The social profile of farmers in the village of S.A.S. Nagar district of Punjab

H Kaur*, I Mohan and G Singh

Summary
Agriculture education is crucial in ensuring the growth of agricultural profitability, efficacy, ecological responsibility, technology for agriculture, and environmental and ecological stability. The current study examines the socioeconomic factors that contribute to the importance of the farming community in Punjab, especially in the villages of Shakrullapur, Rora, Bibipur, Batta, and Fatehpur Theri all of which are located in the Kharar tehsil and SAS Nagar Mohali district. For this study, a questionnaire-based methodology was used. There are recordings of the 120 farmer interviews. The research aims to determine the living and working situations of the populace. A complete understanding of the socioeconomic condition was the aim of this investigation. While many people have improved their quality of life, some are still in the same predicament. Therefore, these locations Socioeconomic status must be investigated, particularly about the community as a whole, occupational framework, academic achievement, labour force income, residential characteristics, and government programs. Variables like Age, education, land holding, family composition, source of information, and extension contact were selected to assess the socio-profile of the farmers. The study showed that the average age of the respondents was 66%, 84% of respondents had access to mobile phones. The majority of the respondents were small farmers which is about 57% also, it is observed that about 34% of farmers have completed their middle school. And most of them i.e., about 86% get their source of information from input dealers (Private agencies), 59% of respondents have extension contact with cooperative societies.

Keywords: Socio-economic determinants, quantitative and qualitative data, education

Introduction
Punjab, popularly known as the "land of rivers," is located in India's northwest. One of the world's most fertile regions is Punjab (the country of the five rivers). Over the last two decades, Punjab State has earned the nicknames "Food Basket of the Country" and "Granary of India," has contributed 40% of rice and 50% to 70% of wheat. A combined measure of an entity's social and economic standing among others in society is called socio-economic status (SES). It affects things like resource accessibility, way of life, food & nutritional security, etc. According to (Roy et al. 2013), it frequently predicts psychological and behavioural aspects, such as knowledge, attitude, perception, adoption, change-proneness, level of aspiration, capacity for taking risks, and economic incentive. People's responses to technological change and participation in development initiatives are greatly influenced by their socio-economic features, demographics, means of production and investment, income, and spending habits. However, one of the major obstacles to the effective implementation of developmental programs is the need for more reliable information regarding the socioeconomic situation of the target group (Pandey et al. 2018; Ramniwas et al. 2022 a&b). Increasing agricultural productivity with the aim of raising farmers' income and living standards is one of the key goals of rural development. The primary means of raising agricultural productivity in the nation is through better practices. The main issue nowadays, especially in developing nations, is socioeconomic position. The execution of several programs and initiatives has improved the socioeconomic situation of the population in rural areas. However, the economic development of rural populations could not be distributed uniformly throughout the area. Even in a small town, different economic classes might be discovered. It has long been believed that development is a process that enhances people's quality of life (Khadda et al. 2016 & 2018; Kasniya et al. 2022). Demographic data, monthly agriculture income and expenditures, habitation patterns of individuals in a particular area, and other data relating to their cultivation profile are all included in socioeconomic surveys. Based on these variables/dimensions, developing policies can be created and enhanced by maintaining the place as the primary focus.

Materials and Methods
The present study was designed to know the socio-economic status of the farmers in Shakrullapur, Rora, Bibipur, Batta, and Fatehpur Theri villages under Kharar tehsil, of SAS Nagar Mohali district of Punjab. The questionnaire-based methodology was adopted for study purposes. The research is based on the primary source of data. The interviews of 125 farmers were recorded.
The study area and the village overview included the Shakrullapur, Rora, Bibipur, Batta, and Fatehpur Theri village’s Census.

Data collection is done using the quantitative approach. The main data was produced as a result of a census that was conducted in these villages. 125 households in villages which comprises of all farmers, government employees as well as self-employed business holders. A systematic questionnaire and in-person door-to-door interviews were used to gather the data. Direct observation, focus group discussions, and community group interviews are also employed as quick evaluation methods. Personal interviews with senior and nearby villagers are also done to collect qualitative data. In the data's given below percentages are also given for a better understanding where we use the formula:

\[
\text{Percentage (\%)} = \frac{n}{N} \times 100
\]

where \(N\) is the total no. of respondents from all the 5 villages i.e., 125 respondents, \(n\) is the no. of respondents from each village.

### Results and Discussion

The following are the various topics examined under the socioeconomic survey:

#### Age

Age and qualification are the main parameters which affect each and every occupation. As per the data collected, most of the farmers lies 37% percentage are between the age of 30-40 years, 52% percentage are between the age of 40-60 years, and the rest 9% are above 60 years of age as shown in Table-1 and Fig-1.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Parameters</th>
<th>Shakrullapur n=31</th>
<th>Rora n=28</th>
<th>Bibipur n=26</th>
<th>Batta n=19</th>
<th>Their n=21</th>
<th>Overall % N=125</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>30-40</td>
<td>12</td>
<td>13</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>47(37.6%)</td>
</tr>
<tr>
<td>2.</td>
<td>40-60</td>
<td>15</td>
<td>10</td>
<td>18</td>
<td>10</td>
<td>13</td>
<td>66(52.8%)</td>
</tr>
<tr>
<td>3.</td>
<td>Above 60</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>12(9.6%)</td>
</tr>
</tbody>
</table>

### Table 1. Age data of 125 farmers

#### Type of mobile Phone, internet connectivity and Agricultural groups on social media

Overall, 84% of respondents have mobile phones and 68% of them have internet connectivity in their mobile phones. 24% of these frames are members of agricultural groups on social media (Facebook, WhatsApp, Twitter and Telegram). Only 16% of respondent do not have any mobile phone as shown in fig 2. All the respondent of Village Theri have mobile phones but only half of them have internet facility available in their phones.

![Figure 1. Age data of 125 farmers](image1)

![Figure 2. Represents technical connectivity of the farmers](image2)
Table 2. Demonstrate the land holding of farmers

<table>
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<tr>
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<th>Batta n=19</th>
<th>Their n=21</th>
<th>Overall % N=125</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Marginal</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>28(23%)</td>
</tr>
<tr>
<td>2.</td>
<td>Small</td>
<td>20</td>
<td>15</td>
<td>12</td>
<td>8</td>
<td>15</td>
<td>70(56%)</td>
</tr>
<tr>
<td>3.</td>
<td>Medium</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>18(14%)</td>
</tr>
<tr>
<td>4.</td>
<td>Large</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>9(7%)</td>
</tr>
</tbody>
</table>

In the above table-2 we can see that out of 125, most the farmer i.e., 56% comes under the category of small farmer who has 1-2 hectare. And then comes the marginal farmer 23% who has less than one-hectare land, followed by medium farmer 14% has 4-10 hectare land. The last large farmer 7% has more than 10-hectare land as shown in fig 3.

Figure 3. Represents the farmer categorization on the basis of land holdings

Table 3. Demonstrate the type of family

The survey was conducted according to that most of the respondents belong to the General category i.e., 99% from all selected villages. Though other categories are also existing in these villages but most of them are not landlords or farmers. They were engaged in some other occupations. Most of the farmers are of the general category. All them have pucca houses, none of the farmers have kaccha or even semi kaccha houses.

In the above table 3, we have represented the type of family. Most of them live in joint families 53.6%, and only 46.4% of farmers live in nuclear families.

Figure 4. Represents the farmer categorization on the basis of family type
The education of the 125 farmers from all five villages showed that 25.6% had attended primary school, 42.2% had finished Metric, 23.2% had finished high school, and 8.8% had graduated, as shown in figure 5. There were few illiterate farmers among the farmers. They explained that this was because they did not value education as much in the past, but as time and years went by, they began to value it greatly and encouraged their kids to pursue education by enrolling them in schools and colleges. Mentioned above in table 4 and represented in fig 5.

Every respondent has different sources of information and extension contacts. 58.4% of overall respondents have contact with input dealers which mainly act as good sources of information to the farmers regarding new seeds and agro-chemicals. Apart from this, farmers also take information from the newspaper 5.6%, Progressive farmers, friends 21.6% and from Kissan melas and field visits also enhanced the skills of the farmers around 11.2% of respondents visit Kissan melas organized in their nearby areas (Kharar, Ludhiana). 3.2% of young farmers have also installed agriculture apps in their phones to generate information, as shown in table 5 and fig 6.
Extension Contact
It was observed that the majority of the farmers have extension contact with input dealers (private agencies) which is about 44.8%, and the rest like SAU, Dept. of Agriculture, KVK and Cooperative societies, constitute of 17.6%, 3.2%, 10.4% and 24% as shown in table 6 and fig 7.

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<th>Their n=21</th>
<th>Overall % N=125</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SAU</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>22 (17.6%)</td>
</tr>
<tr>
<td>2.</td>
<td>Department of Agriculture</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>4 (3.2%)</td>
</tr>
<tr>
<td>3.</td>
<td>KVK</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>13 (10.4%)</td>
</tr>
<tr>
<td>4.</td>
<td>Input dealer</td>
<td>15</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>11</td>
<td>56 (44.8%)</td>
</tr>
<tr>
<td>5.</td>
<td>Co-op. Society</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>30 (24%)</td>
</tr>
</tbody>
</table>

**Table 6. Extension contacts of farmers**

Transport and communication
Automobiles with four or two wheels are the only mode of transportation on the road in the area. The village has a well-built mortar road connecting it to other villages in the district and the district's administrative centre. There are communication options, including phone and cell phone networks.

Vegetative pattern
Most of the population practice agriculture as their prime source of income the crops grown in this area include Paddy, Wheat, Sorghum, Berseem, Bajra, Sugarcane, Cauliflower, Maize etc.

Paddy and wheat were major crops grown in Shakrullapur, Rora, Bibipur, Batta, and Fatehpur Theri villages. The fodder crops grown for cattle were Sorghum, Bajra, and Berseem. The average areas under these crops are 3 hectares for rice, 4 hectares of land for wheat, 2 hectares of land for Bajra, and 1 hectare each for Jowar and Berseem. The total cost of production for paddy is Rs 30000 per hectare, for wheat Rs25000 per hectare, for Bajra Rs 26000 per hectare, for jowar Rs 29000 per hectare, and for berseem Rs 23000 per hectare. The yield per hectare goes as 35,58,35,30,12 quintals per hectare for paddy, wheat, Bajra, jowar, and berseem respectively.

Livestock production in Shakrullapur, Rora, Bibipur, Batta, and Fatehpur Theri

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Category</th>
<th>Breed</th>
<th>Number</th>
<th>Overall Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Buffalo</td>
<td>Murrah</td>
<td>100</td>
<td>9kg/day</td>
</tr>
<tr>
<td>2.</td>
<td>Cow</td>
<td>Holstein Friesian</td>
<td>15</td>
<td>7kg/day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Desi</td>
<td>50</td>
<td>4kg/day</td>
</tr>
</tbody>
</table>

**Table 7. Livestock in rural area**

Conclusion
The aspects that determine the farmer community's position in Shakrullapur, Rora, Bibipur, Batta, and Fatehpur Theri village of Punjab have been looked into in the current study. The primary source of data used in the study was gathered. The socioeconomic standing of farmers is determined by a number of elements, particularly those with an agricultural foundation. The regression model's log-linear form is utilized to estimate the parameters. The study concludes that factors such as the head of household's age, education, health, and usage of contemporary technologies substantially impact farmers’ standing. According to the socioeconomic survey, the residents of the Shakrullapur, Rora, Bibipur, Batta and Fatehpur theri villages have much room to improve their social and economic

![Figure 7. Extension contacts of farmer](image-url)
circumstances. With the expansion of educational opportunities in the region, the inhabitants have started to adopt modern living standards. If the village receives assistance from the government, such as modern agricultural technologies, appropriate schools, medical facilities, and other infrastructures, there can be much greater economic development in the area. In conclusion, we can say that the "Socioeconomic" study is a vital component of education since it enables us to understand the state of our society, people's standards of living, and our nation's social and economic situation. In light of this, the "Socio-Economic Survey" is crucial to our educational system.

Declaration of Interest
The authors have declared that no competing interest exists.

Data Sharing
All relevant data are within the paper and its supporting information files.

References


