

**CHAPTER 2**  
**DEMOGRAPHIC AND SOCIO-ECONOMIC PROFILE OF**  
**RESPONDENTS**

Though agriculture is a vital component for the development of any nation yet the driving force behind the execution and direction of agriculture are the farmers. Farmers play the key role in the development of agriculture and hence it becomes pertinent to understand the various factors which determine the attitude, motivation and moving force behind the hard work of the farmers which in turn drives the agriculture itself.

Agriculture development is the result of not only physical factors such as air, water and soil etc. It is also the outcome of myriad of factors which revolve around the socio-economic background of the farmers. Socio economic background such as age, income, size of land holding, land tenure, caste, education etc. influence the farmer's decision to carry out various agricultural activities. These factors determine not only the social status, accessibility of farmers to various tangible and non-tangible resources, but they also help in shaping and moulding the attitude and behaviour of farmers towards agriculture.

In this chapter, consideration is given to some relevant demographic and socio-economic factors such as gender, age, educational status of the respondents, caste, income level, size of landholdings, family and income distribution, housing condition, cropping pattern etc.

**AGE: -**

Age<sup>1</sup> is a significant demographic parameter which denotes physical and intellectual strength. Age of the farmers have direct impact on their productivity and efficiency. It is an important factor in determining the productivity and ability in performing agricultural activities. Age also reflects the experience of the respondents.

**Table 2.1****Distribution of respondents on the basis of Age (in years)**

AGE GROUP (in years)	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
25-35	11 (7.3%)	4 (26.7%)	15 (9.1%)	10 (9.7%)	0 (0.0%)	10 (8.7%)	25 (8.9%)
35-45	61 (40.7%)	5 (33.3%)	66 (40.0%)	40 (38.8%)	3 (25%)	43 (37.4%)	109 (38.9%)
45-55	65 (43.3%)	5 (33.3%)	70 (42.4%)	47 (45.6%)	6 (50%)	53 (46.1%)	123 (43.9%)
55-65	12 (8.0%)	1 (6.7%)	13 (7.9%)	1 (1.0%)	2 (16.7%)	3 (2.6%)	16 (5.7%)
65 & above	1 (0.7%)	0 (0.0%)	1 (0.6%)	5 (4.9%)	1 (8.3%)	6 (5.2%)	7 (2.5%)
<b>Total</b>	<b>150</b> (53.5%)	<b>15</b> (5.3%)	<b>165</b> (58.9%)	<b>103</b> (36.7%)	<b>12</b> (4.2%)	<b>115</b> (41.1%)	<b>280</b> (100%)

According to Table 2.1, it can be depicted that out of total 280 respondents, a substantial proportion of respondents belong to 35-45 and 45-55 years' age category, that is, 109 (38.9%) and 123(43.9 %) respectively. A small proportion, that is, 25 (8.9 %) of respondents belong to 25-35 years of age category, 16 (5.7%) respondents were found in 55-65 age category and a very nominal proportion 7(2.5%) belong to 65 years and above age. This table shows that a higher proportion of the respondents in both the blocks were of middle age category falling in 35-45 and 45-55 years of age bracket. However, there were some respondents who were young and a very few farmers are found to be in the aged category.

**GENDER:**

Gender distribution is determinant of status of gender parity in society. It indicates the level of participation of Men and Women in various facets of agricultural development. In the present research head of the household was

<sup>1</sup> Age of the respondents was classified into five categories that is, 25-35 years, 35-45 years, 45-55 years, 55-65 years and lastly 65 years and above age group.

interviewed and gender was determined. It is an important indicator which determines the extent of women participation in agriculture and decision making.

**Table 2.2**  
**Distribution of respondents on the basis of Gender**

GENDER	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>MALE</b>	147 (98.0%)	15 (100.0%)	162 (98.2%)	98 (95.1%)	12 (100.0%)	110 (95.7%)	<b>272</b> <b>(97.1%)</b>
<b>FEMALE</b>	3 (2.0%)	0 (0.0%)	3 (1.8%)	5 (4.9%)	0 (0.0%)	5 (4.3%)	<b>8</b> <b>(2.9%)</b>
<b>Total</b>	<b>150</b> <b>(53.5%)</b>	<b>15</b> <b>(5.3%)</b>	<b>165</b> <b>(58.9%)</b>	<b>103</b> <b>(36.7%)</b>	<b>12</b> <b>(4.2%)</b>	<b>115</b> <b>(41.1%)</b>	<b>280</b> <b>(100%)</b>

Table 2.2 shows that majority of households, that is, 272 (97.1%) were headed by males and very few households were headed by females, that is, 8 (2.9%). This analysis indicates the presence of male domination in the rural society. Incidentally, those females which were heading the households were either widows or divorced. Same trend was observed in both the blocks and among the villages.

#### **EDUCATIONAL LEVEL OF RESPONDENTS:**

Education is of paramount importance in an individual's life. Education is known to be a powerful tool for shaping people's life and making life meaningful, even in adult age. It stands to reason that there exists a positive correlation between education and human survival (Ani, 2007). Educational awareness is vital component without which development is incomplete. Agricultural productivity depends on a large extent on the education level of the farmers as it helps in building an understanding and adapting of various scientific changes occurring in the agricultural field.

Education plays a key role in creating awareness and adopting new technologies such as latest equipment's, seeds, use of chemical inputs such as fertilisers, insecticides, pesticides etc. which eventually decides the productivity of crops, soil fertility and impact on environment. Table 2.2 delineates the categories of educational level among the respondents. The following categories of educational qualification such as Illiterate, Literate, Primary level of school education, Secondary level of school education, Higher secondary education in school, Graduation and Any other category which includes respondents who had done diploma or any other professional courses. Literate category includes those respondents who can read and write but did not had formal school education.

**Table 2.3****Distribution of respondents on the basis of Educational Status**

Educational status	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Illiterate</b>	25 (16.7%)	3 (20.0%)	28 (17.0%)	29 (28.2%)	3 (25.0%)	32 (27.8%)	<b>60</b> <b>(21.4%)</b>
<b>Literate</b>	4 (2.7%)	0 (0.0%)	4 (2.4%)	9 (8.7%)	1 (8.3%)	10 (8.7%)	<b>14</b> <b>(5.0%)</b>
<b>Primary</b>	39 (26.0%)	6 (40.0%)	45 (27.3%)	25 (24.3%)	3 (25.0%)	28 (24.3%)	<b>73</b> <b>(26.1%)</b>
<b>Secondary</b>	24 (16.0%)	4 (26.7%)	28 (17.0%)	17 (16.5%)	1 (8.3%)	18 (15.7%)	<b>46</b> <b>(16.4%)</b>
<b>Higher Secondary</b>	22 (14.7%)	1 (6.7%)	23 (13.9%)	5 (4.9%)	1 (8.3%)	6 (5.2%)	<b>29</b> <b>(10.4%)</b>
<b>Graduation</b>	31 (20.7%)	1 (6.7%)	32 (19.4%)	17 (16.5%)	3 (25.0%)	20 (17.4%)	<b>52</b> <b>(18.6%)</b>
<b>Any other*</b>	5 (3.3%)	0 (0.0%)	5 (3.0%)	1 (1.0%)	0 (0.0%)	1 (0.9%)	<b>6</b> <b>(2.1%)</b>
<b>Total</b>	<b>150</b> <b>(53.5%)</b>	<b>15</b> <b>(5.3%)</b>	<b>165</b> <b>(58.9%)</b>	<b>103</b> <b>(36.7%)</b>	<b>12</b> <b>(4.2%)</b>	<b>115</b> <b>(41.1%)</b>	<b>280</b> <b>(100%)</b>

\*Any other category included diploma and other professional courses similar to diploma.

A cursory look at Table 2.3 shows that in the overall analysis, the majority of respondents, 73 (26.1%) were educated upto primary level, followed by 60 (21.4%) respondents who were illiterate, 51 (18.2%) respondents were graduates, 46 (16.4%) respondents have done secondary level education and 29 (10.4%) have passed higher secondary. Inference can be drawn from the above table that there is higher proportion of graduate farmers in Jandiala block, that is, 32(19.4 %) than in the Ajnala block, that is, 20(17.4%), whereas Ajnala block have also a higher proportion of illiterate farmers, that is, 32 (27.8%) than in Jandiala block which is 28(17%). Within the Jandiala block, Manawala village had a higher proportion of graduates 31(20.7%) in comparison to 1(6.7%) graduate in Dhirakot village. The main reason could be because of the proximity of Jandiala block to the main district Amritsar or accessibility to educational institutions in comparison to Ajnala block. The other reason could be the level of awareness and keen approach towards educational attainment.

**CASTE:**

Caste<sup>2</sup> is a form of social stratification in which membership is ascribed in the society. Caste is characterised by endogamy, hierarchy, occupation and concept of purity and pollution. Caste not only describes the social status of individual in Indian scenario but it also depicts the accessibility of various resources and acceptability in the social set up. In this study caste was stratified into three strata's such as General caste category, Scheduled caste and Other Backward Castes (OBC)

**Table 2.4****Distribution of respondents on the basis of Caste**

Caste	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>General</b>	136 (90.7%)	12 (80.0%)	148 (89.7%)	87 (84.5%)	10 (83.3%)	97 (84.3%)	<b>245 (87.5%)</b>
<b>Scheduled Caste</b>	9 (6.0%)	3 (20.0%)	12 (7.3%)	15 (14.6%)	2 (16.7%)	17 (14.8%)	<b>29 (10.4%)</b>
<b>Other Backward Castes</b>	5 (3.3%)	0 (0.0%)	5 (3.0%)	1 (1.0%)	0 (0.0%)	1 (0.9%)	<b>6 (2.1%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

From the Table 2.4, it can be observed that out of 280 total respondents, an overwhelming majority of respondents belong to general category which accounts for 245 (87.5%) while 29 (10.4%) of respondents belong to scheduled caste category and only 6 respondents are from OBC (Other Backward Castes) category. A higher proportion of general category respondents may signify the preponderance of general category in farming and indicates the negligible presence of scheduled and other backward caste community involved in farming in these villages. The above table also depicts that there was consonance among both the blocks in terms of caste division.

**TYPE OF FAMILY:**

Type of family represents the unit of family and their interactions between them. Structure of family has direct bearing on the decisions taken for the farm. Traditionally, the head of the household mostly take decision regarding the

<sup>2</sup> In these villages, General caste includes Khattris, Jats, Kamboj, Brahmins, Scheduled caste includes Chamar, Mhasha, Majhabi and Other backward castes include Labana, Rai Sikh.

agricultural practices, financial resources, technology etc. It is an important social factor which determines agricultural performance to a great extent. For this study respondents were categorised into two types of family, that is, Joint family and Nuclear family types.

**Table 2.5**  
**Distribution of respondents on the basis of type of family**

Family type	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Joint</b>	49 (32.7%)	4 (26.7%)	53 (32.1%)	15 (14.6%)	5 (41.7%)	20 (17.4%)	<b>73</b> <b>(26.1%)</b>
<b>Nuclear</b>	101 (67.3%)	11 (73.3%)	112 (67.8%)	88 (85.4%)	7 (58.3%)	95 (82.6%)	<b>207</b> <b>(73.9%)</b>
<b>Total</b>	<b>150</b> <b>(53.5%)</b>	<b>15</b> <b>(5.3%)</b>	<b>165</b> <b>(58.9%)</b>	<b>103</b> <b>(36.7%)</b>	<b>12</b> <b>(4.2%)</b>	<b>115</b> <b>(41.1%)</b>	<b>280</b> <b>(100%)</b>

According to Table 2.5, a substantial proportion, 207 (73.9%) respondents have nuclear family while only 73(26%) were having joint family structure. This table highlights that there is tendency of nuclearization which results into fragmentation of land and resources. Land fragmentation decreases the earning capacity and could lead the farmer to adopt intensive farming practices, continuous farming and even adopting monoculture to earn profit. On the other hand, it can also motivate farmer to diversify crop production which not only ensure soil fertility but also promote optimal use of resources. It is noted that Ajnala block had higher proportion of nuclear families 95 (82.6%) than Jandiala block 112(67.8%).

### **SIZE OF THE FAMILY:**

Family size<sup>3</sup> represents the number of family members in a household. Household size has a significant influence on farmer's lifestyle and its income. It also indicates the people who can participate and assist in the agricultural activities as it provides potential labour to carry out agricultural activities. On the other hand, it also represents the liabilities of the head of the household.

<sup>3</sup> The size of the household is divided into four categories consisting, 1-3 members, 4-6 members, 7-9 members and household having more than 9 members.

**Table 2.6****Distribution of respondents on the basis of Size of the family**

Family size (number of members)	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>1-3</b>	10 (6.7%)	0 (0.0%)	10 (6.1%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>10 (3.6%)</b>
<b>4-6</b>	105 (70.0%)	11 (73.3%)	116 (70.3%)	89 (86.4%)	8 (66.7)	97 (84.3%)	<b>213 (76.1%)</b>
<b>7-9</b>	32 (21.3%)	4 (26.7%)	36 (21.8%)	14 (13.6%)	4 (33.3)	18 (15.7%)	<b>54 (19.3%)</b>
<b>More than 9</b>	3 (2.0%)	0 (0.0%)	3 (1.8%)	0 (0.0%)	0 (0.0)	0 (0.0%)	<b>3 (1.1%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

In Table 2.6, it can be observed that a large share of respondents, that is, 213 (76.1%) have 4 to 6 family members, 54 (19.3%) households have 7 to 9 family members and meagre 10 (3.6%) and 3(1.1%) household were found to have 1 to 3 and more than 9 family members in their household respectively. Jandiala block as having varied responses in regard to number of members in the household. On one hand, there were 10 (6.7%) households with 1-3 members on the other hand, 3(2%) households were also having more than 9 members in the household. On the contrary Ajnala block was having the majority of households that is 97(84.3%) with 4-6 members in the household and 18(15.7%) household with 7-9 members. This table indicates that there is tendency of nuclearization of family in this area. Nuclearization of family leads to fragmentation of land and resources of the farmers.

**INCOME DISTRIBUTION:**

Income<sup>4</sup> of the household determines the economic standing, standard of living and accessibility to resources. It became imperative to gain insights on the livelihood conditions of the household in order to understand ability of the farmer to actuate and adopt any new agricultural technology. There are various sources through which a household derive its income, such an income from cultivation of various crops and its by-products, income from the livestock and their products, income earned from non-farming enterprises that household's members are engaged in (Ranganathan, 2014).

<sup>4</sup> Income was categorised in to 6 categories comprises of income upto Rupees 1 lakh, Rupees 1 to 2 lakhs, Rupees 2 to 3 lakhs, Rupees 3 to 4 lakhs, Rupees 4 to 5 lakhs and more than Rupees 5 lakhs income. Income of the household was taken annually.

In the present study, the respondents were asked about the total income of household from all the sources and they were also inquired about the income from the agriculture activities alone.

**Table 2.7****Distribution of respondents on the basis of Income of the family**

Total Household income (Annually in Rupees)	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Upto 1 lakh</b>	4 (2.7%)	0 (0.0%)	4 (2.4%)	8 (7.8%)	3 (25.0%)	11 (9.6%)	<b>15</b> <b>(5.4%)</b>
<b>1-2 lakhs</b>	14 (9.3%)	1 (6.7%)	15 (9.1%)	14 (13.6%)	0 (0.0%)	14 (12.2%)	<b>29</b> <b>(10.4%)</b>
<b>2-3 lakhs</b>	13 (8.7%)	6 (40.0%)	19 (11.5%)	20 (19.4%)	3 (25.0%)	23 (20.0%)	<b>42</b> <b>(15.0%)</b>
<b>3-4 lakhs</b>	25 (16.7%)	4 (26.7%)	29 (17.6%)	18 (17.5%)	5 (41.7%)	23 (20.0%)	<b>52</b> <b>(18.6%)</b>
<b>4-5 lakhs</b>	24 (16.0%)	3 (20.0%)	27 (16.4%)	20 (19.4%)	1 (8.3%)	21 (18.3%)	<b>48</b> <b>(17.1%)</b>
<b>More than 5 lakhs</b>	70 (46.7%)	1 (6.7%)	71 (43.0%)	23 (22.3%)	0 (0.0%)	23 (20.0%)	<b>94</b> <b>(33.6%)</b>
<b>Total</b>	<b>150</b> <b>(53.5%)</b>	<b>15</b> <b>(5.3%)</b>	<b>165</b> <b>(58.9%)</b>	<b>103</b> <b>(36.7%)</b>	<b>12</b> <b>(4.2%)</b>	<b>115</b> <b>(41.1%)</b>	<b>280</b> <b>(100%)</b>

Income in this Table represents the income of the household from all the sources per annum. As indicated in Table 2.7, a fair proportion of respondents 94(33.6%) have more than Rupees 5 lakhs income per annum, followed by 52(18.6%) respondents having Rupees 3 to 4 lakhs as family income, 48(17.1%) respondents were found to have 4 to 5 lakhs Rupees income per annum, 42 (15%) respondents were having 2 to 3 lakhs Rupees income per annum, 29(10.4%) respondents had 1 to 2 lakhs Rupees income per annum and only 15(5.4%) respondents were sustaining on upto 1 lakh Rupee income per annum. It indicates that a higher proportion of farmers have Rupees 5 lakhs or more income per annum. Among these blocks, Jandiala block have a larger proportion of farmers in more than 5 lakhs income per annum which also implies that farmers of Jandiala block are more well off than of Ajnala block. Within villages, Manawala village had a higher proportion of respondents, that is, 70 (46.7%) earning more than 5 lakhs rupees annually in comparison to 1(6.7%) respondent in Dhirakot village. Whereas in Ajnala block, (Panj garain wala) more respondents were found earning more than 5 lakhs rupees annually, that is, 23 (22.3%) as compared to Kotli jimmat singh village which has no respondent earning



more than Rupees 5 lakhs. The reason could be better earning opportunities in Jandiala block, more profit from agriculture and other vocations pursued by the respondents, and adoption of better agricultural techniques etc.

**Table 2.8****Distribution of respondents on the basis of income from agriculture alone**

Agricultural income (Annually in Rupees)	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Up to 1 lakh</b>	8 (5.3%)	0 (0.0%)	8 (4.8%)	8 (7.8%)	3 (25.0%)	11 (9.6%)	<b>19 (6.8%)</b>
<b>1-2 lakhs</b>	19 (12.7%)	4 (26.7%)	23 (13.9%)	22 (21.4%)	2 (16.7%)	24 (20.9%)	<b>47 (16.8%)</b>
<b>2-3 lakhs</b>	19 (12.7%)	4 (26.7%)	23 (13.9%)	18 (17.5%)	4 (33.3%)	22 (19.1%)	<b>45 (16.1%)</b>
<b>3-4 lakhs</b>	20 (13.3%)	4 (26.7%)	24 (14.5%)	17 (16.5%)	2 (16.7%)	19 (16.5%)	<b>43 (15.4%)</b>
<b>4-5 lakhs</b>	24 (16.0%)	2 (13.3%)	26 (15.8%)	20 (19.4%)	1 (8.3%)	21 (18.3%)	<b>47 (16.8%)</b>
<b>More than 5 lakhs</b>	60 (40.0%)	1 (6.7%)	61 (37.0%)	18 (17.5%)	0 (0.0%)	18 (15.7%)	<b>79 (28.2%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

Table 2.8 demonstrates the income of household from the agricultural sources only. It can be discerned from the table that by and large a number of households had more than 5 lakhs income from the agricultural sources which accounts to 79(28.2%). Besides that, 47(16.8%) households had both Rupees 4 to 5 lakhs income and Rupees 1 to 2 lakhs earning each, 45(16.1%) households were found to be having Rupees 2 to 3 lakhs as income, 43(15.4%) households had Rupees 3 to 4 lakhs as their income and 19 (6.8%) households were having upto Rupees 1 lakh income from the agricultural sources alone in their hand. It connotes that largely household had Rupees 3 to 5 lakhs income from the agriculture only which puts them into better bracket than the people who were struggling for the profit in agriculture. Jandiala block was found to having higher proportion of households, that is, 61 (37%) having more than Rupees 5 lakhs income per annum from agricultural sources only as compared to Ajnala block which accounts to 18 (15.7%). Within the villages also, Manawala village had a higher number of household earning more than Rupees 5 lakhs, 60 (40%) as compared to

Dhirakot village which accounts to 1 (6.7%). In Ajnala block, Panj garain wala village had 18 (17.5%) whereas none of the respondents from Kotli jimmat singh village had earning more than Rupees 5 lakhs.

### **ACCOMODATION:**

Accommodation<sup>5</sup> of a household signifies not only their living arrangements but also highlights the living standard of the respondents. In the present study, an attempt was made to determine the status of accommodation and type of accommodation.

**Table 2.9**

### **Distribution of respondents on the basis of Accommodation**

Accommodation	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Owned</b>	146 (97.3%)	15 (100.0%)	161 (97.6%)	102 (99.0%)	12 (100.0%)	114 (99.1%)	<b>275 (98.2%)</b>
<b>Rented</b>	2 (1.3%)	0 (0.0%)	2 (1.2%)	1 (1.0%)	0 (0.0%)	1 (0.9%)	<b>3 (1.1%)</b>
<b>Provided by Employer</b>	2 (1.3%)	0 (0.0%)	2 (1.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>2 (0.7%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

Table 2.9 represent the accommodation of farmers. It can be observed that a majority of respondents, that is, 275(98.2%) had their own accommodation while only 3(1.1%) and 2(0.7%) respondents had either a rented accommodation or the accommodation was provided by employer to the employee.

### **TYPE OF ACCOMODATION:**

Type of accommodation indicates the condition of the houses where people are living and also highlights the living standards of the respondents. “Kacha” houses are temporary houses made up of wood, mud, straw etc, semi built houses are houses which are half built or are under construction. “Pakka” houses are strong permanent establishments made up of bricks, cement etc.

<sup>5</sup> The respondents were asked about particulars of accommodation and the type of accommodation a household possess.

**Table 2.9.1**  
**Distribution of respondents on the basis of Type of Accommodation**

Accommodation type	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Kacha</b>	5 (3.3%)	0 (0.0%)	5 (3.0%)	1 (1.0%)	0 (0.0%)	1 (0.9%)	<b>6</b> <b>(2.1%)</b>
<b>Pakka</b>	128 (85.3%)	15 (100.0%)	143 (86.7%)	75 (72.8%)	10 (83.3%)	85 (73.9%)	<b>228</b> <b>(81.4%)</b>
<b>Semi built</b>	17 (11.3%)	0 (0.0%)	17 (10.3%)	27 (26.2%)	2 (16.7%)	29 (25.2%)	<b>46</b> <b>(16.4%)</b>
<b>Total</b>	<b>150</b> <b>(53.5%)</b>	<b>15</b> <b>(5.3%)</b>	<b>165</b> <b>(58.9%)</b>	<b>103</b> <b>(36.7%)</b>	<b>12</b> <b>(4.2%)</b>	<b>115</b> <b>(41.1%)</b>	<b>280</b> <b>(100%)</b>

Table 2.9.1 represents the types of accommodation of respondents in which they reside, and shows that overwhelming majority, 228(81.4%) respondents had pakka houses while as many as 46(16.4%) respondents had semi built houses and only 6 (2.1%) respondents had kacha houses. It implies that higher proportion of farmers from both the blocks had pakka houses made up of brick and mortar. It shows better living conditions of respondents.

#### **PARTICULARS OF LAND OWNERSHIP<sup>6</sup>:**

Land is indispensable and fundamental means of production in agriculture without which agricultural production cannot take place. So, it is of paramount importance to understand the pattern of ownership and operational holdings of land to gain insight of the agrarian class structure (Rawal,2008). Pattern, distribution, ownership and use of land greatly affect the sustainability of the natural resources. The effectiveness of sustainable management techniques, resources and ecological process are the result of how the land is managed, fragmented and patterned.

**Table 2.10**  
**Distribution of respondents on the basis of Pattern of Ownership**

Ownership pattern	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Individual</b>	106 (70.7%)	15 (100.0%)	121 (73.3%)	89 (86.4%)	8 (66.7%)	97 (84.3%)	<b>218</b> <b>(77.8%)</b>
<b>Family</b>	32 (21.3%)	0 (0.0%)	32 (19.4%)	4 (3.9%)	4 (33.3%)	8 (7.0%)	<b>40</b> <b>(14.3%)</b>
<b>Charitable society</b>	1 (0.7%)	0 (0.0%)	1 (0.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>1</b> <b>(0.4%)</b>
<b>Partnership</b>	1 (0.7%)	0 (0.0%)	1 (0.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>1</b> <b>(0.4%)</b>
<b>Leased</b>	8 (6.7%)	0 (0.0%)	8 (4.8%)	10 (9.7%)	0 (0.0%)	10 (8.7%)	<b>18</b> <b>(6.4%)</b>
<b>Total</b>	<b>150</b> <b>(53.5%)</b>	<b>15</b> <b>(5.3%)</b>	<b>165</b> <b>(58.9%)</b>	<b>103</b> <b>(36.7%)</b>	<b>12</b> <b>(4.2%)</b>	<b>115</b> <b>(41.1%)</b>	<b>280</b> <b>(100%)</b>

<sup>6</sup> The land ownership was determined on the basis of ownership patterns acquired by the respondents and the type of ownership prevalent in the area surveyed.

Table 2.10 exhibits the ownership pattern of the farms in the area. A cursory look at the table gives us an idea that a higher proportion of respondents 218 (77.8%) were controlling and managing the farms individually, a small proportion of 40(14.3%) farms were managed by the family members jointly. As many as 18(6.4%) of the farms were leased, only 1 farm was running in partnership. It can be discerned from the table that while in villages of Ajnala block, the majority of respondents had farming as an occupation of family or an individual only, apart from leasing. Villages in Jandiala block were having some farms which were leased and under partnership as well. Jandiala block have one charitable society called Pingalwara. This society has its own zero budget natural farm in Dhirakot village, orchard in Manawala village and its own nursery where they grow their own saplings to plant in their farms. In this farm, they have also adopted organic farming techniques to grow crops without resorting to any kind of chemical fertilisers and pesticides.

### **OWNERSHIP OF LAND:**

Ownership of land in this study implies the ownership pattern of the operational holding in which farming is practised. Owned farms are those in which head of the household owns the farm and operates the farming himself whereas some farms are leased to other people for carrying out farming practices. Leased farms are either leased out to some other farmers or they are leased in by farmers from other people to carry out farming.

**Table 2.10.1**

#### **Distribution of respondents on the basis of type of Ownership**

Ownership type	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Self-operated</b>	142 (94.7%)	15 (100.0%)	157 (95.2%)	93 (90.3%)	12 (100.0%)	105 (91.3%)	<b>262 (93.6%)</b>
<b>Leased out</b>	5 (3.3%)	0 (0.0%)	5 (3.0%)	10 (9.7%)	0 (0.0%)	10 (8.7%)	<b>15 (5.3%)</b>
<b>Leased in</b>	3 (2.0%)	0 (0.0%)	3 (1.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>3 (1.1%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

Table 2.10.1 reveals the ownership pattern of the farms. The above analysis is indicative of the fact that a fair majority, 262(93.6%) respondents had self-operated farms, it means that they operate and manage their land on their own. A very few

respondents 15(5.3%) opted to lease out their land to someone else, that is, they gave their land to other farmers for cultivating crops and only 3 (1.1%) respondents leased in the land for cultivating that means they rented a land from owner of the land for agriculture purposes. Jandiala was found to have farms having leased out and leased in their operational holdings whereas 10 (8.7%) farms were found to have leased out in Ajnala block and none farm was leased in Ajnala block. The main reason by the respondents of lesser number of farms leased in Ajnala block was depleting profits and reducing fertility of the Ajnala area.

### **NUMBER OF FARMS IN OPERATION:**

Number of farms<sup>7</sup> implies the operational farm holding possessed by the farmers. It can be owned by the farmer himself, managed in partnership, leased in and leased out by the farmers and owned jointly with the family members. It signifies the operational holding in which farming is practiced. Number of farms have direct bearing on the earning capacity of the farmers, so its became pertinent to ascertain the number of farms operated by the respondents. These farms could be located in the same area or can be scattered in various places. Only those farms were taken into consideration which were operationalized for agriculture purpose.

**Table 2.11**

#### **Distribution on the basis of Number of Farms hold by the respondents**

Number of farms	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Only 1</b>	54 (36.0%)	11 (73.3%)	65 (39.4%)	28 (27.2%)	12 (100.0%)	40 (34.8%)	<b>105 (37.5%)</b>
<b>2-5</b>	76 (50.7%)	4 (26.7%)	80 (48.5%)	74 (71.8%)	0 (0.0%)	74 (64.3%)	<b>154 (55.0%)</b>
<b>6-10</b>	9 (6.0%)	0 (0.0%)	9 (5.5%)	1 (1.0%)	0 (0.0%)	1 (0.9%)	<b>10 (3.6%)</b>
<b>11-15</b>	3 (2.0%)	0 (0.0%)	3 (1.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>3 (1.1%)</b>
<b>16-20</b>	3 (2.0%)	0 (0.0%)	3 (1.8%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>3 (1.1%)</b>
<b>&gt; 20</b>	5 (3.3%)	0 (0.0%)	5 (3.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>5 (1.8%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

<sup>7</sup> The number of farms possessed by the respondents were categorized into only 1 farm, 2 to 5 farms, 6 to 10 farms, 11 to 15 farms, 16 to 20 farms and more than 20 number of farms per household.

According to Table 2.11 more than half of the respondents, that is, 154 (55%) had 2 to 5 operational holdings, 105(37.5%) respondents had only one operational land holding, 10 (3.6%) respondents had 5 to 10 operational holding and very little proportion were found to have more than 10 to 15, 15 to 20 and more than 20 operational holding which accounts to 3(1.1%) each and 5(1.8%) of the respondents surveyed. It is indicated from the table that respondents of Ajnala block had less number of farms in comparison to respondents of Jandiala block. It is indicative of the fact that farms in Jandiala block are more scattered than in Ajnala block or that farmers may be having a large number of farms in occupation in Jandiala block than in Ajnala block.

### **AGRICULTURAL FARM SIZE:**

Size of farm implies the arable land which is cultivated. Sizes of the farms have huge reverberations on the productivity and adoption of farming and management techniques which can be applied on the farm. The area is calculated as total area available for cultivation it can be integrated in one place or may be located in clusters at different locations. In the present study, size of the farms operated for agriculture purposes were divided into following categories<sup>8</sup>: Marginal farm size (less than 1 hectare), Small farm size (1 to 2 hectares), Semi-medium farm size (2 to 4 hectares), Medium farm size (4 to 10 hectares), Large (more than 10 hectares).

**Table 2.12**

### **Distribution of respondents on the basis of Size of the Farm**

Farm size	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Marginal (&lt;1 hectare)</b>	4 (2.7%)	0 (0.0%)	4 (2.4%)	6 (5.8%)	3 (25.0%)	9 (7.8%)	<b>13 (4.6%)</b>
<b>Small (1-2 hectares)</b>	8 (5.3%)	3 (20.0%)	11 (6.7%)	7 (6.8%)	0 (0.0%)	7 (6.1%)	<b>18 (6.4%)</b>
<b>Semi-medium (2-4 hectares)</b>	38 (25.3%)	1 (6.7%)	39 (23.6%)	20 (19.4%)	3 (25.0%)	23 (20.0%)	<b>62 (22.1%)</b>
<b>Medium (4-10 hectares)</b>	59 (39.3%)	7 (46.7%)	66 (40.0%)	42 (40.8%)	4 (33.3%)	46 (40.0%)	<b>112 (40.0%)</b>
<b>Large (10&gt; hectares)</b>	41 (27.3%)	4 (26.7%)	45 (27.3%)	28 (27.2%)	2 (16.7%)	30 (26.1%)	<b>75 (26.8%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

<sup>8</sup> These categories of farmers are in accordance with Agricultural census, 2010-11 Government of India. Available at <http://agcensus.nic.in/document/agcensus2010/agcen2010rep.htm>

According to Table 2.12, out of the total 280 respondent's half of the respondents 112 (40%) have medium size land holdings that is 4-10 hectares of land under cultivation. Followed by, 75 (26.8%) respondents are having large size land holdings that is more than 10 hectares. There was also fair proportion of respondents, 62 (22.1%) who had semi-medium that is, 2-4 hectares of land holdings. Ajnala although had small number of farms but the table indicates that they had fair proportion of respondents occupying large scale land holdings, that is 30(26.1%) it means they had larger area of land under cultivation.

### **CROPPING PATTERN:**

Cropping pattern<sup>9</sup> is the proportion of area under various crops in a farm at a given point of time. It is indicative of annual spatial arrangements of crops, fallow in the area and the sequence of the crops grown. Cropping systems based on climate soil and water availability. Cropping pattern evolved for optimising the production level utilising the resources at the farmer's disposal. The cropping system should provide enough food for the family, fodder for cattle and generate sufficient cash income for domestic and cultivation expenses. While opting for any crop a farmer keeps in mind the potential productivity of the crop and monetary benefits. In addition to these, choice of crops and cropping systems further depends on large extent on other factors such as: Infrastructure facilities for example Irrigation facilities, availability of transport, storage of crops after harvest, trade and marketing, post-harvest handling and processing etc.

Socio-economic factors for instance Financial resource base, land ownership, size and type of land holding, household needs of food, fodder, fuel, fibre and finance, labour availability etc. Technological factors such as Improved varieties, mechanization, access to information, etc. (Das, 2013).

### **CROPPING SEASON:**

Indian agricultural year is generally observed from July to June next every year. There are mainly two seasons which are observed in Indian cropping pattern.

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<sup>9</sup> In this section, for analysing the cropping pattern adopted by the respondent's researcher took a note of the cropping season in which the respondents usually grow their crops. Further they were asked about the selection of crops in these season, reason for their selection of the crops and finally researcher tried to seek information regarding what other crops respondent would want to grow apart from the crops they were growing.

These are Kharif and Rabi, **Kharif**: kharif season remains in force during July to October. Crops in this season are grown during the south-west monsoon and are also called as monsoon crops. Seeds of the crops are sown in beginning of the monsoon and are harvested at the end of the monsoon. Crops grown in this season are paddy, maize, cotton. **Rabi**: This season is from October to March during the winter. Crops grown during this season are called rabi crops. Seeds of these crops are sown during the winters and after maturation they are harvested at the end of winters. Crops grown during this season are wheat, gram, mustard. The crops grown between March and June are summer crops.

**Table 2.13**

**Distribution of respondents on the basis of Cropping season adopted by them**

Cropping season	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Kharif season</b>	1 (0.7%)	0 (0.0%)	1 (0.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	<b>1</b> <b>(0.4%)</b>
<b>Rabi season</b>	2 (1.3%)	0 (0.0%)	2 (1.2%)	2 (1.9%)	2 (16.7%)	4 (3.5%)	<b>6</b> <b>(2.1%)</b>
<b>Throughout the year</b>	147 (98.0%)	15 (100.0%)	162 (98.2%)	101 (98.1%)	10 (83.3%)	111 (96.5%)	<b>273</b> <b>(97.5%)</b>
<b>Total</b>	<b>150</b> <b>(53.5%)</b>	<b>15</b> <b>(5.3%)</b>	<b>165</b> <b>(58.9%)</b>	<b>103</b> <b>(36.7%)</b>	<b>12</b> <b>(4.2%)</b>	<b>115</b> <b>(41.1%)</b>	<b>280</b> <b>(100%)</b>

The above Table 2.13 describes the number of respondents who cultivate their land during which time of the year. It can be discerned from the table that a large proportion of respondents, that is, 273 (97.5%) cultivate their land throughout the year without keeping soil fallow for rejuvenating on its own. Only 6(2.1%) and 1(0.4%) respondents cultivate their land during Rabi and Kharif season respectively. Same pattern of cultivating crops is observed in both the blocks. While farmers of Jandiala block were seen growing crops in both seasons, that is in Kharif and Rabi. On the other hand, only 4 (3.5%) farmers of Ajnala block were growing crops in Rabi season only. It testifies that most of the farmers do not keep their land fallow and keep growing crops in their land without giving the land adequate time to revitalise and recover its fertility. The reason that respondents stated for not keeping the land fallow and doing farming throughout the year was their inability to meet their expenses and the burden of the loan which they have to repay to the various financial institutions.



**CROPS GROWN IN DIFFERENT SEASONS:**

Punjab is facing the problem of monoculture with wheat and rice as the major cereal crops grown by the farmers. Rice is a crop of kharif season and wheat is crop of rabi season. Apart from rice and wheat, maize and barley are also sown. Very few farmers opt for pulses and oilseeds. Respondents were inquired about the crops they grow in their farms and reasons for adopting these crops. Data is presented in subsequent tables.

**Table 2.13.1****Distribution of respondents on the basis of Selection of crops**

Crops grown*	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Rice</b>	142 (94.7%)	14 (93.3%)	156 (94.5%)	103 (100.0%)	12 (100.0%)	115 (100.0%)	<b>271 (96.8%)</b>
<b>Wheat</b>	136 (90.7%)	14 (93.3%)	150 (90.9%)	103 (100.0%)	12 (100.0%)	115 (100.0%)	<b>265 (94.6%)</b>
<b>Vegetable</b>	79 (52.7%)	0 (0.0%)	79 (47.9%)	36 (35.0%)	0 (0.0%)	36 (31.3%)	<b>115 (41.1%)</b>
<b>Other</b>	5 (3.3%)	1 (6.7%)	6 (3.6%)	1 (1.0%)	0 (0.0%)	1 (0.9%)	<b>7 (2.5%)</b>
<b>Fruit</b>	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (8.3%)	1 (0.9%)	<b>1 (0.4%)</b>

\*Multiple responses table.

The Table 2.13.1 represents the crops grown by respondents in different seasons as it gives the picture of selection of crops by the respondents. Rice and Wheat are predominant crops cultivated by the respondents with 271 (96.8%) and 265(94.6%) respondents opting for it respectively. Monoculture was observed in the cropping pattern. As many as 115(41.1%) respondents grow vegetables like potatoes, tomatoes, cauliflower and other seasonal vegetables. Only 1 (0.4%) respondent grows fruits such as *kinnu* (tangerine) in his farm and only 7 (2.5%) respondents grow other crops such as sugarcane, sunflower (in Jandiala) and fodder crops like 'barseen' on their farms. It shows that the respondents of this area are practicing monoculture in respect of combination of wheat and rice largely respondents have shunned the usage of other crops such as pulses, bajra, maize. This has led to decline in productivity and made soil vulnerable to pest attacks. In vegetables, most of the respondents have opted for potatoes so even vegetables are not diversified. A very few respondents were found who grew other seasonal vegetables like peas etc. More respondents in Jandiala block grew vegetables, 79(47.9) as compared to those in Ajnala block that is, 36(31.3%). It shows that though both the blocks follow the monoculture pattern of cropping but respondents of Jandiala are also found to grow vegetables to earn more

profit. Among the villages of Jandiala block, it is interesting to note that 79 (52.7%) respondents from Manawala village grow vegetables whereas none of the respondents from Dhirakot village were found growing vegetables for selling in the market. In Ajnala block, the same pattern was observed as 36 (35%) respondents are growing vegetables in Panj garain wala whereas none of the respondents from Kotli Jimmat Singh village are seen growing vegetables. The reason for not adopting vegetables in Dhirakot and Kotli Jimmat Singh village could be tendency of adopting monoculture and reluctance to grow other vegetables as it demands more labor and investment.

**Table 2.13.2**  
**Distribution of respondents on the basis of Reason for the selection of the crops**  
**grown in the farm**

Reason for opting crops	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>More profit/good return</b>	39 (26.0%)	5 (33.3%)	44 (26.7%)	26 (25.2%)	2 (16.7%)	28 (24.3%)	<b>72 (25.7%)</b>
<b>No market for other products</b>	38 (25.3%)	3 (20.0%)	41 (24.8%)	24 (23.3%)	3 (25.0%)	27 (23.5%)	<b>68 (24.3%)</b>
<b>Instant money</b>	32 (21.3%)	5 (33.3%)	37 (22.4%)	10 (9.7%)	3 (25.0%)	13 (11.3%)	<b>50 (17.9%)</b>
<b>Less labour intensive</b>	18 (12.0%)	0 (0.0%)	18 (10.9%)	26 (25.2%)	0 (0.0%)	26 (22.6%)	<b>44 (15.7%)</b>
<b>Need less resources</b>	10 (6.7%)	2 (13.3%)	12 (7.3%)	12 (11.7%)	4 (33.3%)	16 (13.9%)	<b>28 (10.0%)</b>
<b>Other reasons e.g minimum risk</b>	13 (8.7%)	0 (0.0%)	13 (7.9%)	5 (4.9%)	0 (0.0%)	5 (4.3%)	<b>18 (6.4%)</b>
<b>Total</b>	<b>150 (53.5%)</b>	<b>15 (5.3%)</b>	<b>165 (58.9%)</b>	<b>103 (36.7%)</b>	<b>12 (4.2%)</b>	<b>115 (41.1%)</b>	<b>280 (100%)</b>

Table 2.13.2 cites the rationale for selecting the crops by the respondents. Earning more profit or gains in return from the crops dominate the reason for their selection of any crop with 72 (25.7%) respondents affirming it, 68 (24.3%) respondents were some where compelled to grow monotonous crops as there is lack of market for any other crops. It shows the impact of commercialisation on the selection of crops by the respondents ,50 (17.9%) respondents grow these crops in lieu of instant money returns as these crops are sold instantly and they do not have to wait much for the buyers. As many as 44 (15.7%) respondents admitted that these crops require less labour and labour availability and affordability is also one of the concern of the respondents in this area, 28 (10%) respondents said that resources such as fertilizers, insecticides and pesticides etc. required for these crops are less in comparison to other crops which led to the selection of these crops and 18 (6.4%)

respondents mentioned other reason from above mentioned justifications such as less level of risk involved in adopting these crops. Among the blocks, a higher proportion of respondents from Jandiala block, that is, 37 (22.4%) affirmed that they grew these crops in lure of instant money instead of any wishful desire to grow these crops as compared to 13 (11.3%) respondents of Ajnala block. Further, it was observed that 26 (22.6%) respondents from Ajnala block mention the reason of less labour involved in these crops which was on higher side as compared to 18 (10.9%) respondents affirming the same reason as given in Jandiala block. It highlights the problem of labour availability in this area. In addition to this, a higher proportion of respondents, that is, 16 (13.9%) from Ajnala block advocated that these crops require less resources as compared to other crops. Meanwhile, 12 (7.3%) respondents mention this reason in Jandiala block. This reason give account to paucity of resources available to the respondents in this area.

### **CROPS THAT FARMERS WISH TO GROW:**

Farmers choice of crops narrowed down to various factor such as monetary benefits, infrastructural facilities etc. but apart from the crops grown for commercial selling farmers always endeavour in pursuit of some other crops. The crops that farmers aspire to grow usually don't meet with their fate because of many reasons including less economic gains, huge investment, inadequate and inept labour to name a few. In this study, the respondents were asked about the choice of crops they aspire to grow and their responses were documented in Table 2.13.

**Table 2.14**  
**Distribution of respondents on the basis of crops that the farmers wish to grow**

Crops want to grow*	Jandiala block			Ajnala block			Total
	Manawala	Dhirakot	Total	Panj garain wala	Kotli jimmat singh	Total	
<b>Pulses</b>	46 (30.7%)	9 (60.0%)	55 (33.3%)	81 (78.6%)	7 (58.3%)	88 (76.5%)	<b>143</b> <b>(51.1%)</b>
<b>Vegetables</b>	24 (16.0%)	5 (33.3%)	29 (17.6%)	44 (42.7%)	5 (41.7%)	49 (42.6%)	<b>78</b> <b>(27.9%)</b>
<b>Maize</b>	35 (23.3%)	7 (46.7%)	42 (25.5%)	25 (24.3%)	3 (25.0%)	28 (24.3%)	<b>70</b> <b>(25%)</b>
<b>Others such as bajra, olives, oilseeds</b>	20 (13.3%)	4 (26.7%)	24 (14.5%)	15 (14.6%)	0 (0.0%)	15 (13.1%)	<b>39</b> <b>(13.9%)</b>
<b>Flowers</b>	22 (14.7%)	2 (13.3%)	24 (14.5%)	4 (3.9%)	2 (16.7%)	6 (5.2%)	<b>30</b> <b>(10.7%)</b>
<b>Fruits</b>	3 (2.0%)	0 (0.0%)	3 (1.8%)	0 (0.0%)	1 (8.3%)	1 (0.9%)	<b>4</b> <b>(1.4%)</b>

\*Multiple response table

A cursory look at the Table 2.14 enumerates the crops desirable for growing by the respondents. Though they are growing the wheat and rice combination crops but most of the respondents were also willing to grow other crops as well. As of now most of the farmers depend on the market for their daily requirements of vegetables, so they want to grow these themselves. As many as 143 (51.1%) respondents desire to grow pulses, and 78 (27.9%) respondents want to grow vegetables. Among them most of the respondents from Ajnala want to grow vegetables as respondents from Jandiala already cultivate vegetables. A higher proportion, 70 (25%) respondents want to grow maize as the maize used to be predominant crop earlier but now it is not a popular crop to grow and in fact is lesser known in this area. As many as 39 (13.9%) respondents enumerated other crops such as bajra, oilseeds, olives, potato, pea, moong etc as well. 30 (10.7%) respondents also want to grow flowers as the market of flowers is flourishing and they also have great returns. A negligible proportion of 4 (1.4%) respondents wanted to grow fruits in their farm.

**SUMMARY:**

The foregoing discussion brings out some of the characteristics of socio-economic conditions of the study region. Female participation as head of the household was negligible as most of the households were headed by males. It was found that a substantial proportion of respondents were middle aged that is, representing 35 to 55 years of age group. A fair proportion of respondents were found not adequately educated as majority of respondents fall under the higher secondary level of education. General caste category was found in predominance in this study region. The structure of family suggests that the majority of households were having nuclear family having largely 4 to 6 members in the households. Income distribution among the households reflects that one-third of sample households were having annual income of rupees more than Rupees 5 lakhs. Jandiala block is found to have higher proportion of respondents having income more than 5 lakhs in comparison to Ajnala block. Agricultural income also indicated similar trend with Jandiala block having higher proportion of respondents with annual agricultural income of more than Rupees 5 lakhs. As far as accommodation is concerned, the majority of households were owned by the farmers with very few staying on rent. Largely the households were of “*Pakka*” built.

The analysis of ownership pattern reveals that the majority of farms of households were individually owned, followed by joint ownership with family. Further, the majority of farm owned by households were operated by self and a very few households were leasing their farms. Jandiala block was found to be having higher proportion of respondents with leased out farms. More than half of the respondents were having 2 to 5 number of farms. In terms of size of land holdings data suggest that a higher proportion of respondents were owning medium size land holdings that is, land holding of 4 to 10 hectares of land, followed by respondents with large land size holdings with more than 10 hectares of land. Ajnala block was having a less number of farms but these farms were having large land size holdings whereas in Jandiala block, farmers were having their farms distributed over the area. As far as crops and cropping pattern is concerned, the study reveals that the majority of farms grow the crops throughout the year with monoculture pattern of wheat and rice in their farms followed by growing seasonal vegetables. A higher proportion of respondents from Jandiala block were found growing vegetables in comparison to Ajnala block. Reason cited for choosing these crops was good return in lieu of these crops, lack of market of other crops and instant money obtained from selling the crops. Whereas, when asked about the crops they want to grow, pulses found the most preferred crop followed by vegetables and maize by the respondents.