Το	U	nned)		96 6.2%	124 7.2%	220 6.18%	155 8.3%	97 6.2%	252 7.33%	472 7.1%
			6-14 SR- 706	189 12.2%	256 15.0%	445 12.51%	250 13.3%	177 11.4%	427 12.42%	872 13.0%
		-	15-24	317 20.5%	344 20.1%	661 18.58%	390 20.8%	312 20.0%	702 20.43%	1363 20.4%
		2	25-40	374 24.2%	429 25.1%	803 22.57%	480 25.6%	386 24.8%	866 25.18%	1669 24.9%
		4	41-59	359 23.2%	341 19.9%	700 19.67%	333 17.7%	319 20.5%	652 18.97%	1352 20.2%
		é	60 &	211 13.6%	217 12.7%	428 12.03%	270 14.4%	267 17.1%	537 15.62%	965 14.4%
		-	Total	1546 100.0%	1711 100.0%	3557 100.0%	1878 100.0%	1558 100.0%	3436 100.0%	6693 100.09

3.10 Distribution of Household Members by Educational Level

Table 3.10 shows that nearly one-third (32.2%) of the total surveyed population, including children in age group of 1-5 years is illiterate. The level of illiteracy is comparatively high among the females. While 36.3 percent of females are illiterate, male illiterates constitute only 28.6 percent of the total male population. This means the literacy rates of males, females and total populations are 71.5, 63.7 and 67.8 percent respectively. The table shows that about 18 percent of the total population studied only up to primary level and there is no major difference in their percentage among males and females.

About 16.3 percent of the population received education up to upper primary level. Such persons are comparatively more among males (18.4%) than females (14.0%). The persons who have received education up to secondary level constitute 18.3 percent of the total population. Here also males are far ahead of females as against 15.4 percent of females 20.9 of males have received education up to secondary level. It seems that after completing secondary education a large number of males as well as females discontinue their education as only 11.6 percent of persons have completed higher secondary education. The dropout rate after secondary level education is marginally higher among males than females.

There is a sharp decline in the number of persons who have completed graduation or postgraduation. Only 2.5 percent of the total population is graduates and 0.8 percent post-graduates. Surprisingly, the number of graduates as well as post-graduates is more among females than males, both in terms of numbers as well as percentage which suggest that as far as higher education is concerned there is no gender bias.

The illiteracy level in low RNFE districts is comparatively higher (36.1%) than the low RNFE districts (28.2%). At the district level illiteracy is highest in low RNFE district Bhatinda (42.1%) and lowest in high RNFE district Ludhiana (23.3%). Illiteracy among females is comparatively higher than males in all the districts and the gap in the illiteracy rates among males and females is high in low RNFE districts (10.7%) as compared to the high RNFE districts (4.9%). Among the various districts, this gap was highest in Bhatinda district (11.9%) and lowest in Ludhiana district (3.8%). This finding reinforces the finding of many scholars that higher educational levels promote non-farm activities in rural areas.

			Education	High RNF	E Districts		Low RNF	E Districts		All Total
		Ed.lev.	level	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Totai
Sex	Male		Illiterate	176 21.5%	262 29.8%	438 25.77%	363 36.5%	204 24.6%	567 31.08%	1005 28.5%
			Primary	149 18.2%	167 19.0%	316 18.59%	161 16.2%	156 18.8%	317 17.37%	633 18.0%
			Upper Primary	185 22.6%	153 17.4%	338 19.90%	162 16.3%	148 17.9%	310 16.99%	648 18.4%
			Secondary	184 22.4%	178 20.3%	362 21.30%	179 18.0%	196 23.6%	375 20.55%	737 20.9%
			Higher Secondary	95 11.6%	99 11.3%	194 11.41%	101 10.2%	108 13.0%	209 11.45%	403 11.4%
			Graduate	29 3.5%	14 1.6%	43 2.53%	24 2.4%	13 1.6%	37 2.02%	80 2.3%
			Post- graduate & above	2 .2%	6 .7%	8 0.47%	5 .5%	4 .5%	9 0.49%	17 .5%
			Total	820 100.0%	879 100.0%	1699 100.0%	995 100.0%	829 100.0%	1824 100.0%	3523 100.0%
	Female	Edu.lev.	Illiterate	184 25.3%	295 35.5%	479 30.74%	427 48.4%	246 33.7%	673 41.74%	1152 36.3%
			Primary	133 18.3%	146 17.5%	279 17.90%	154 17.4%	153 21.0%	307 19.04%	586 18.5%
			Upper Primary	133 18.3%	119 14.3%	252 16.17%	102 11.6%	89 12.2%	191 11.84%	443 14.0%
			Secondary	139 19.1%	136 16.3%	275 17.65%	95 10.8%	119 16.3%	214 13.27%	489 15.4%
			Higher Secondary	95 13.1%	105 12.6%	200 12.83%	80 9.1%	96 13.2%	276 17.12%	376 11.9%
			Graduate	30 4.1%	22 2.6%	52 3.33%	18 2.0%	16 2.2%	34 2.11%	86 2.7%
			Post- graduate & above	12 1.7%	9 1.1%	21 1.34%	7 .8%	10 1.4%	17 1.05%	38 1.2%
			Total	726 100.0%	832 100.0%	1558 100.0%	883 100.0%	729 100.0%	1612 100.0%	3170 100.0%

Table 3.10: District-wise Distribution of Household Members by Educational Level and Gender

Total	Edu.lev.		360 23.3%	557 32.6%	917 28.15%	790 42.1%	450 28.9%	1240 36.08%	2157 32.2%
		Primary	282 18.2%	313 18.3%	595 18.26%	315 16.8%	309 19.8%	624 18.16%	1219 18.2%
		11	318 20.6%	272 15.9%	590 18.11%	264 14.1%	237 15.2%	501 14.58%	1091 16.3%
		2	323 20.9%	314 18.4%	637 19.55%	274 14.6%	315 20.2%	589 17.145	1226 18.3%
		Higher Secondary	190 12.3%	204 11.9%	394 12.09%	181 9.6%	204 13.1%	385 11.20%	779 11.6%
			59 3.8%	36 2.1%	95 2.91%	42 2.2%	29 1.9%	71 2.06%	166 2.5%
		Post-graduate & above	14 .9%	15 .9%	29 0.89%	12 .6%	14 .9%	26 0.75%	55 .8%
		Total	1546 100.0%	1711 100.0%	3257 100.0%	1878 100.0%	1558 100.0%	3436 100.0%	6693 100.0%

3.11 Distribution of Household Members by Technical Education

Out of the total population (6,693) of surveyed households, only 112 (1.7%) have received technical education. Out of 112 technically educated persons, 60 (53.6%) are males and 52 (46.4%) are females. This shows that as far as technical education is concerned there is hardly any gender based bias.

Out of the total persons with technical education, about 27.7 percent have done industrial training certificate course or Polytechnic Diploma in some trade. The corresponding figures for the males and the females are 40.0 percent and 13.4 percent respectively. BE/B.Tech has been done only by 10 (8.9%) persons out of which 7 are males and 3 are females. Only 16 (14.3%) persons received training in medical related fields such as medicine, pharmacy, nursing etc. Out of these 16 persons, 6 are males and 10 females. The other professional courses like B.Ed, M.Ed, B. Lib. etc. account for maximum number (39.3%) of persons. Out of these 44 persons, 18 are males and 26 females. This shows that in medical related fields and in other professional courses females outnumbered the males. Among males, the highest preference (30%) is for other professional courses, followed by polytechnic (25%). Among females, the highest preference (50%) is for other professional courses, followed by medical related fields (19.2%).

The total number of technically educated persons in high RNFE districts and low RNFE districts is exactly equal. Even the number of males and females who have received technical education in these two types of districts is also equal. Since the number of persons who have received technical education is too small, no comment can be made whether high level of technical education promotes non-farm activity in rural areas or not.

Male	Tech. level		High RNF	E Districts		Low RNF	E Districts			
viuic		Edu.		Kapurth					All	
			Ludhiana	ala	Total		Nawanshehr	Total	Total	
		B.E / B.tech	1	2	3	4	0	4	7	
			.1%	.2%	0.17%	.4%	.0%	0.21%	.2%	
		Poly-technic	5	1	6	3	6	9	15	
		r ory teenine	.6%	.1%	0.35%	.3%	.7%	0.49%	.4%	
				11/0	0.0070		.,,,,	011270	,0	
		ITI	4	2	6	2	1	3	9	
			.5%	.2%	0.35%	.2%	.1%	0.16%	.3%	
					2	2	0	2		
		Medical	3	0	3	3	0	3	6	
			.4%	.0%	0.17%	.3%	.0%	0.16%	.2%	
		Other	5	3	8	5	5	10	18	
		professional	.6%	.3%	0.47%	.5%	.6%	0.54%	.5%	
		course								
		Other formal	0	2	2	0	0	0	2	
			.0%	.2%	0.11%	.0%	.0%	.0%	.1%	
		Informal	2	0	2	1	0	1	3	
			.2%	.0%	0.11%	.1%	.0%	0.05%	.1%	
		None	800	869	1669	977	817	1794	3463	
			97.6%	98.9%	98.23%	98.2%	98.6%	98.35%	98.3%	
		Total	820	879	1699	995	829	1824	3523	
		Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Female	Tech.lev	.B.E/B.TECH	1	2	3	0	0	0	3	
			.1%	.2%	0.19%	.0%	.0%	.0%	.1%	
		Poly	1	1	2	0	0	0	2	
		technic	.1%	.1%	0.12%	.0%	.0%	.0%	.1%	
		ITI	0	1	1	0	4	4	5	
			.0%	.1%	0.06%	.0%	.5%	0.24%	.2%	
		Medical	6	2	8	1	1	2	10	
			.8%	.2%	0.51%	.1%	.1%	0.12%	.3%	
		Other	6	4	10	8	8	16	26	
		Professional	.8%	4 .5%	0.64%	8 .9%	8 1.1%	0.99%	.8%	
		Course	.070	.570	0.0-1/0	7 /0	1.1/0	0.7770	.070	
		Other formal	1	0	1	3	1	14	5	
			.1%	.0%	0.06%	.3%	.1%	0.24%	.2%	
		Informal	0	1	1	0	0	0	1	

Table 3.11: District-wise Distribution of Household Members by Technical Education and Gender

		None	711 97.9%	821 98.7%	1532 98.33%	871 98.6%	715 98.1%	1586 98.38%	3118 98.4%
		Total	726	832	1558	883	729	1612	3170 100.0
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	%
Total	Tech.lev.	B.E/B.TECH	2 .1%	4 .2%	6 0.18%	4 .2%	0 .0%	4 0.11%	10 .1%
		Poly-Technic	6 .4%	2 .1%	8 0.24%	3 .2%	6 .4%	9 0.26%	17 .3%
		ITI	4 .3%	3 .2%	7 0.21%	2 .1%	5 .3%	7 0.20%	14 .2%
		Medical	9 .6%	2 .1%	11 0.33%	4 .2%	1 .1%	5 0.14%	16 .2%
		Other professional course	11 .7%	7 .4%	18 0.55%	13 .7%	13 .8%	26 0.75%	44 .7%
		Other formal	1 .1%	2 .1%	3 0.09%	3 .2%	1 .1%	4 0.11%	7 .1%
		Informal	2 .1%	1 .1%	3 0.09%	1 .1%	0 .0%	1 0.02%	4 .1%
		None	1511 97.7%	1690 98.8%	3201 98.28%	1848 98.4%	1532 98.3%	3380 98.37%	6581 98.3%
		Total	1546 100.0%	1711 100.0%	3257 100.0%	1878 100.0%	1558 100.0%	3436 100.0%	6693 100.0 %

3.12 Distribution of Population by Occupation

Table 3.12 shows that nearly 30 percent of the population is engaged in household activities. These are mainly women who are not doing any paid work. They are generally counted as non-workers. Similarly, nearly 37 percent of the population is listed in the category of 'others'. This category mainly includes non-workers, like children, unemployed persons and old persons. About 15 percent of the population is engaged in self-cultivation. Less than 1 percent of the total population is engaged in agricultural labour and allied agricultural activity (animal husbandry). Thus, only 16 percent of the total population is engaged in agricultural sector.

About 18.6 percent of the total population is engaged in non-farm activity which includes non-farm labour (8.7%), self-employed in non-agricultural activities (4.3%) and service, both public (2.0%) and private (2.4%). There are no major differences in the occupation of people between high and low RNFE districts.

Present	Hig	h RNFE Distri	cts	Lo	w RNFE Distric	ets	All
occupation	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Self-cultivation	244	231	475	305	230	535	1010
	15.8%	13.5%	14.58%	16.2%	14.8%	15.57%	15.1%
Animal	10	0	10	б	1	7	17
husbandry	.6%	.0%	0.30%	.3%	.1%	0.20%	.3%
Agri. Lab.	10	2	12	28	2	30	42
	.6%	.1%	0.36%	1.5%	.1%	0.87%	.6%
Non-Agri. Lab.	103	157	260	151	172	323	583
	6.7%	9.2%	7.98%	8.0%	11.0%	9.40%	8.7%
Household	481	511	992	530	464	994	1986
Activities	31.1%	29.9%	30.45%	28.2%	29.8%	28.925	29.7%
Self emp in Non-	60	84	144	69	75	144	288
Agri	3.9%	4.9%	4.42%	3.7%	4.8%	4.20%	4.3%
Service (public)	20	41	61	41	34	75	136
	1.3%	2.4%	1.87%	2.2%	2.2%	2.18%	2.0%
Service (private)	59	32	91	46	26	72	163
	3.8%	1.9%	2.79%	2.4%	1.7%	2.09%	2.4%
Others	559	653	1212	702	554	1256	2468
	36.2%	38.2%	37.21%	37.4%	35.6%	36.55%	36.9%
Total	1546	1711	3257	1878	1558	3436	6693
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.12: Distribution of Main Workers by District and Present Occupation

Source-Primary Survey 2012

3.13 Distribution of Workers by Occupation 5 Years Back

Table 3.13 shows that there was no major difference in the distribution of workers by occupation 5 years back from the present. Even five years back, the number of persons engaged in occupations like animal husbandry, agricultural labour, and service in public sector was almost the same as it is today. There is only a marginal growth (less than 1 percentage point) in occupations like self-employment in non-agricultural occupation, self-cultivation, and non-agricultural labour and private service during these 5 years. The growth in the proportion of persons who are engaged in household activities was comparatively more (1.2 percentage point) than other occupation.

By contrast, the proportion of workers in occupation listed as others which also include non-workers, declined by 4.1 percent points in these 5 years. This change may be due to the fact that many of the

workers at present must have been non-workers 5 years back due to underage or for some other reasons. There is no major difference in pattern of change between low RNFE and high RNFE districts.

	High RNFE	Districts		\mathbf{L}	ow RNFE Dis	tricts	All
Occupations	Ludhiana	Kapurthala	Total	Bhating	la Nawansheh	r Total	Total
None	0	0	0	1	1	0	1
	.0%	.0%	.0%	.1%	0.06%	.0%	.0%
Self cultivation	238	220	458	305	213	518	976
	15.4%	12.9%	14.06%	16.2%	13.7%	15.07%	14.6%
Animal	10	1	11	4	2	6	17
husbandry	.6%	.1%	0.33%	.2%	.1%	0.17%	.3%
Agri lab	10	0	10	30	2	32	42
	.6%	.0%	0.30%	1.6%	.1%	0.93%	.6%
Non-Agri lab	80	144	224	147	168	315	539
_	5.2%	8.4%	6.87%	7.8%	10.8%	9.16%	8.1%
Household	448	502	950	508	448	956	1906
activities	29.0%	29.3%	29.16%	27.1%	28.8%	27.82%	28.5%
Self-Emp in	58	84	142	66	69	135	277
Non-Agri	3.8%	4.9%	4.35%	3.5%	4.4%	3.92%	4.1%
Service (public)	20	47	67	36	34	70	137
·* · ·	1.3%	2.7%	2.05%	1.9%	2.2%	2.03%	2.0%
Service (private))44	26	70	25	21	46	116
	2.8 %	1.5%	2.14%	1.3%	1.3%	1.33%	1.7%
Others	638	687	222	756	604	1357	2682
	41.26%	40.15%	6.81%	40.2%	38.57%	39.49%	40.07%
Tota	l 1546		3257	1878		3436	6693
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.13: Distribution of Workers by District and Occupation 5 Years Back

Source-Primary Survey 2012

3.14 Distribution of Workers by Occupation 10 Years Back

Table 3.14 shows that even 10 years back the proportion of workers in most of the occupations was more or less similar to their proportion in those occupations at present. The major difference is only in two occupations, that is, (i) household activities and (ii) Other occupations. The proportions of workers in household activities was less than 3.9 percentage points from the present and in other occupations including non-workers was 9.6 percentage points more than the present. The major reason for both is the same that due to underage many of the present workers were non-workers 10 years back. Change in other occupations is comparatively less. In most of these occupations the percentage of workers 10 years back was less than the present for the same reason as mentioned earlier, that is, many of present workers were non-workers 10 years back or were not residing in the

village. There is a marginal decline in the percentage of workers in public service. This decline may be due to the fact that the persons who retired from public service outnumbered the persons who got jobs in public service during the past 10 years. There is no major difference in pattern of change in the high RNFE and low RNFE districts.

	High	RNFE Districts	3	Lov	v RNFE Distric	ets	All
Occupation	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Self-	228	205	433	295	186	481	914
cultivation	14.7%	12.0%	13.29%	15.7%	11.9%	14.0%	13.7%
Animal	5	0	5	2	0	2	7
husbandry	0.3%	0.0%	0.15%	0.1%	0.0%	0.05%	0.1%
Agri. Lab.	11	0	11	27	1	28	39
_	.7%	0.0%	0.33%	1.4%	0.1%	0.81%	0.6%
Non-Agri.	68	129	197	128	134	262	459
Lab.	4.4%	7.5%	6.04%	6.8%	8.6%	7.62%	6.9%
Household	408	466	874	485	368	853	1727
Activities	26.4%	27.2%	26.83%	25.8%	23.6%	24.82%	25.8%
Self-Emp.	44	68	112	53	49	102	214
Non-Agri.	2.8%	4.0%	3.43%	2.8%	3.1%	2.96%	3.2%
Service	35	18	53	11	12	23	76
(Private)	2.3%	1.1%	1.62%	0.6%	0.8%	0.66%	1.1%
Others	147	77	224	262	238	500	724
	9.5%	4.5%	6.87%	14.0%	15.3%	14.55%	10.8%
None	580	703	1283	573	533	1106	2389
	37.5%	41.1%	39.39	30.5%	34.2%	32.18%	35.7%
Service	20	45	65	39	37	76	141
(Public)	1.3%	2.6%	1.99%	2.1%	2.4%	2.21%	2.1%
Total	1546	1711	3257	1878	1558	3436	6693
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.14: Distribution of Workers by District and Occupation 10 Years Back

Source-Primary Survey 2012

3.15 Distribution of Workers who shifted their Occupation and Reasons of Shift

Only 41 workers out of 6,693 persons reported shift in their occupation which is an insignificant number. This shows that very limited opportunities are available for the people to shift their profession. Only 4 persons benefitted from government schemes and 3 from new employment opportunities. In most cases push factors rather than pull factors contributed for the shift in occupation.

	Hig	h RNFE Distr	icts	Low	RNFE District	S	All
Reasons	Ludhiana		Total	Bhatinda	Nawanshehr	Total	Total
		Kapurthala					
Low Agri	3	0	3	3	3	6	9
income	15.0%	.0%	13.64%	50.0%	23.08%	31.58%	21.95%
Small	2	0	2	0	3	3	5
holding	10.0%	.0%	9.09%	.0%	23.08%	15.79%	12.19%
Higher	0	0	0	0	0	0	0
education	.0%	.0%	.0%	.0%	.0%	.0%	.0%
Risk a	3	1	4	0	1	1	5
version	15.0%	50.0%	18.18%	.0%	7.69%	5.26%	12.19%
Govt	2	0	2	1	1	2	4
scheme	10.0%	.0%	9.09%	16.67%	7.69%	10.53%	9.76%
New emp	2	0	2	0	1	1	3
opp	10.0%	.0%	9.09%	.0%	7.69%	5.26%	7.32%
Others	8	1	9	2	4	6	15
	40.0%	50.0%	41.74	33.33%	30.77%	31.58%	36.59
Total	20	2	22	6	13	19	41
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.15: Distribution of Workers who shifted their Occupation byDistrict and Reasons of Occupational Shift

3.16 Distribution of Household Members having Subsidiary Occupation

The number of persons who have also adopted subsidiary occupation along with main occupation to supplement their income is very small (344). Out of these 344 persons, about two-thirds (66.9%) have adopted animal husbandry as their subsidiary occupation, which is not difficult to understand. Other occupations which have been adopted as subsidiary occupations by sizeable numbers are self-cultivation, household activities and self-employed in non-agricultural activities.

Out of the 344 persons who have adopted subsidiary occupation -209 (60.76%) are from high RNFE districts, especially Ludhiana which alone account for 157 (45.64%) persons. The low RNFE districts have only 135 (39.24%) such persons.

Subsidiary	High I	RNFE Districts		Low F	RNFE Districts		All
occupation	Ludhiana	Kapurthala	Total	Bhatinda	Nawashehar	Total	Total
Self cultivation	9	2	11	8	2	10	21
	5.73%	3.85%	5.26%	10.53%	3.39%	7.41%	6.10%
Animal	107	29	136	47	47	94	230
husbandry	68.15%	55.77%	65.07%	61.84%	79.66%	69.63%	66.86%
Agri. Lab.	3	0	3	1	1	2	5
	1.91%	.0%	1.44%	1.32%	1.69%	1.48%	1.45%
Non-Agri. Lab.	5	5	10	5	0	5	15
	3.18%	9.62%	4.78%	6.58%	.0%	3.70%	4.36%
Household	8	5	13	3	5	8	21
Activities	5.10%	9.62%	6.22%	3.95%	8.47%	5.93%	6.10%
Self Emp in	12	4	16	4	1	5	21
Non-Agri	7.64%	7.69%	7.66%	5.26%	1.69%	3.70%	6.10%
Service (pub)	1	0	1	0	0	0	1
	0.64%	.0%	0.48%	.0%	.0%	.0%	0.29%
Service	4	1	5	3	1	4	9
(private)	2.55%	1.92%	2.39%	3.95%	1.69%	2.96%	2.62%
Others	8	6	14	5	2	7	21
	5.10%	11.54%	6.70%	6.58%	3.39%	5.19%	6.10%
Total	157	52	209	76	59	135	334
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.16: Distribution of Household Members by District and Subsidiary O	ccupation

3.17 Distribution of Persons Employed in Non-Agri. Labour by District

Out of the total surveyed population, only 1170 persons are engaged in non-farm activities. Out of these 1170 persons, as many as 620 (53.99%) are working as non-agricultural labourers. Out of these 620 non-farm labourers, 360 (58.06%) are from low RNFE districts and 260 (41.94%) from high RNFE districts.

High	RNFE Districts		Low	RNFE Districts		
						All Totals
Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	
119	141	260	181	179	360	620
45.77%	54.23%	100.0%	50.28%	49.72%	100.0%	100.0%

Table 3.17: Persons	Employed in	Non-Agri. Lab	by District
10010 00110 10100110			

3.18 Distribution of the Non-Agri. Labourers by Sectors

The participation of non-agricultural labour in mining and quarrying, wholesale and retail trade and hotels & restaurant is negligible or nil. About 9 percent of them are in construction sector. About 89 percent of these labourers are engaged in activities which have been classified as others. These include cleaners and helpers on trucks, brick kiln workers, workers with tent stores houses, workers at marriage palaces, workers with rice shellers and flour mills with auto mechanics, home painters, Furniture painters, workers on road side dhabas and other shops etc.

	High RNFE Districts			Low RNFE Districts			
Sectors	Ludhiana	Kapurtha la	Total	Bhatinda	Nawanshehr	Total	All Total
Mining &	0	3	3	0	0	0	3
quarrying	.0%	2.1%	1.15%	.0%	2.1%	0%	0.48%
Manufacturing	3	1	4	1	2	3	7
	2.5%	.7%	1.53%	.6%	.7%	0.83%	1.12%
Construction	17	6	23	23	9	32	55
	14.3%	4.3%	8.84%	12.7%	4.3%	8.88%	8.87%
Wholesale &	1	0	1	2	0	2	3
Retail trade	.8%	.0%	0.38	1.1%	.0%	0.55	0.48%
Hotel &	0	0	0	0	0	0	0
Restaurant	.0%	.0%	.0%	.0%	.0%	0%	.0%
Others	98	131	229	155	168	323	552
Oulers	82.4%	92.9%	88.07%	85.6%	92.9%	89.72	89.03%
Total	119	141	260	181	179	360	620

Table 3.18: Distribution of Non-Agri Lab by Sector and District

Source-Primary Survey 2012

3.19 Sector-wise distribution of Non-Agri. Lab by Place of Work

About 68 percent of the total non-agricultural labours work within the village and about 29 percent outside the village but within the district. Only about 3 percent of these labourers are working outside the district. About half (52.7%) of the labourers who work in construction sector work within the village and another half (47.3%) outside the village but within the district. About 70 percent of the non-agricultural labourers categorised as 'others' work within the village and about 27 percent outside the village but within the district. A little over 3 percent of these labourers work outside the district. Incidentally, these are the only non-agricultural labourers who are working outside the district of their residence.

Because of low wages the non-agricultural labourers prefer to work near his place of residence. This also helps them to attend to other responsibilities of the family more conveniently and spend more time in the family for caring and meeting family demands. It is only under compelling circumstances that non-agricultural labourer prefer distant place to work.

	Workplace					
Sector	Within village	Outside village	Outside district	Total		
Mining & Quarrying	3	0	0	3		
	100.0%	0.0%	0.0%	100.0%		
Manufacturing	2	5	0	7		
	28.6%	71.4%	0%	100.0%		
Construction	29	26	0	55		
	52.7%	47.3%	.0%	100.0%		
Wholesale & Retail	2	1	0	3		
trade	66.7%	33.3%	0.0%	100%		
Hotel & Restaurant	0	0	0	0		
	0.0%	0.0%	0.0%	0.0%		
Others	386	148	18	552		
	69.9%	26.8%	3.3%	100%		
Total	422	180	18	620		
	68.1%	29.0%	2.9%	100.0%		

Table 3.19: Distribution of Non-Agri Lab by Sector and Place of Work (State as a whole)

Source-Primary Survey 2012

3.20 Sector-wise Distribution of Non-Agri Lab. by Place of Work

Table 3.20 shows that more than two-thirds (68.1%) of the total non-agricultural workers work within the village and 29.0 percent outside the village but within the district. Only 2.9 percent of them work outside the district.

The table further shows that as compared to high RNFE districts higher percentage of rural nonfarm labours in low RNFE districts work within the village. By contrast, labours who are working outside the village, but within the district, as well as those who work outside the district has higher percentage in high RNFE districts than the low RNFE districts. Viewed at the district level the table reveals that there is not much difference in the percentage of non farm labourers working within the village as well outside the village and even outside the district three districts. It is only in high RNFE district Ludhiana where 40 percent of the labourers work outside their village. This may be due to a lot of nonfarm activity in Ludhiana and other towns as well as along the main roads.

Place of Work	High RNFE Districts			Low RNFE Districts			Grand
	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Within village	52	104	156	141	125	266	422
_	43.7%	73.8%	60.0%	77.9%	69.8%	73.89%	68.06%
Outside	55	35	90	40	50	90	180
village	46.2%	24.8%	34.61%	22.1%	27.9%	25.0%	29.03%
Outside	12	2	14	0	4	4	18
district	10.1%	1.4%	5.38%	.0%	2.2%	1.11%	2.90%
Total	119	141	260	181	179	360	620
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.20: Distribution of Non-Agri. Lab. by District and Place of Work

Source-Primary Survey 2012

3.21 Distribution of Non-Agri. Lab. by Distance to Place of Work

Table 3.21 shows that more than two-thirds (66.9%) of the total non-agricultural labourers do not have to travel for work as they work within the village. About 9 percent of them travel up to 5 km for work. About 16.5 percent travel between 5-10 km and 4.4 percent between 10-20 km for work. Only 3.1 percent of the workers travel more than 20 km for work. The table further reveals that as compared to about 26.7 percent of non-agriculture labourers from the low RNF districts, about 42 percent of them from the high RNFE districts have to travel 1 km or more for work. This is simply because higher percentage of non-farm labourers in high RNNE districts work outside the village. Whereas, only about 5.3 percent of the labourers in low RNFE districts travel upto 5 km. for work, 14.6 percent of labourers in high RNFE districts travel that distance for work. Percentage of labourers who travels between 5-10 km. 10-20 km. and more than 20 km for work are also compulsory more from the high RNFE districts than the low RNFE districts, but the difference in their percentages is comparatively less.

	High	RNFE Districts		Low RNI	FE Districts		All
Distance	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Within	47	104	151	140	124	264	415
Village	39.5%	73.8%	58.07%	77.3%	69.3%	73.33%	66.93%
Upto 5 Km	32	6	38	10	9	19	57
	26.9%	4.3%	14.61%	5.5%	5.0%	5.28%	9.19%
5-10	25	20	45	22	35	57	102
	21.0%	14.2%	17.30%	12.2%	19.6%	15.83%	16.45%
10-20	9	7	16	4	7	11	27
	7.6%	5.0%	6.15%	2.2%	3.9%	3.05%	4.35%
20 Km and	6	4	10	5	4	9	19
above	5.0%	2.8%	3.84%	2.8%	2.2%	2.50	3.06%
Total	119	141	260	181	179	360	620
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.21: Distribution of Non-Agri. Lab. by District and Distance of Work

Source-Primary Survey 2012

3.22 Distribution of Non-Agri. Lab. by Days of Employment

Table 3.22 shows a very high degree of under-employment among non-agricultural labourers. Some of them (1.8%) reported that they get employment for less than three months in a year. A very large proportion of them (23.5%) get employment for 3-6 months. This shows that more than one-fourth of non-agricultural labourers are getting employment for less than 6 months. Another 37.7 percent get employment for more than 6 months but less than 12 months. However, about 37 percent of the non-agriculture labour does get employment for all the 12 months. It is very strange that percentage of non-farm labourers who gets work for less than 3 months as well as of those who gets work for 3 to less than 6 months is more in high RNFE districts than low RNFE districts. Labours who get work for 6 months or more have high percentage in low RNFE districts than high RNFE districts.

Kapurthala which falls under high RNFE district offers more opportunities (58.7%) for nonagricultural workers to work for more than 12 months which is far ahead of other districts. Bhatinda district which falls under low RNFE district offers very less opportunities i.e. only 16.0 percent on a long term bases i.e. above 12 months. But in Bhatinda 43.7 percent non-agricultural labour is engaged in 3 to 6 months period which is the highest for this specific period; while in Ludhiana 48.6 percent non-agricultural workers stay in the job for 7 to 12 months period. There may be compulsion to the employer to give break to discontinue the job after 6 months for the fear of strict labour laws.

	High	RNFE Distric	ets	Low	All districts		
Days of Employment	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	combined
< 3 months	4	5	9	2	0	2	11
	3.4%	3.5%	3.46%	1.1%	.0%	0.56%	1.8%
3 to < 6	52	24	76	52	18	70	146
months	43.7%	17.0%	29.23%	28.7%	10.1%	18.44%	23.5%
6 to < 12	44	46	90	88	56	144	234
months	37.0%	32.6%	34.62%	48.6%	31.3%	40.0%	37.7%
12 months	19	66	85	39	105	144	229
	16.0%	46.8%	32.69%	21.5%	58.7%	40.0%	36.9%
Total	119	141	260	181	179	360	620
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.22: Distribution of Non-Agri Lab by District and Days of Employment

Source-Primary Survey 2012

3.23 Distribution of Non-Agri. Lab. by Work Hours

About two-thirds of the non-agricultural labourer reported that they work for 4-8 hours per day which are normal hours of work for non-agricultural labourers and are in conformity with the labour laws. Likewise, about 31.5 percent of the labourers reported that they get work for 8 hours or more per day and only 10 labourers (1.6%) reported that they get work for less than 4 hours per day. There are no significant differences in the work hours of the non-agricultural labourers between the high RNFE and low RNFE districts.

Table 3.23: Distribution of Non-Agri Lab by District and Work Hours

	Hig	h RNFE Distric	ts	Low	RNFE Distric	ets	All Total
Work Hours	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	
Less than 4	4	3	7	0	3	3	10
Hrs	3.4%	2.1%	2.69%	.0%	1.7%	0.83%	1.6%
4-8 Hrs	82 68.9%	93 66.0%	175 67.31%	129 71.3%	111 62.0%	240 66.67%	415 66.9%
8 Hrs and	33	45	78	52	65	117	195
above	27.7%	31.9%	30.0%	28.7%	36.3%	32.50%	31.5%
Total	119 100.0%	141 100.0%	260 100.0%	181 100.0%	179 100.0%	360 100.0%	620 100.0%

Source-Primary Survey, 2012

3.24 Distribution of Non-Agri. Lab. by Type of Contract

Only a small fraction (3.9%) of the non-agricultural labourers is working on regular basis. Rest of them (96.1%) works only as casual labourers. The data from Table 3.24 reveal that majority of the works under non-agricultural field is done by engaging the labourers on casual basis only. Only on few works the labourer is being offered contract type of job. However, the percentage of non-agricultural labourers who are working on regular basis is comparatively more in high RNFE districts than low RNFE districts.

Type of	High	RNFE Distri	cts	Low	cts	All	
Contract	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	total
Regular	12	5	17	4	3	7	24
	10.1%	3.5%	6.54%	2.2%	1.7%	1.94%	3.87%
Casual	107	136	243	177	176	353	596
	89.9%	96.5%	93.46%	97.8%	98.3%	98.06%	96.13%
Total	119	141	260	181	179	360	620
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.24: Distribution of Non-Agri. Lab. by District and Type of Contract

Source-Primary Survey 2012

3.25 Distribution of Non-Agri. Labourers by Mode of Payment

Majority (57.4%) of the non-agricultural labourers works as daily wagers, so they get their wages daily. Over 39 percent of the non-agricultural labourers get their payment on monthly basis. Only about 3.4 percent of the labourers get their payment on piece-rate basis.

The percentages of non-agricultural labourers who get their wages on daily basis as well as on piece rate are comparatively more in high RNFE districts than low RNFE districts. By contrast, those who get their wages on monthly basis their percentage is high in low RNFE districts than low RNFE districts.

Table 3.25: Distribution of Non-Agri Lab by District and Mode of Payment

Mode of	High	RNFE Distric	ets	Low	ts	All	
Payment	Ludhiana Kapurthala Total		Bhatinda	Bhatinda Nawanshehr		Total	
Daily	49	128	177	85	94	179	356
	41.2%	90.8%	68.08%	47.0%	52.5%	49.72%	57.4%
Piece Rate	9	5	14	4	3	7	21
	7.6%	3.5%	5.38%	2.2%	1.7%	1.94%	3.4%
Monthly	61	8	69	92	82	174	243
	51.3%	5.7%	26.54%	50.8%	45.8%	48.33%	39.2%
Total	119	141	260	181	179	360	620
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source-Primary Survey 2012

3.26 Average Annual Net Earnings of Non-Agriculture Labourer by District and Activity

Table 3.26 shows that average annual net earnings of a non-agricultural labourer is about 36 thousand or about Rs. 3,000 per month. The highest earnings of these labourers are in wholesale and retail trade and minimum in mining and quarrying. Earning of labourers in low RNFE districts are comparatively higher than the high RNFE districts in general and in those activities which have been classified as others. In all other activities their earning are comparatively high in high RNFE districts than low RNFE districts.

Sectors		High RN Districts	IFE	Low Dist	RNFE RICTS		
	Ludhiana Mean Annual earning (in Rs.)	Kapurthala Mean annual earning(in Rs.)	Mean	Bhatinda Mean Annual earnings (in Rs.)	Nawanshehr Mean Annual earning(in Rs.)	Mean	Total
Mining & quarrying	00	23487	23487	0	0	0	23487
Manufacturin g	21440	62000	41720	20500	31500	24167	31188
Construction	32848	34512	33192	19451	44625	27197	313337
Wholesale & retail trade	62450	0	62450	60300	0	6030	61733
Others	28779	39195	34738	23601	53661	40261	37101
All	30048	38813	34702	22890	53060	38882	36437

Table 3.26: Average	Annual Earning	of Non-Agricultura	al Labour by	v Districts & Sectors
		of the second second		

Source-Primary Survey 2012

3.27 Average Annual Earnings of Non-Agriculture labour by District and Social Group

The average annual earning of Scheduled castes was highest i.e. Rs. 56957.63 in district Kapurthala, while it was lowest i.e. Rs. 21670.13 in the district Bhatinda. Similarly, for the OBC and other caste category the annual earnings were highest in Kapurthala and lowest in Bhatinda. Kapurthala district which falls under the high RNFE category witness the highest mean annual earnings in SC group with 56957.63 and for OBC group of 48969.57. These both social group shows their earning as lowest in Bhatinda district with 21670.13 and 17712.14 respectively. This show that SC and OBC workers mean earning has no relation with high RNFE and low RNFE status of districts. Confirmation of this concept also reveals from the Ludhiana's other category earning of Rs. 26075.38 which is lowest and the same high RNFE district of Kapurthala shows the highest earning of 44001.00 for other's group.

	High RNF	E Districts	Low RN	FE Districts	
	Ludhiana Kapurthala		Bhatinda	Nawanshehr	
Caste	annual earning	annual earning	annual earning	annual earning	All
	Mean	Mean	Mean	Mean	Ν
SC	30861.15	56957.63	21670.13	42392.36	359
OBC	29655.17	48969.57	17712.14	35892.16	147
Others	26075.38	44001.00	28350.21	33466.79	114

Table 3.27: Average Annual Earning of Non-Agricultural Labour byDistrict & Social Group

Source-Primary Survey 2012

Household got Work under MGNREGA

3.28 Social Group-wise Distribution of Households which got Work in MGNREGA

The NREGA is very effective programme for creating wage employment in the rural areas. Data in Table 3.28 show that maximum number of beneficiaries of Ludhiana district belongs to SCs category. Only few beneficiaries of Kapurthala and Nawanshehr district belong to other category. A total of 51 beneficiaries were from high non-farm districts and only 16 were from low non-farming districts.

Table 3.28 shows that only 74 households got work under NREGA. This shows the ineffectiveness of MGNREGA in providing work opportunities to the people. Out of these 74 households, 54 (73.0%) belongs to SCs and 16 (21.6%) to OBCs categories. This, however, shows that the programme is benefitting mostly the poor.

District-wise analysis shows that Ludhiana and Nawansheher offer more opportunities in MGNREGA scheme to SC and OBCs with more preference to SCs. This shows that scheme has no relation of high and low RNFE districts in terms of opportunities in getting work under MGNREGA. This is also clear from the figures of other 2 districts of Kapurthala and Bhatinda where the scope of MGNREGA seems to be marginal and much behind the other two districts of Ludhiana and Nawanshehr.

	High	RNFE Distric	ts	Low RNFI	E Districts		All
Caste	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
	Ν	N	Ν	N	N	N	Ν
	33	3	36	4	14	18	54
SC	71.73%	60.0%	70.58%	57.14%	87.5%	78.26%	72.97%
	13	0	13	3	0	3	16
OBC	28.26%	0.0%	25.49%	42.82%	0.0%	13.04%	21.62%
	0	2	2	0	2	2	4
OTHERS	0.0%	40.0%	3.92%	0.0%	12.5%	8.69%	5.40%
	46	5	51	7	16	23	74
All	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 3.28: Social Group-wise Distribution of Households which got Work in MGNREGA

Source-Primary Survey 2012

3.29 Average Days of Employment per Worker in NREGA by District & Social Group

The district-wise average number of days of employment was highest in Kapurthala districts (33.60 days) and lowest in Bhatinda district (25.44 days). In district Nawanshehr, only 24.44 days of employment in a year was got by MGNREGA beneficiaries while the act guarantee of 100 days in a year. In district Kapurthala, there is not any caste differentiation in the matter of days employment whereas a sharp variation in number of days of employment has been reported in the district Nawanshehr where difference between SC and other group is 26.71 days and 8.50 days of employment got in a year respectively.

Table 3.29: Average Days of Employment per Worker in NREGA by District & Social Group

		High RNFE districts				Low RNFE districts				
Caste	Ludhiana Kapurth		ourthala	la Bhatinda		Nawai	All			
	employ	ment days	employ	ment days	employment days		employment days		Ν	
	Mean	Ν	Mean	Ν	Mean	Ν	Mean	Ν		
SC	27.75	4	26.71	14	21.45	33	33.33	3	54	
OBC	16.67	3	0	0	34.85	13	0	0	16	
OTHERS	0	0	8.50	2	0	0	34.00	2	4	
All	23.00	7	24.44	16	25.24	46	33.60	5	74	

Source-Primary Survey 2012

3.30 Average Earnings per Worker in NREGA by District & Social Group

The average earnings by MGNREGA workers are more in the two districts of high RNFE i.e. Ludhiana and Kapurthala as compared to the other districts of low RNFE status. This correlates the facts with high average earnings and High RNFE activities are linked to each other. In districts the beneficiaries of district Kapurthala were earning highest (Rs.4,132.80) and lowest (Rs.2,939.29) was reported by the beneficiaries of Bhatinda district. Among the social groups, SCs are getting on an average of Rs. 4,132.80 annually in district Kapurthala, followed by Bhatinda (Rs.3,581.25), Nawanshehr (Rs.3285.86) and lowest in district Ludhiana (Rs.2,760.42).

]	High RNFE districts				Low RNFE districts				
	Ludhiana	Ludhiana		la	Bhatinda	Bhatinda		hr		
Caste	Earnings		Earnings	Earnings		Earnings		Earnings		
	Mean	N	Mean	Ν	Mean	Ν	Mean	N		
SC	3581.25	4	3285.86	14	2760.42	33	4100.00	3	54	
OBC	2083.33	3	0	0	4285.85	13	0	0	16	
OTHERS	0	0	1045.50	2	0	0	4182.00	2	4	
All	2939.29	7	3005.81	16	3191.52	46	4132.80	5	74	

Table 3.30: Average Earnings per Worker in NREGA by District & Social Group

Source-Primary Survey 2012

Self- Employed in Non- Agriculture

3.31 Distribution of Self-employed in Non- agriculture

The district of Nawanshehr – though falls under the low RNFE category, but its performance in selfemployment in non agriculture is highest among the four sampled districts with 29.97 percent. Surprisingly, this followed with another low RNFE district of Bhatinda with 25.8 percent in selfemployment under non-agriculture. This clearly shows that the self-employment in non-agriculture has no direct bearing on promotion of rural non-farm employment. There are other various factors responsible for growth of rural non farm sector such as industrialisation of the district.

Self	High	RNFE Districts	Low		
Employed	Ludhiana	Kapurthala	Bhatinda	Nawanshehr	All
Ν	78	98	82	69	327
%	23.85	21.10	25.08	29.97	100.00

 Table 3.31: Distribution of Self-employed in Non-agriculture

Source-Primary Survey 2012

3.32 Self-Employed in Non-Agri. by District and Activity

The self-employed in non-agricultural activities have been classified into three main categories, i.e. (i) shopkeepers (ii) truckers, mechanics and workshop owners (iii) others. The total numbers of self-employed persons in non-agricultural activities is 327 which are only 4.88 percent of the total surveyed population. Out of 327 persons, 157 (48.0%) are shopkeepers and 138 (42.2%) are truckers,

mechanics and workshop owners. The remaining 9.8 percent have been classified as others.

The percentage of self-employed as shopkeepers is comparatively more in high RNFE districts than the low RNFE districts; by contrast the self driving truck owners, mechanic and workshop owners have a high percentage in low RNFE districts. Self-employed in other activities have high percentage in high RNFE districts.

	High RNFF	High RNFE districts			Low RNFE districts			
Activity	Ludhiana	Kapurthal a	Total	Bhatinda	Nawanshehr	Total	Total	
Shopkeeper	44	53	97	27	33	60	157	
	56.4%	54.1%	55.1%	32.9%	47.8%	39.7%	48.0%	
Truck driver&	25	35	60	44	34	78	138	
mechanic and	32.1%	35.7%	34.1%	53.7%	49.3%	51.7%	42.2%	
workshop								
Others	9	10	19	11	2	13	32	
	11.5%	10.2%	10.8%	13.4%	2.9%	8.6%	9.8%	
Total	78	98	176	82	69	151	327	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 3.32: Distribution of Self-Employed in Non-Agri by District and Activity

Source-Primary Survey 2012

3.33 Distribution of Self Employed in Non Agricultural Activities by Place of Work

Table 3.33 shows that more than 78 percent of the shopkeepers and 75 percent of those classified as others are working within the village, while only about 39 percent of the truckers, mechanics and workshop owners are working within the village.

While less than one-fifth, nearly about one third of the shopkeepers and those classified as others are working outside the village but within the district, 43.5 percent of the truckers, mechanics and workshop owners work outside the village but within the district. While a very small percentage of shopkeepers and those classified as others are working outside the districts, a fairly high percentage of truckers, mechanics and workshop owners have their establishments outside the district.

This shows that the threshold population required for sustaining activities like truck plying, mechanic shop and auto-workshops is much higher than a grocery shop or a general store etc. Thus, majority of the persons who are working as truckers, mechanics or are having a workshop have to move outside of the village.

Activity		Work place		
110010109			Outside	
	Within village	Outside village	district	Total
Shopkeeper	123	31	3	157
	78.3%	19.7%	1.9%	100.0%
Truckers & Mechanic	54	60	24	138
and Workshop owners	39.1%	43.5%	17.4%	100.0%
_				
Others	24	6	2	32
	75.0%	18.8%	6.2%	100.0%

 Table 3.33: Distribution of Self-Employed in Non-Agri by Activity (State as a whole)

Source-Primary Survey 2012

3.34 Distribution of Self-Employed in Non-Agri. by District and Workplace

Out of the total self-employed persons, about 61.5 percent have their establishments within the village and this percentage is comparatively high in the high RNFE districts than the low RNFE districts. Nearly 30 percent of the self-employed have their establishments outside the village put within the district. The percentage of such persons is almost equal in low RNFE districts and high RNFE districts. Only about 9 percent of the self-employed have their establishments outside the district. Here the percentage of self-employed outside the district is comparatively much high in low RNFE districts than the high RNFE districts.

The fact that overwhelming majority of persons who are self-employed in non agricultural activities are located either within the village or in nearby village/town indicates that they are mostly pursuing low earning petty activities.

Work	High RNFE	districts		Lo	Low RNFE districts			
Place	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total	
Within	61	60	121	34	46	80	201	
village	78.2%	61.2%	68.75%	41.5%	66.7%	52.98%	61.5%	
Outside	15	36	51	28	18	46	97	
village	19.2%	36.7%	28.98%	34.1%	26.1%	30.46%	29.7%	
Outside	2	2	4	20	5	25	29	
district	2.6%	2.0%	2.27%	24.4%	7.2%	16.56%	8.9%	
Total	78 100.0%	98 100.0%	176 100.0%	82 100.0%	69 100.0%	151 100.0%	327 100.0%	

Table 3.34: Distribution of Self-Employed in Non-Agri by District and Workplace

Source-Primary Survey 2012

3.35 Average Annual Net Earnings of Self-Employed in Non-Agriculture

The respondent reported that the activities in which they are employed, was mainly of shopkeeper, truckers, mechanic and repair workshop and others. The mean earning according to the nature of

activity shows that shopkeeper has annual earning highest i.e. Rs. 1,57, 909.09 in district Kapurthala, and lowest i.e. Rs. 88,527.08 in district Bhatinda. Similarly for truck drivers, mechanics and repair workshops the annual earning was highest in Kapurthala and Bhatinda. But in contrast to this, for other activities average annual earning of Rs. 1,00000 was highest in Ludhiana and lowest i.e. Rs. 66,000 in district Kapurthala. For all activity, the average annual earning was highest i.e. Rs. 1,61,084.51 in Kapurthala district and lowest i.e. Rs. 1,00,453.09 in district Bhatinda.

The highest earnings of both the districts of Ludhiana and Kapurthala confirm the status of high RNFE districts. It has been seen that in both the category of districts i.e. high and low RNFE the activities of truck driver, mechanics and workshop offers more earnings as compared to others and shopkeepers. Bhatinda district's performance is poor among all the activities. This shows that in rural Bhatinda the people are engaged more in agricultural related ctivities and less in other types of non-farm activities. That is the reason that Bhatinda is categorised as low RNFE district.

	High H	RNFE districts	Low R	Low RNFE districts		
	Ludhiana	Kapurthala	Bhatinda	Nawanshehr		
Act Nature	Mean net earnings	Mean net earnings	Mean net earnings	Mean net earnings	All N	
Shopkeeper	94674.42	157909.09	88523.08	128294.55	157	
Truckers & mechanic & workshop owners	121400.00	169277.78	114070.45	119040.00	140	
Others	100000.00	66000.00	74181.82	76800.00	30	
All	103974.03	161084.51	100453.09	119906.00	327	

 Table 3.35: Average annual net earnings (Rs.) per Household Self-Employed in Non-Agriculture by district & Activity

Source-Primary Survey 2012

3.36 Average Annual Net Earnings (Rs.) per Household Self-Employed in Non-Agriculture by district & Social group

The data shown in Tables 3.35 and 3.36 indicate similar findings. This uniformity in findings proves that there is a direct relation of average annual net earnings as per social groups and as per activity-wise in those specific districts. The mean annual earnings in case of Nawanshehr show highest with Rs.1,62, 271 values. The mean value of both the district of high RNFE was Rs. 1,13,786 as compared to low RNFE districts whose combined annual average net earnings was Rs.1,28,577. This proves that low RNFE district's all social groups are performing better in mean earnings.

Table 3.36: Average Annual Net Earnings (Rs.) per Household self-Employed in Non-Agriculture by District & Social Group

Caste							_				
		High	n RNFE dist	tricts	-		Lov	v RNFE dis	tricts		
	Ludhia	n:	Kapurtha	la		Bhatin	ıda	Nawanshe	hr		All N
	Mean net earnings	N	Mean net earnings	N	Total Mean net earnings	Mean net earnings	N	Mean net earnings	N	Total Mean net earnings	
SC	87000	23	133587	31	113744	83571	14	141600	25	120769	93
OBC	117852	27	117342	49	117526	91846	13	187750	24	154054	113
Others	105964	28	110500	18	107739	105830	55	157762	21	120180	122
All	104487	78	121264	98	113786	99813	82	162271	70	128577	327

Source-Primary Survey 2012

3.37 Distribution of Adult Female Members (15 yrs and above) by Activity

Women empowerment is always under the focus of the government with a view of which the study was conducted along with other parameters. The data show that 97.3 percent of women are engaged in household only. In high RNFE districts 98.18 percent women were doing only household work as compared to 96.32 percent women of low RNFE districts. Only a small number of women are reported doing some economic activities.

	High	RNFE districts		Low RNFE d	All		
Activity	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Only household	584	498	1082	480	541	1021	2103
work	98.6%	97.6%	98.18%	95.8%	96.8%	96.32%	97.3%
Family lab in	0	0	0	2	3	5	5
agri	0.0%	0.0%	0.0%	0.4%	0.5%	0.47%	0.2%
Family lab in	1	0	1	2	1	3	4
non-agri	0.2%	0.0%	0.09%	0.4%	0.2%	0.28%	0.2%
Self Emp in non	0	0	0	1	1	2	2
agri	0.0%	0.0%	0.0%	0.2%	0.2%	0.19%	0.1%
Wage lab	1	3	4	4	2	6	10
-	0.2%	0.6%	0.36%	0.8%	0.4%	0.57%	0.5%
Other	6	9	15	12	11	23	38
	1.0%	1.8%	1.36%	2.4%	2.0%	2.17%	1.8%
Total	592	510	1102	501	559	1060	2162
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source-Primary Survey 2012

3.38 Average Days of Employment of Adult Females Members (15 Yrs & Above) by District and Activity

The average number of working days was 365 for those doing only households work in all the districts. The women in district Nawanshehr and Bhatinda who were self-employed in non-agriculture were getting average 300 days of employment in a year. In overall, the highest number of employment days was found in Kapurthala (300 days), followed by Bhatinda (289 days), Ludhiana (261 days) and lowest in Nawanshehr (250 days).

	High R	NFE districts	Low RN	Low RNFE districts		
	Ludhiana	Kapurthala	Bhatinda	Nawanshehr		
Activity	Employment	Employment	Employment	Employment	All	
	days	days	days	days		
	Mean	Mean	Mean	Mean	Ν	
Only HH work	365	365	365	365	2103	
Family lab. in Agri.	0	0	225	250	5	
Family lab. in Non-Agri.	120	0	100	100	4	
Self-emp. in Non-Agri.	0	0	300	300	2	
Wage Emp.	300	300	316	300	10	
Others	0	0	0	0.	38	
All	261	300	289	250	2162	

Table 3.38: Average days of employment of adult females members (15 yrs & above)
by district and activity

Source-Primary Survey 2012

3.39 Adult Female Members by Workplace

Since 97.3 percent of the adult females are engaged in household work, nearly 97 percent of females are working within their own house. Another about 0.7 percent is working outside the house but within village. About 1.6 percent of the adult females are working outside the village and only 1 female is working outside the district. This shows that in rural Punjab female participation in work outside the house is almost negligible.

The differences in the proportion of females working within the house and outside the house between high RNFE districts and low RNFE districts are only negligible.

	High RNFE d	listricts		Low	Low RNFE districts			
Work place	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehar	Total	Total	
Within house	582	496	1078	476	540	1016	2094	
	98.3%	97.3%	97.82%	95.0%	96.6%	95.85%	96.9%	
Within village	2	2	4	б	5	11	15	
-	0.3%	0.4%	0.36%	1.2%	0.9%	1.04%	.7%	
Within district	б	9	15	10	9	19	34	
	1.0%	1.8%	1.36%	2.0%	1.6%	1.79%	1.6%	
Outside district	0	0	0	1	0	1	1	
	0.0%	0.0%	.0%	0.2%	0.0%	0.09%	.0%	
Within State	2	3	5	8	5	13	18	
	0.3%	0.6%	0.45%	1.6%	0.9%	1.23%	.8%	
TOTAL	592	510	1102	501	559	1060	2162	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 3.39: Distribution of Adult Females Members (15 Yrs & Above) by District and Workplace

Source-Primary Survey 2012

3.40 Problems related to Work faced by Adult Females

Since most of the adult females work within their house, 63.6 percent of them did not face any problems. A few ladies (1.2%) listed family responsibility as their main problem. No women reported workplace issues or family not allowing working or any other work related problem.

Table 3.40: Problems Related to Work faced by Adult Female Members(15 yrs and above) by District

	Hig	h RNFE districts		L	Low RNFE districts			
Problems	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total	
No problem	207	281	308	329	557	886	1374	
	35.0%	55.1%	27.94%	65.7%	99.6%	83.58%	63.6%	
Distance	367	229	596	163	2	165	761	
	62.0%	44.9%	54.08%	32.5%	0.4%	15.56%	35.2%	
Family	18	0	18	9	0	9	27	
responsibility	3.0%	0.0%	16.33%	1.8%	0.0%	0.84%	1.2%	
Family not	0	0	0	0	0	0	0	
allowing	0.0%	0.0%	0.0%	.0%	0.0%	0.0%	0.0%	
Work place	0	0	0	0	0	0	0	
issue	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Any other	0	0	0	0	0	0	0	
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total	592	510	1102	501	559	1060	2162	
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Source-Primary Survey 2012

3.41 Average Annual Earning of Households by Sector of Employment

Mean annual earnings from government sources is the highest in Ludhiana district (Rs. 2,57,491) followed by Kapurthala (Rs.2,50,103.23). Both these districts are high RNFE districts which confirm that there is a direct link between high RNFE and high mean annual earnings. On the other hand, both low RNFE districts show poor performance as compared to the high RNFE districts in government job as a source of earnings. Private job, as a source of earnings, also indicates the similar trend because high RNFE stands better as compared to the low RNFE districts in mean annual earnings.

	High RNF	FE districts	Low RNF	E districts	
	Ludhiana	Kapurthala	Bhatinda	Nawanshehr	
Employer	Mean Annual earnings (in Rs.)	All N			
Government	257491.58	250103.23	223252.17	227314.29	141
Private	62800.00	92750.00	66266.44	64900.00	164

Table 3.41: Average Annual Earning of Households by Sector of Employment

Source-Primary Survey 2012

3.42 Average Annual Earning of Households by Nature of Employment

Regular employment as well as contractual employment exhibits the best figures for Kapurthala district with Rs. 252868.97. Though Nawanshehr district stands at No.2 but on an average the 2 districts of high RNFE together give better mean annual earning as compared to the two districts of low RNFE districts.

In cases of contractual based mean annual earnings, mean annual earnings of high RNFE district stand better than the low RNFE districts. This comparison is in line with the states of high and low RNFE districts and correlates with the intensity of rural non-farm employment growth.

	High RN	NFE districts	Low RN	Low RNFE districts			
	Ludhiana	Kapurthala	Bathinda	Nawanshehr			
Nature of					7		
Employment							
	Mean Annual	Mean Annual	Mean Annual	Mean Annual	All		
	earnings (in Rs.)	earnings (in Rs.)	earnings (in Rs.)	earnings (in Rs.)	Ν		
Regular							
_	211392.00	252868.97	160284.32	230050.00	164		
Contractual	61850.91	101769.23	69200.00	65740.54	141		

Source-Primary Survey 2012

3.43 Distribution of Salaried Household Members by Benefits received & by Sector of Employment

The salaried person are getting benefits other than salary are of great help to the family which ensure their welfare and social security. The district-wise analysis shows that high RNFE districts employees enjoy better facilities of P.F., Medical Insurance, Pension and other benefits. Whereas in low RNFE district, the position of getting benefit is comparatively low as some important benefits like P.F., Medical, Insurance and Pension are not provided to many of them. These findings are directly linked to better and high RNFE districts with better employment facilities where the life of a employee become more secure and dignified. Such workers perform better and the growth in economic sector accelerates fast due to overall growth of the employee.

	Ludhiana	Nawanshehr	Bhatinda	Kapurthala
	Ν	Ν	Ν	N
Provident Fund				
Yes	33	41	19	26
No	5	8	4	5
Medical benefit				
	•	-		
Yes	33	41	17	27
No	5	8	6	4
Insurance				
Yes	33	40	14	26
No	5	9	9	5
Pension				
Yes	32	40	18	26
No	6	9	5	5
Any other benefit				
Yes	20	31	8	18
No	18	18	15	13

 Table 3.43: Distribution of Salaried Household Members by Benefits received & by Sector of Employment

Source-Primary Survey 2012

3.44 Sector-wise Distribution of Household Out-Migrants sending Remittances

There are only 245 migrants who are sending remittances back home. Only about one-fourth of these migrants are working in occupation such as mining, quarrying, manufacturing, construction, wholesale & retail and hotel & restaurants. Only about one-fourth of the total out-migrants is engaged in these occupations. Within these occupations their numbers are relatively more in hotel & restaurants (8.2%), construction (6.5%) and manufacturing (5.3%). Three-fourths of these migrant have adopted a variety of occupations which have been grouped together under 'thers'.

The migrant workers prefer to work under various trades as per their capacity and talent and as per the opportunity. The nature of available work in rural areas is quite different from the urban areas. Though various trades are in demand but their spread is not uniform. The data collected from the sampled areas showed that mining & quarrying have engaged marginal workers. The other area of

their work is manufacturing and construction where the employee earns handsome amount due to technical and tough nature of work. These workers send money to their respective families for their survival and to meet their needs. It is revealed from the data that some trades like hotel & restaurant, wholesale & retail, construction, manufacturing and mining offers scope to 1/3 of the workforce in their trades to earn and remit money to their families.

	High RNFE d	listricts		Low	All		
Sector	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Mining &	0	2	2	0	1	1	3
quarrying	0.0%	2.2%	2.02%	0.0%	1.0%	0.68%	1.22%
Manufacturing	1	3	4	5	4	9	13
	12.5%	3.3%	4.04%	10.0%	4.2%	6.16%	5.3%
Construction	1	4	5	7	4	11	16
	12.5%	4.4%	5.05%	14.0%	4.2%	7.53%	6.5%
Wholesale &	0	6	6	3	0	3	9
retails	0.0%	6.6%	6.06%	6.0%	0.0%	2.05%	3.7%
Hotel &	0	11	11	4	5	9	20
restaurants	0.0%	12.1%	11.11%	8.0%	5.2%	6.16%	8.2%
Others	6	65	71	31	82	113	184
	75.0%	71.4%	71.71%	62.0%	85.4%	77.39%	75.1%
Total	8	91	99	50	96	146	245
	100.0%	100.0%	100.0	100.0%	100.0%	100.0%	100.0%

Table 3.44: Sector-wise distribution of Household Out-migrants sending Remittances

Source-Primary Survey 2012

3.45 Annual Remittances sent by Migrant Household Members

Most of these migrants (92.7%) send a very small amount of remittances (below Rs. 25,000 per annum) back home. About 5.7 percent send between Rs. 25,000 - Rs. 45,000. Only 1.6 percent is sending more than Rs. 45,000.

Remittances	High RNFE districts				All		
	Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	Total
Below	8	82	90 90.91	46	91	137	227
25000	100.0%	90.1%	%	92.0%	94.8%	93.84%	92.7%
25000-	0	7	7	3	4	7	14
45000	0.0%	7.7%	7.07%	6.0%	4.2%	4.79%	5.7%
Above	0	2	2	1	1	2	4
45000	0.0%	2.2%	2.02%	2.0%	1.0%	1.34%	1.6%
Total	8	91	99 100.0	50	96	146	245
	100.0%	100.0%	%	100.0%	100.0%	100.0%	100.0%

Table 3.45: Annual Remittance sent by Migrants Household members

Source-Primary Survey 2012

3.46 Distribution of Migrants according to Destination of Migration

During the survey it was enquired how many households belonging to the family have migrated to the other areas – including other countries and sending remittances back home. The survey revealed a total of 245 such households and all of them are working in foreign countries. These persons belong to 193 families. From 150 families, out of these, only one person from each family migrated. From 37 families, 2 persons from each migrated. There are only 3 families from which 3 persons each and from another 3 from which 4 persons each migrated.

The out-migration is comparatively more from the low RNFE districts than the high RNFE districts. About 91 percent of these migrants are males and only about 9 percent females (Table 3.46).

Destination of		No. of Migrants											
Destination of			HIGH	RNFE	1			LC)W	RNFE			
migration	Ludh	iana	Kapu	ırthala	To	otal	Bh	natinda	Naw	ansh	Tot	al	Total
									e	har			
	М	F	М	F	Μ	F	Μ	F	Μ	F	Μ	F	
Within the	0	0	0	0	0	0	0	0	0	0	0	0	0
districts													
Within the	0	0	0	0	0	0	0	0	0	0	0	0	0
State													
Other States	0	0	0	0	0	0	0	0	0	0	0	0	0
Abroad	8	0	91	5	99	13	46	4	78	13	124	17	223(M)
													-22(F)
Total	8		91	5	99	13	46	4	78	13	124	17	245

 Table 3.46: Distribution of Migrants according to destination of migration

3.47 Distribution of Migrants according to Period of Migration and Gender

As discussed earlier, 245 persons migrated from the sampled 193 households; about 14 percent of male and 18 percent of females out-migrated within last one year. About 46 percent of male and 45 percent females out migrated within 1-5 years. About one-fifth of males and slightly over one-fifth of females migrated during the past 5-10 years. Only about one-fifth of male and a little less than one-fifth of females out-migrated more than 10 years back. About 50-53 per cent male and 3-6 percent females in high and low RNFE surveyed districts were migrated with in 1-5 years (Table 3.47). It has been observed that only 22 females in all the four surveyed districts have been reported as migrant, whereas the number of males were 223.

		I	High RNFE Districts				Lov					
Period	Ludhia	na	Kapurth	ala	Tot	al	Bhatinda		Nawans	hehr	Tota	al
of	Sex	Υ.	Sex		Se	X		Sex	Sex		Sex	
Migration												
_	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F	Μ	F
Less	1	0 0.0	11	1	12	1	5	1	14	2	19	3
than 1	12.5%	%	12.1%	20.0%			10.9%	25.0%	17.9%	15.4%		
1-5	2 25.0%	0 .0%	48 52.7%	3 60.0%	50	3	23 50.0%	3 75.0%	30 38.5%	3 23.1%	53	6
5-10	2	0 0.0	18	1	20	1	7	0	17	4	24	4
	25.0%	%	19.8%	20.05			15.2%	0.0%	21.8%	30.8%		
Above 10	3	0 0.0	14	0	17	0	11	0	17	4	28	4
	37.5%	%	15.4%	0.0%			23.9%	0.0%	21.8%	30.8%		
Total	8	0 0.0	91	5	99	5	46	4	78	13	124	17
	100.0%	%	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%		

Table 3.47: Distribution of Migrants according to period of migration

Source: Primary Survey, 2012

CHAPTER IV

Characteristics of Village Enterprises

Economic enterprise established in the rural area is one of the key indicators to study rural nonfarm employment. In this chapter data collected from enterprises established in the selected villages has been discussed. There were about 378 economic enterprises functioning in the selected 20 villages, among them a total of 77 enterprises were selected for their detailed interview. These are discussed as under:-

4.1 Types of Enterprises

During the survey, enterprises located in the selected villages were contacted and information regarding types of enterprises, its year of establishment, number of employees, nature of employment, reason for establishing enterprises in the village and constraints in their business was collected through structured questionnaires. A total of 77 enterprises were interviewed. In this chapter, findings are based on the information provided by village enterprises.

Out of the total sampled enterprises, 42.86 percent were engaged in manufacturing, 7.8 percent in non-manufacturing and remaining about half of the enterprises were doing trade and service related activities. In high RNFE districts 65.79 percent enterprises were doing service and trade related activities as compared to one-third enterprises in low RNFE districts. About 59 percent of enterprises in low RNFE districts were doing manufacturing activities. It shows that manufacturing activities are concentrated in low RNFE districts and trade and service related activities are more common in high RNFE districts.

Sectors		High RNFE	Low RNFE	Total
Manufacturing	Ν	10	23	33
	%	26.32	58.97	42.86
Non-Manufacturing	Ν	3	3	6
	%	7.89	7.69	7.79
Trade and Service	Ν	25	13	38
	%	65.79	33.34	49.35
All	Ν	38	39	77
	%	100.00	100.00	100.00

Source: Primary Survey, 2012

4.2 Year of Establishment

Out of the total enterprises 15.54 percent were established before the year 2000 and remaining 84.46 percent after 2000. In manufacturing and non-manufacturing only 2 enterprises (one each) were established before 2000. In service and trade activities, 26.31 percent enterprises were established before the year 2000 and remaining 73.69 percent after year 2000. There was not much difference among the high and low RNFE districts regarding year of establishment of enterprises.

Sectors	Year of esta	blishment	High RNFE	Low RNFE	Total	
Manufacturing	Pre 2000 N		0.00	1	1	
		%		4.34%	3.03%	
	Post 2000	Ν	10	22	32	
		%	100.00	95.65%	96.96%	
		Total	10	23	33	
			100.00	100.00	100.00	
Non-	Pre 2000	Ν	1	0	1	
Manufacturing						
		%	33.33%	0%	16.66%	
	Post 2000	Ν	2	3	5	
		%	66.66%	100.0%	83.33%	
		Total	3	3	6	
			100.00	100.00	100.00	
Trade and	Pre 2000	Ν	8	2	10	
Service		%	32.0%	15.38%	26.31%	
	Post 2000	Ν	17	11	28	
		%	68.0%	84.61%	73.68%	
		Total	25	13	38	
Total	Pre 2000	Ν	9	3	12	
		%	23.68%	7.69%	15.58%	
	Post 2000	Ν	29	36	65	
		%	76.31%	92.30%	84.42%	
		Total	38	39	77	
			100.00	100.00	100.00	

Source: Primary Survey, 2012

4.3 Number of Employees

It is found that most of the enterprises were run by their owners and only few enterprises especially those engaged in manufacturing were hiring someone or involving their family members in the business. Table 4.3 shows that in 77 enterprises a total of 99 employees were working. It comes to 1.29 employees per enterprise. On an average 1.55 employees per enterprise were working in manufacturing, whereas it was 1.17 employees per enterprise in non-manufacturing and 1.07 employee per enterprise in the service and trade related activities. In high RNFE districts, per enterprise number of employees was 1.34 and in low RNFE districts it was 1.23.

Sectors		High RNFE	Low RNFE	Total
Manufacturing	Ν	18	33	51
-		35.29%	68.25%	51.51%
Non-Manufacturing	Ν	3	4	7
		5.88%	8.33%	7.07%
Trade and Service	Ν	30	11	41
		58.82%	22.91%	41.41%
Total	Ν	51	48	99
		100.0%	100.0%	100.0%
Employees Per Enterprises				•
Manufacturing				
No. of enterprise	Ν	10	23	51
Employee per enterprise	Ν	1.80	1.43	1.94
Non Manufacturing				
No. of enterprise	Ν	3	3	6
Employee per enterprise	Ν	1.00	1.33	1.17
Service & trade				
No. of enterprise	Ν	25	13	38
Employee per enterprise	Ν	1.2	1.0	1.07
Total	Ν	38	39	77
G. Total	Ν	1.34	1.23	1.29

 Table 4.3: Number of Employees per Establishment in the Surveyed Villages

Source: Primary Survey, 2012

4.4 Nature of Employment

About two-thirds of total employees were regular and remaining one-third were casual employees. In the high RNFE district percentage of casual employees (47.05%) was more as compared to only 18.75 percent in low RNFE districts. Number and proportion of regular employee was substantially high in high RNFE districts as compared to low RNFE districts. In manufacturing enterprises about 92 percent of employees were regular. Within districts 89 percent in high RNFE districts and 94 percent employees in low RNFE districts in the manufacturing sector were regular. The percentage of regular employees in other sector is comparatively small.

Secto	rs	High RNFE	Low RNFE	Total
Manufacturing	Regular	16 (88.89)	31(93.93)	42(92.15)
	Casual	2(11.11)	2(6.07)	4(7.85)
	Total	18(100.00)	33(100.00)	51(100.00)
Non-	Regular	3(100.00)	0(0.00)	3(42.86)
Manufacturing				
	Casual	0(0.00)	4(100.00)	4(57.14)
	Total	3(100.00)	4(100.00)	7(100.00)
Trade and Service	Regular	8(26.67)	8(72.73)	16(39.02)
	Casual	22(73.33)	3(27.27)	25(60.93)
	Total	30(100.00)	11(100.00)	41(100.00)
Total	Regular	27(52.95)	39(81.25)	66(66.67)
	Casual	24(47.05)	9(18.75)	33(33.33)
	Total	51(100.00)	48(100.00)	99(100.00)

 Table 4.4: Distribution of Employees by Nature of Employment

4.5 Average Monthly Earning

The average monthly earning was Rs. 87200/- for manufacturing in high RNFE districts, where as it was only Rs. 13869/- in low RNFE districts. In non-manufacturing enterprises the average monthly earning of low RNFE districts (Rs.10000/-) was comparatively high as compared to high RNFE districts (Rs. 5000/-). In service and trade related activities monthly earning in both set of districts is nearly same. It was Rs. 5920/- for high and Rs. 4653/- for low RNFE districts.

Sectors	High RNFE	Low RNFE
Manufacturing	87200/-	13869/-
Non-Manufacturing	5000/-	10000/-
Trade and Service	5920/-	4653/-

Table 4.5: Average net earnings per month (in Rs.) by type of Enterprise

4.6 Place of Origin

The place of origin of nearly 90 percent of the total employees working in village enterprises is within the same village. The remaining 10 percent are either from within the district or outside the district but within the state. Nobody was from outside the state, this also shows that local people are involved in RNFE activities and no migrant workers have been involved in their business. There is no significant difference between low and high RNFE districts with regard to the place of origin of the employees.

Place	High RNFE	Low RNFE	Total
Within village	47 (92.16)	42(87.50)	89(89.89)
Within district	1(1.96)	4(8.33)	5(5.05)
Outside district	3(5.88)	2(4.17)	5(5.05)
Outside state	0(0.00)	0(0.00)	0(0.00)
Total	51(100.00)	48(100.00)	99(100.00)

Table 4.6: Distribution of Employees by their place of origin

4.7 Marketing of Produce

More than 92 percent of the enterprises sell their produce directly to the consumer within the village. Only 3.89 percent of the total enterprises market their produce within district and similar proportion sell outside the state. There is no much difference among high and low RNFE districts with regard to the marketing of the product.

Place	High RNFE	Low RNFE	Total
Within village	33 (86.84)	38(97.43)	71(92.21)
Within district	2(5.26)	1(2.57)	3(3.89)
Outside district	3(7.89)	0(0.00)	3(3.89)
Outside state	0(0.00)	0(0.00)	0(0.00)
Total	38(100.00)	39(100.00)	77(100.00)

Table 4.7: Distribution of Enterprises by their Destination of Marketing of Produce

4.8 Mode of Marketing

Majority of the enterprises sell their produce in the village and the data in Table 4.8 also show that they are selling it directly to the consumers. There is no middleman involved in selling product of any of the selected enterprises.

 Table 4.8: Distribution of Enterprises by their mode of marketing

Place	High RNFE	Low RNFE	Total
Direct selling	37 (97.37)	39(100.00)	76(98.70)
Middleman	0(0.00)	0(0.00)	0(0.00)
Government procurement	1(2.63)	0(0.00)	1(1.30)
Other	0(0.00)	0(0.00)	0(0.00)
Total	38(100.00)	39(100.00)	77(100.00)

4.9 Reason for Establishment in the Village

All the selected enterprises were asked why they have established their economic activities within the village. About 64 percent reported that the main reason for establishing their enterprise within the village was that they do not have to pay rent as they have established their enterprise on their own land/building. Lack of competition as the main reason for establishing the enterprise in the village was reported by over one-fourth of the enterprise owners. Reasons like help from the family members, less land rate and inheritance have been reported by just a few enterprises. The inter-district differences with regard to reasons for establishing the enterprises within the village are insignificant.

Sl. No.	Particulars]	High RNFE Low RNFE		Grand Total			
		Ludhiana	Kapurthala	Total	Bhatinda	Nawanshehr	Total	
1	Help from family members	1 (10.0)	3 (10.71)	4 (10.52)	0 0.0%	0 0.0%	0 0.0%	4 5.19%
2	No competition	3 (30.0)	7 (25.0)	10 (26.31)	5 (33.33)	5 (20.83)	10 (25.64)	20 25.97%
3	No rent	6 (60.0)	16 (57.15)	22 (57.89)	10 (66.66)	17 (70.83)	27 (69.23)	49 63.63%
4	Less land rate	0 0.0%	2 (7.14)	2 (5.26)	0 0.0%	1 (4.16)	1 (2.56)	3 3.09%
5	Inheritance	0 0.0%	0 0.0%	0 0.0%	0 0.0%	1 (4.16)	1 (2.56)	1 1.29%
	Total	10 (100.00)	28 (100.00)	38 (100.00)	15 (100.0)	24 (100.0)	39 (100.0)	77 (100.00)

Table 4.9: Distribution of Enterprises by Reason for Establishment in the Village

4.10 Constraints faced by Enterprises

Selected enterprises were asked to mention the constraints faced by them for the successful running of their establishment. High input cost as the main constraint was reported by more than one-fourth of the enterprises. Inadequate facilities as the main constraint were reported by almost equal high number of enterprises. Lack of demand for their product/services and lack of credit was also reported as the main constraint by some of the enterprises. Lack of raw material, lack of skilled labour and inadequate benefits as the main constraint was reported only in a few isolated cases. Over one-fifth of the enterprises reported that they do not face any problem in running their establishment. While inadequate facilities, followed by high input cost, followed by lack of demand have been listed as the three main constraints in running the enterprise in high RNFE districts, high input cost followed by inadequate facilities, followed by lack of credit have been listed as the three main constraints in running their establishment.

Sr	Particulars	Н	igh RNFE	Total	Lov	w RNFE	Total	Grand
		Ludhiana	Kapurthala		Bhatinda	Nawanshehr		Total
1	Lack of	1	1	2	0	3	3	5
	credit	(9.09)	(3.70)	(5.26)	0.0%	(12.5)	(7.69)	6.49%
2	Lack of	0	6	6	2	1	3	9
	demand	0.0%	(22.22)	(15.78)	(13.33)	(4.16)	(7.69)	11.68%
3	Inadequate	4	7	11	2	5	7	18
	facilities	(36.36)	(25.92)	(28.94)	(13.33)	(20.83)	(17.94)	23.37%
4	High input	3	5	8	4	8	12	20
	cost	(27.27)	(18.51)	(21.05)	(26.66)	(33.33)	(30.76)	25.97%
5	Lack of raw	0	0	0	1	0	1	1
	material	(0.0%)	(0.0%)	(0.0%)	(6.66)	(0.0%)	(2.56)	1.29%
6	Lack of	1	0	1	0	0	0	1
	skilled labour	(9.09)	(0.0%)	(2.63)	(0.0%)	(0.0%)	(0.0%)	1.29%
7	Inadequate	0	2	2	0	0	0	2
	benefits	(0.0%)	(7.41)	(5.20)	(0.0%)	(0.0%)	(0.0%)	2.59%
8	High taxes	2	1	3	0	1	1	4
		(18.18)	(3.71)	(7.89)	(0.0%)	(4.16)	(2.56)	5.19%
10	No problems	0	5	5	6	6	12	17
		(0.0%)	(18.52)	(13.15)	(40.0)	(25.0)	(30.76)	22.07%
	Total	11	27	38	-		39	77
		(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.00
)

Table 4.10Constraints faced by Enterprises

CHAPTER V

Rural Non Farm Sector: Some Correlates

5.1 Age and RNFE Employment

Age profile of Agriculture and RNFE worker shows that about one-fifth of total RNFE workers were from the younger age-group (15-24 yrs), whereas for agriculture worker this proportion was only 3.74 percent. In the age-group 25-40 years proportion of worker in agriculture and non-farm employment is almost similar with little variation. Only 11.02 percent worker of rural non-farm sector was in the age-group 60+, whereas in agriculture the proportion was 26.28 percent.

Age in Years	Agriculture	RNFE	Total
15-24	119	244	363
	(3.74)	(20.85)	(8.34)
25-40	1193	477	1670
	(37.50)	(40.76)	(38.38)
41-59	1033	320	1353
	(32.47)	(27.35)	(31.10)
60 & above	836	129	965
	(26.28)	(11.02)	(22.18)
Total	3181 (73.11)	1170 (26.89)	4351 (100.00)
	(100.00)	(100.00)	(100.00)

Table 5.1: Age and RNFE

Source: Primary Survey, 2012

5.2 Land Size and RNFE

About two-thirds of total workers engaged in rural non-farm sector belong to landless category. A little more than one-fifth workers belongs to the category of marginal farmers. As the size of landholding size increases, number of workers in rural non-farm sector decrease. It shows that landholding size has a direct relation with the status of rural non-farm sector. Higher the proportion of landless higher is the rural non-farm sector activity.

Table 5.2:	Land	Size an	d RNFEs
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Land owned (in acres)	Ν	Percentage (%)
Landless	778	66.49
Upto 2-5 acres	247	21.11
2.5 acres to 5.00 acres	80	6.84
5-10 acres	34	2.90
Above 10 acres	31	2.65
Total	1170	100.00

Source: Primary Survey, 2012

5.3 Education and RNFE

For the promotion of rural non-farm sector formal education is one of the key determinants. Therefore, entrepreneurs were asked about their education status. More than 55 percent of the surveyed entrepreneurs were having education below secondary level. About one-fifth were having secondary level education. More than 5 percent of them were graduates and post-graduates.

RNFE	Percentage (%)
655	55.98
289	24.70
159	13.59
39	3.33
28	2.39
100	100.00
	655 289 159 39 28

Table 5.3: Education and RNFE

Source: Primary Survey, 2012

5.4 Shift in Occupation from Agriculture Household

There are only 41 households which experience shift in occupation from agriculture to rural nonfarm activities. Out of these 41 households, 38 households are such from which only one member expirences shift in his occupation. From the remaining 3 households, 2 persons from each household shifted from agriculture to RNF sector. This shows that the shift from farm to non-farm sector is very small.

Table 5.4: Households which Experience Shift in Occupation fromFarm to Rural Non-Farm

Details	RNFE	Percentage
One member	38	92.68
Two members	3	7.32
Three members	0	0
More than Three members	0	0
No. of members involved in RNFE	41	100.00

Primary Survey, 2012

5.5 Shift in Occupation from Earlier Traditional RNFE

There were total 95 RNFE workers, who earlier were also involved in some traditional RNFE activities. It shows that 8.11 percent of total RNFE worker were earlier also doing some RNFE activities and they presently shifted to other RNFE activities. Among the traditional RNFE shifted worker, more than 88 percent were single member shifting. Therefore, it shows that even traditional RNFE were shifting, because of less remunerative traditional activities.

Table 5.5: Households into traditional RNF activities & shift in occupation of household members

Details	RNFE	Percentage
One member	84	89.47
Two members	10	10.52
Three members	1	0.01
More than Three members	0	0
No. of members shifting from traditional RNFE	95	100.0

Source: Primary Survey, 2012

CHAPTER VI

6.1 Findings of Focus Group Discussion Meetings & Constraints for RNFE

The focus group discussion meetings were organised at district level in the selected district. The main findings of the discussion meeting are discussed in this chapter.

The Salient points discussed with the participants are as under:-

Infrastructure and Training Facilities

The state has many engineering colleges, polytechnics, ITIs and other professional institutions, both in public and private sectors, which impart job-oriented education and offer training courses to young boys and girls. Most common trades among the ITI students are plumbing, carpentry, engine repair, tailoring, electronics, fitter, binder, etc. Because of expanding business of hospitality and growing demand of trained persons in this field outside the country, hospitality trade is becoming popular among the students. Journalism is another field which is becoming popular due to growing demand in the media sector. Many industrial units in Punjab employ outside labour because it is ready to work on comparatively low wages. This hits the interest of the local labour. Even the highly skilled jobs are also grabbed by the outsiders.

The youth belongs to special category i.e. SC, handicapped and women are allowed to avail 25 per cent concessions in training courses. This skill development scheme covers those beneficiaries which are already employed and wants to improve their present skill in various trades. National Bank of Agriculture and Rural Development is also providing training under various trades for enabling the youth to take up self employment. These beneficiaries are provided help through forward and backward linkages.

The Awareness: It was pointed out that there is a lack of awareness among the rural masses regarding the availability of various training areas in the ITIs. Though the ITI staff spread awareness through their students, yet a proper mechanism is missing where by counselling and talent identification can be done. Better results can be achieved in generating employment in rural non-farm sector if awareness regarding the trade's available and other facilities like credit and self-employment scope, market linkage knowledge is provided to the public particularly to the young generation looking for employment.

Food Processing: Promotion of food processing industry in the state will not only create jobs in non-farm sector but also promote crop diversification in the state. There is ample scope for juice extraction and packing, especially of kinnow and water melon. Similarly, food processing units utilizing maize and potato can be promoted in the state. The production of kinnow, guava and grapes offers large scope in processing of these products which certainly encourage the growth of rural non-farm sector in the field of marketing, picking, packing & transport areas. The recent trend in Guar cultivation is becoming popular among the farmers which help in diversification of agriculture and offer a vast scope in the growth of Rural Non-Farm sector in harvesting, transport, trading and processing areas.

The production of grapes offer a good scope in processing the fruit for converting it into "Sogi" i.e. dry fruit which is in great demand in the market and fetch a good price. The processing technique is not difficult and can be learned easily through the officials of Department of Horticulture.

Low cost vegetable and fruit processing activities with awareness and capacity building efforts can offer a vast scope for women to take part in developmental areas where they can improve their incomes and can engage in employment for leading quality life. Rural based cottage industry where the local women without much travel can avail chance in engaging themselves can be strengthened if forward linkages and backward linkages are timely provided along with awareness and capacity building by various agencies involved & entrusted with the job. Backyard poultry, honey processing through bee keeping, weaving technology at rural areas and vegetable production with the help of Department officials and NGOs help can be taken up by federating such groups at district level to engage the rural women for employment generation.

Banking Facilities: It was a common opinion among all the participants that banks are not liberal in financing the units, activities, which are covered under government's developmental schemes at subsidized rates. Even after fulfilling the statutory requirements to be eligible for credit, the bank officials are adamant to ask for securities which are not always possible for the landless applicants. Such matters, if taken up in district credit committees (DCC) meetings along with the lead bank, can minimize the impact of the problem.

NGO's Role: NGO's contribution in training and skill development is reported to be negligible in the state.

NABARD Role: NABARD is playing a very significant role in boosting rural non-farming activities for employment. They are providing technical training through group activities and are arranging subsidies finance to the youngster. District development mangers working in each district also help in promoting credit to non-farm sector for employment generation.

Woman's Participation: The story of woman participation in employment of rural nonfarm sector is not encouraging in the state. The stitching and knitting activities are not much in demand due to the availability of branded item and choice of the customers. Many types of skilled activities are not being adopted by the rural girls due to various constraints.

Chinese Product Popularity: Though the quantum of impact is not known but the participants have raised the issue in the discussion and expressed their fear that the growing popularity of goods produced in China is also affecting the local market due to their low cost. This ultimately can cause damage to the scope in loosing employment in rural non-farm sector.

Attitude of Punjab Labour: It is a established fact that the local labour from Punjab have more or less shifted from agriculture activities to non-agriculture activities, but even in nonagricultural activities also they are moreconcise about the quantum of wages. They are always looking for good package as compared to the outside labourers and opted for activities of their choice only. Their lifestyle also differs from that of the migrant labourers. They do not work for extended hours as the migrant labour does. Thus, due to the different attitude of the local labour they have a limited chance to get employment in the rural nonfarm sector.

6.2 Constraints and Suggestions in the Development of the Rural Non-Farm Sector

From the analysis of earlier studies, the household and enterprises surveyand FGD meetings following constraints and suggestions are emerged for the promotion of non-farm sector in the state of Punjab:-

Entrepreneurship Development: It was observed during the survey that the biggest constraints in entrepreneurship development was that the youth and other rural people are not coming forward to adopt RNFS activities because they are reluctant to bear the risk of starting any new economic activities. Moreover, there is also lack of skills and exposure for which the capacity building on skill formation is required. In the State of Punjab, most of the educated youths prefer white collar job rather than starting any labour oriented self-employment activities. There is a need to change the mindset of rural youth, which generally feel more convenient to agricultural related activities. They should be motivated to adopt the rural non-farm activities.

Employment-oriented Education: It is observed from the survey discussion, particularly with **the** educated youth that despite of having graduation or post- graduation degree; it is not helping to start any non-farm activities. Our education system is also not producing entrepreneurship quality. Therefore, there is the need to revamp the education curriculum, even at school level by introducing such course which help individual to acquire talent in starting self-employment venture.

Problems in getting Suitable Material: For the rural non-farm sector getting suitable raw material, particularly in handicraft sector is the problem as stated by the survey respondents. The artisan who require wood and other forest product are also facing shortages in raw material its proper quantity and timely availability at reasonable prices. There is a need for facilitation of making availability of raw material to craftsman

Vocational education: During survey it was also observed that basic and updated vocational education is totally missing in the rural areas. Though there are some stitching, tailoring and embroidery centre, but their scope is very limited. Demand supply linkages are missing. There is a need to establish support system for creating rural-urban market

linkages. In the school, market driven vocational courses like mobile repair, electrician, basic computer, machinery work and sanitation work should be started. In the state of Punjab, there are a lot of construction activities going on around the year, hence certain trades are in great demand but because of scarce supply, people get these services at a very high rate. It is also seen that such activities are performed by the migrants from other states, but there is a huge potential to involve local rural youth in such trade after providing them vocational education and training.

Marketing of product: During the survey, one of the tasks covered was to interview the enterprises in the selected villages and enquire about their problems. It is revealed that most of the entrepreneurs are facing marketing problems after production. There is no marketing information network. Even small shopkeeper of Karyana Store is facing this problem because most of the rural people purchase their daily need goods from the nearby town on borrowing basis. But small shopkeeper in the village cannot afford to sell on borrowing basis. Therefore, people prefer their pet shopkeeper located at the town/city.

Transfer of Technology: Upgradation of technology for existing unit is one of the dire needs of the rural non-farm sector because latest technology reduces the cost and raise the quality of product. A product can only become competitive in the national and international market through the useof latest technology. Therefore, for promotion of rural Non-farm sector, technology must be transferred at the production level. Technology available for particular product is beyond the individual level and even rural enterprises may not know the available technology. Therefore, existing and future potential rural enterprises should be provided knowledge regarding latest technology knowhow of their product.

Cluster Development Approach: As discussed earlier, marketing of the product and services in the rural non-farm sector is one of major problems. One-way of tackling this problem is to start the economic activities in a cluster of villages. The government of Punjab introduced the scheme of developing Industrial Focal point in a cluster of villages, which showed some positive results. If the declared focal point is a natural growth centre, then it is more successful. Therefore, it would be better if focal points are to be developed at natural growing centres/towns.

Low Work in Capital and High Indebtedness: Rural enterprises are basically resourceless, with very less capital to put in business. Therefore, the entrepreneur is either dependent upon credit institutions or money-lender. As bank also wants guarantee or security, in that case the entrepreneur prefers money-lender, who charges very high rate of interest. So whatever is earned through activity is spent on returning the credit. In such situation the entrepreneur lost interest and some time even he closed his activity and start

searching other avenue of employment. Therefore, it is required that bank should provide long term, liberal and low interest loans to the rural enterprises.

Less Women Participation: Rural non-farm sector is gender sensitive. It is observed during the field survey that majority of the rural enterprises were male and women were either totally missed or doing only supportive work. In such situation, women who are already out of job market may be encouraged to participate in RNFE activities. In this context, SHGs are to be formed and mobilized for doing employment oriented non-farm activities.

Power Supply to Rural Industry: The erratic and irregular supply of power inhibits the growth of rural industry. The scenario of power availability is dismal in the state. The present industrial units are not getting required supply to utilize their machinery to its full potential. Even the agriculture sector is short of supply of power. The farmer has to face a lot of hardship to irrigate their crops in time with adequate need of power. Therefore, regular power supply is one of the key requirements for promotion of farm as well as rural non-farm sector.

CHAPTER VII

Summary of Findings and Conclusion

This chapter is based on the main findings emerged from the village level, household and enterprise of the selected villages of the four districts of Punjab.

7.1 Background of Surveyed Villages

On an average 40 percent of the sampled villages falls below 5 km distance from their nearest town, whereas 25 percent of the sampled villages are located between 6-10 km from the town. In the remaining 35 percent villages, people have to travel a distance from 11-15 km to avail non-farm related facilities and requirements available in these towns.

Households belonging to SC and OBC together are 63.63 percent in all districts as compared to the other household category which is only 36.37 percent. SC household alone constitute 36.02 percent and 34.12 percent respectively in high & low RNFE district. A total of 6,500 households reported in all the 20 villages. The average household size was 325.

Hindu population shows more presence in Kapurthala (24.52 percent) and Nawanshehr (16.72 percent). Comparatively less percentage of Hindu population was found in Ludhiana (6.07 percent) and Bhatinda (8.11 percent). The average population of all 20 sampled villages is 1,675.

More than 97 percent houses are pucca and only a little above of 2 percent is mentioned as katchcha house. This indicates that all categories of households in the rural areas have sufficient income to construct pucca house.

From the total 6,500 households, 2,435 (37.46 percent) were having their own agricultural land. Among the total agriculture land owned household, 49.65 percent were in high RNFE district and remaining 50.35 percent were in low RNFE districts.

All the villages which were selected in all the districts are well connected with metalled roads which facilitate them to move conveniently for performing their duties and have easy access to all type of services available around their command area.

85 percent of the surveyed villages in all the districts (high & low) receive power supply for more than 13 hours during 24 hours. Only 15 percent of the surveyed villages complain for comparatively less availability of power.

The people of villages are now being provided with water through various types of supply lines for their use in household chores and drinking purposes. Lately, the drinking water supply also threatened due to reports of contamination rendering the water harmful for drinking. The presence of SHGs is not encouraging in all the villages covered for survey. Out of four districts, one each from high and low districts indicated the SHG activities and the remaining 80 percent villages are devoid of such activities.

More than 18 percent of the total establishments were of repair shops. The other shops which include some latest goods in demand in villages and are fast becoming popular covers about one-third of the total establishments. The High RNFE district villages which were surveyed have maintained their status in dominating trend of non-farm sector, because 45.97 percent villages were having grocery shops, which is the highest figure among all the categories & among all the surveyed areas.

About one-third of households having operational land belonged to large cultivation group and even 11.47 percent households were cultivating but on other's land i.e. leased-in category. Proportion of small cultivations is 38.75 percent in high RNFE district and proportion of medium cultivation in low RNFE district was 30.36. Landless cultivators and small cultivators together covered 47.44 percent in high RNFE district whereas the same type of grouping covers 35.32 percent in low RNFE district.

It was found that about 85 percent migrant's purpose was to do agricultural and allied work and just 5 percent came for both purposes. Only 10 percent are working in non-farm purposes which show that there is no urgent requirement of migrants in non-farm sector as compared to the farm sector.

It has also been reported that most of the migrant labour stay in the village for about 45 to 60 days. However, some workers stay in the village upto 90 days. This shows that migrant labour is mostly seasonal.

In 90 percent selected villages the agricultural wage rate (per day) was in the range of Rs. 100-200, whereas remaining 10 percent village reported that the wage rate was within Rs. 200-300. As compared to agriculture, non-agriculture rate was comparatively more. About one-fourth of selected villages, wage rate for non-agriculture was within the range of Rs. 201-300.

The flagship schemes e.g. IAY, MGNREGA and old-age pension are implemented in all the districts regardless of high and low RNFE districts. The coverage of these schemes are normally cannot be overlooked in any of the villages because of the provisions made under the schemes. The beneficiaries under these schemes are almost present in all the selected villages, so data also show that 100 percent coverage is made in the entire selected district.

7.2 Characteristics of Surveyed Households

A little more than one-fifth of selected households were having less than 3 members, while 46.5 percent have 3 to 5 member households.

Out of the total surveyed households, 25.6 percent belongs to SCs, 20.8 percent belongs to OBCs and 53.6 percent to other castes. No household belong to STs. The caste composition of households included in the sample is not much different from the caste composition of the population residing in the rural areas of the state.

With 77.9 percent of the surveyed households being Sikh and 17.7 percent being Hindus, the religious composition of the households included in the sample is more or less similar to the religious composition of the rural population in Punjab.

Out of the total 650 non-farm households, the principal mode of livelihood of more than half (53.54%) is non-farm labour. About 27.5 percent are self-employed. However, almost 94 percent of the self-employed do not use any hired labour which indicates that they have only petty enterprises which give them very small income.

Out of the total surveyed households about 37.1 percent are landless and 62.9 percent own land. The land owners are further divided into 4 categories, that is, those owning land up to 2.5 acres (marginal land owners), 2.5-5.0 acres (small land owners), 5-10 acres (medium landowners) and more than 10 acres (medium-large and large owners). Whereas marginal landowners have a poor representation in the sample (only 3.8%), the other three categories have a fair and almost equal representation (ranging from 18.8% to 20.8% of the total households).

All the surveyed (1,314) households own homestead land but the land other than homestead is owned only by 827(62.9%) households. However, all those households which own land are not cultivating it themselves. Some of them lease out their land, fully or partially, to others. Out of 827 landowners, 147(17.8%) reported that they lease out their land, partially or fully, to others.

Out of the total 779 cultivators, 644 (82.7%) cultivate either paddy or maize during Kharif and 647 (83.1%) either wheat or mustard during Rabi as their main crop. However, paddy during Kharif and wheat during Rabi is the main choice of the farmers as paddy is preferred by 86.6 percent of the farmers during Kharif and wheat by 98.5 percent of the farmers during Rabi.

Maximum percentage of population falls under 25-40 age group. The other closely related age group in the range of 15-24 and 41-59 constitute 20.4 percent and 20.2 percent respectively. Together these three groups comprise more than 65 percent population who are able to constitute by performing in economic activities either farming or non-farming. The remaining about 35 percent population either consists of children or old persons who generally cannot take part in any economic activities. The pattern of spread as per the age group in male and female in all the districts is almost uniform.

Literacy levels of the total population, males and females are 67.8, 71.5 and 63.7 percent respectively. About 18 percent of the total population studied only up to primary level and there is no major difference in their percentage among males and females.

Out of the total population (6,693) of the surveyed households, only 112 (1.7%) have received technical education. Out of 112 technically educated persons, 60 (53.6%) are males and 52 (46.4%) are females. This shows that as far as technical education is concerned there is hardly any gender based bias. Out of the total persons with technical education, about 27.7 percent have done ITI certificate course or polytechnic diploma in some trade.

About 18.6 percent of the total population is engaged in non-farm activity which includes non-farm labour (8.7%), self-employed in non-agricultural activities (4.3%) and service, both public (2.0%) and private (2.4%).

There was no major difference in the distribution of workers by occupation 5 years back from the present. Even five years back, the number of persons engaged in occupations like animal husbandry, agricultural labour, and service in public sector was almost the same as it is today. There is only a marginal growth (less than 1 percentage point) in occupations like self-employment in non-agricultural occupation, self-cultivation, and non-agricultural labour and private service during these 5 years.

The major difference is only in two occupations, that is, (i) household activities and (ii) other occupations. The proportions of workers in household activities was less than 3.9 percentage points from the present and in other occupations including non-workers was 9.6 percentage points more than the present. The major reason for both is the same, that is, due to underage many of the present workers were non-workers 10 years back.

Only 4 persons benefitted from government schemes and 3 from new employment opportunities. In most cases push factors rather than pull factors contributed for the shift in occupation.

The number of persons who have also adopted subsidiary occupation along with main occupation to supplement their income is also very small (344). Out of these 344 persons, about two-thirds (66.9%) have adopted animal husbandry as their subsidiary occupation, which is not difficult to understand.

Out of the total surveyed population, only 1,170 persons are engaged in non-farm activities. Out of these 1,170 persons as many as 620 (53.99%) are working as non-agricultural labourers. Out of these 620 non-farm labourers, 360 (58.06%) are from low RNFE districts and 260 (41.94%) from high RNFE districts.

The participation of non-agricultural labourers in activities like mining & quarrying, manufacturing, wholesale & retail trade, hotel & restaurant is nil or negligible. Only about 9

percent of the total non-agricultural labourers are engaged in construction activity as high as 89 percent of the non-agricultural labourers are engaged in "other" activities.

About half (52.7%) of the labourers who work in construction sector work within the village and another half (47.3%) outside the village but within the district. About 70% of the non-agricultural labourers categorised as 'others' work within the village and about 27 percent outside the village but within the district. A little over 3 percent of these labourers work outside the district. Incidentally, these are the only non-agricultural labourers who are working outside the district of their residence.

More than two-thirds (68.1%) of the total non-agricultural workers work within the village and 29.0 percent outside the village but within the district with only 2.9 percent of them work outside the district.

More than two-thirds (66.9%) of the total non-agricultural labourers do not have to travel for work as they work within the village. About 9 percent of the non-agricultural labourers who work outside the village have to travel up to 5 km for work. About 16.5 percent travel between 5-10 km and 4.4 betwen 10-20 km for work. Only 3.1 percent of the workers travel more than 20 kms for work.

More than one-fourth of non-agricultural labourers are getting employment for less than 6 months. Another 37.7 percent get employment for more than 6 months but less than 12 months. However, about 37 percent of the non-agriculture labour do get employment for all the 12 months.

About two-thirds of the non-agricultural labourers reported that they work for 4-8 hours per day which are normal hours of work for non-agricultural labourers and are in conformity with the labour laws. Likewise, about 31.5 percent of the labourers reported that they get work for 8 hours or more per day and only 10 labourers (1.6%) reported that they get work for less than 4 hours per day.

Only a small fraction (3.9%) of the non-agricultural labourers is working on regular basis, rest of them (96.1%) work only as casual labourers.

Majority (57.4%) of the non-agricultural labourers works as daily wagers, so they get their wages daily. Over 39 percent of the non-agricultural labourers get their payment on monthly basis. Only about 3.4 percent of the labourers get their payment on piece-rate basis.

The mean annual earnings in case of Nawanshehr show highest with Rs. 1,62,271 values. The mean value of both the districts of high RNFE was Rs. 1,13,786 as compared to low RNFE districts whose combined annual average net earnings was Rs.1,28,577. This proves that low RNFE district's all social groups are performing better in mean earnings.

Participation of women in work other than household work is almost negligible as 97.3 percent of them are doing nothing other than household work.

The women in district Nawanshehr and Bhatinda who were self-employed in nonagriculture were getting average 300 days of employment in a year. In overall the highest number of employment days was found in Kapurthala (300 days), followed by Bhatinda (289 days), Ludhiana (261 days) and lowest in Nawanshehr (250 days).

Since 97.3 percent of the adult females were engaged in household work, nearly 97 percent of females were working within their own house. Another about 0.7 percent was working outside the house but within village. About 1.6 percent of the adult females were working outside the village and only 1 female was working outside the district. This shows that in rural Punjab female participation in work outside the house is almost negligible.

Since most of the adult females work within their house, 63.6 percent of them did not face any problems. A few ladies (1.2%) listed family responsibility as their main problem. No women reported workplace issues or family not allowing working or any other work related problem.

Mean annual earnings from government sources is the highest in Ludhiana district (Rs. 2,57,491), followed by Kapurthala (Rs.2,50,103.23). Both these districts are high RNFE districts which confirm that there is a direct link between high RNFE and high mean annual earnings.

Regular employment as well as contractual employment exhibits the best figures for Kapurthala district with 2,52,868.97 and 1,01,769.23 values respectively. Though Nawanshehr district stands at No. 2 but on an average the 2 districts of high RNFE together give better mean annual earning as compared to the two districts of low RNFE districts.

High RNFE district's employees enjoy better facilities under P.F., Medical Insurance, Pension and other benefits. Whereas in low RNFE district the position of employment is comparatively less as some important benefits like PF, Medical, Insurance and Pension are not provided to many of them.

There are only 245 migrants who are sending remittances back home. Only about one-fourth of these migrants are working in occupation such as mining, quarrying, manufacturing, construction, wholesale & retail and hotel & restaurants. Only about one-fourth of the total out-migrants is engaged in these occupations. Within these occupations their numbers are relatively more in hotel & restaurants (8.2%), construction (6.5%) and manufacturing (5.3%). Three-fourths of these migrants have adopted a variety of occupations which have been grouped together under 'others'.

Most of these migrants (92.7%) send a very small amount of remittances (below Rs. 25,000 per annum) back home. About 5.7 percent send between Rs. 25,000–Rs. 45,000. Only 1.6 percent of them send more than Rs. 45,000.

In total 245 persons are working in foreign countries. These persons belong to 193 families. Only a single person migrated from 150 families, and two persons from 37 families. From 3 families 3 persons migrated and another 3 families from where 4 families migrated.

As discussed earlier, and 245 persons migrated from the sampled 193 households, about 14 percent males and 18 percent females migrated within less than a year. 46.18 percent males and 44.90 percent females migrated within 1-5 years. Only about one-fifth males and a little less than one-fifth females migrated for the more than 10 years.

7.3 Characteristics of Village Enterprises

42.86 percent were engaged in non-manufacturing and remaining about half enterprises were doing trade and service related activities. Manufacturing activities were concentrated in low RNFE districts and trade and service related activities were more common in high RNFE districts.

Out of total enterprises, 15.54 percent established their enterprises before the year 2000 and remaining 84.46 percent established their enterprise after 2000. There was not much difference among the high and low RNFE districts regarding enterprises' year of establishment.

In manufacturing, the average 1.94 employees per enterprise were working, whereas it was 1.17 employees per enterprise for non-manufacturing and 1.07 employees per enterprise on the service and trade related activities. In high RNFE district, per enterprise number of employees was 1.34 and in low RNFE districts it was a little less i.e. 1.23 employees per enterprise and overall it was 1.28 employees per enterprise.

About two-thirds of the total employees were regular and remaining one-third were casual employees. In the high RNFE districts percentage of casual employees (47.05%) was more as compared to only 18.75 percent in low RNFE districts. Number and proportion of regular employee was substantially high in high RNFE districts as compared to low RNFE districts.

The average monthly earning was Rs. 87,200 for manufacturing in high RNFE districts, whereas it was only Rs. 13,869 in low RNFE districts. In non-manufacturing enterprises the average monthly earning of low RNFE districts (Rs.10,000) was comparatively high as compared to high RNFE districts (Rs. 5,000). In service and trade related activities monthly earning in both set of districts is nearly same. It was Rs. 5,920 for high and Rs. 4,653 for low RNFE districts.

Out of total 99 enterprises engaged in 77 enterprises, about 90 percent enterprise's place of

origins was within village. They are working in own village, whereas remaining 10 are either from within district or outside district but within state.

More than 92 percent of the enterprises sell their produce directly to the consumer within the village. Only 3.89 percent of total enterprises marketed their produce within district and similar proportion sell outside state.

Majority of the enterprises sell their produce in the village and the data also show that they are selling it directly to the consumers; there was not any middleman involved in selling product of any of the selected enterprises.

More than one-fourth of the selected enterprises reported that there is no competition for marketing of their product but around 70 percent enterprises established their business in their own villages because they are not able to pay any rent and they have own land to establish their business. On the other hand, if they are in town they have to pay hefty rent. District-wise variation in the context of reason for establishment is not very significant.

Bibliography

Bhall, Shiela (1987), Trends in Employment in Indian Agriculture Land and Assets Distribution, *The Indian Journal of Agricultural Economics*, Vol. 42, No. 2.

Bhalla, G.S. (1990), "Agricultural Growth and Structural Changes in the Punjab Economy: An Input-Output Analysis", Research Report No.82, International Food Policy Research Institute, Washington, D.C.

Bhalla, Sheila (1989), "On the Proliferation of Small Farms and Labour Absorption in Indian Agriculture", Institute for Studies in Industrial Development, New Delhi.

Bhalla, Sheila (1993) "Tests of Some Propositions about the Dynamics of Changes in the Rural Workforce Structure", *The Indian Journal of Labour Economics*, Vol. 36, No.3, pp. 428-433.

Bhalla, Surjit S. (1988), "Does Land Quality matter?", *Journal of Development Economics*, Vol. 29, pp.45-62.

Chadha, G.K. (1986), *The Off-farm Economic Structure of Agriculturally Growing Regions: A Study of Indian Punjab*, Australian National University, Canberra.

Chadha, G.K. (2002), "Rural Non Farm Employment in India: What does Recent Experience teach Us?", *Indian journal of economics*. Vol. 45, No. 4, October-December.

Choe, Y.B. (1986), M. Cycle Hypothesis, Non-farm Activities, and Industrialization in the Asian Monsoon Economy", Korea Rural Economics Institute, Seoul.

Chuta, E., and C. Liedholm (1979), "Rural Non-farm Employment: A Review of the State of the Art", Rural Development Paper 4, Department of Agricultural Economics, Michigan State University (USA).

CRRID (2009), Comprehensive District Agriculture Plan (C-DAP) of district Bhatinda, Chandigarh.

Fisher, T., V. Mehajan and A. Singha (1997), "The Forgotten Sector: Non-farm Employment and Enterprise in Rural India Intermediate Technology Publications, London.

Ghuman, Ranjit Singh (2005), "Rural Non Farm Employment Scenario: Reflection from Recent Data in Punjab", *Economics and Political Weekly*, October.

Ghuman, Ranjit Singh, Sukhpal and Balwinder Singh (2002), "Non Farm Employment in Rural Punjab", *Indian Journal of Economics*, Vol. 45, No. 4, October-December.

Gill, Sucha Singh (2002), "Agriculture, Crop Technology and Employment Generation in Punjab", Centre for Research in Rural and Industrial Development (CRRID), Chandigarh.

Government of Punjab, Various uses of Statistical Data of Punjab, Economic and Statistical Organisation, Punjab.

Hymer, H. Stephen and Resnic Stephen (1969), "A Model of an Agrarian Economy with Non-Agricultural Activities" *American Economic Review*, Vol.59, Issue 4, pp. 493-506.

Islam, Rizwanul (1986), "Non-farm Employment in Rural Asia: Issues and Evidence", Australian National University, Canberra.

Jayasuriya, S.K. and R.T. Shand (1986), "Technical Change and Labour Absorption in Asian Agriculture: Some Emerging Trends", *World Development*, Vol. 14, No.3.

Johnston, B. and P. Kilby (1975), "Agriculture and Structural Transformation: Economics Strategies in Late-Developing Countries, Oxford University Press, London.

Mahajan, R.K. (2002), "Rural Non-farm Sector in Punjab: Problem, Potential and Constraints", *Indian Journal of Economics*, Vol. 45, No.4, October-December.

Mayer, Richard L. and Larson Donald (1978) *Rural Non-farm Employment: The Recent Asian Experience*, Department of Agriculture and Rural Sociology, Ohio State University, Ohio, Columbus (USA).

Mellor, J. (1976) *The New Economics of Growth: A Strategy for India and the Developing World*, Cornell University Press, New York.

NABARD (2010), Potential Link Credit Plan of District Nawanshehr.

Oshima, H. (1986), "Levels and Trends of Farm Families", Non-agricultural Incomes at Different Stages of Women Development, Korea Rural Economics Institute, Seoul.

Ramix, G. and F. Stewart (1993), "Rural Non-agricultural Activities in Development: Theory and Applications, *Journal of Development Economics*, Vol.40.

Rangi, P.S. & Others (2002), "Rural Non-farm Employment: A Case Study of Flour Mills in Punjab", *Indian Journal of Economics*, Vol.45, No.4, October-December.

Rosegrant, M.W. and P.B. R. Hazell (2000), *Transforming the Rural Asian Economy: The Unfinished Revaluation*, Oxford University Press, Hong Kong. Saith, A. (1992), *The Rural Non-farm Economy: Processes and Policies*, International Labour Organisation, Geneva.

Sandhu, H.S and Jasdeep Singh Toor (2002), "Nature and Determinants of Rural Non-farm Activity in Punjab", *Indian Journal of Economics*, Vol. 45, No.4, October-December.

Shand, R.T. (1983), *The Role of Off-farm Employment in the Development of Rural Asia: Issues*, National Centre for Development Studies, Australian National University, Canberra.

Singh, Dipinder (2011), "Economic Development, Rural Non Farm Employment and Public Policy: A Case Study of Punjab", Unpublished Ph.D Thesis, Punjabi University, Patiala.

Vyas, V.S., and G. Mathai (1978) "Farm and Non-Farm Employment in Rural Areas" Economic and Political Weekly 13 (6-7), pp. 333-347.

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