### Socio-economic and institutional Characteristics of Vegetable Growers in Jaunpur District of Uttar Pradesh, India

**Abstract**

Vegetable cultivation has become highly commercialized. But there is a wide gap between current and desired production. To know the profile and problems faced by vegetable growers the study was undertaken in Karanjakala block of Jaunpur district of Uttar Pradesh. Two hundred fourteen (214) vegetable growers were randomly selected as respondents for the purpose of study. The findings reveal that majority of the respondents were in 36 to 54 years age group, having education up to intermediate. Majority of farmers belonged to other backward caste category, from joint families, having large size family, large land holdings and agriculture as main occupation, from medium income group and having 21 to 32 years of farming experience. Lack of government and non- government institutions for imparting training to the vegetable growers was perceived as the major problem, followed by unawareness about the modern vegetable cultivation technologies. Therefore, based on the findings of current study, it can be concluded that vegetable growers were middle aged; education is higher secondary with large family belonging to medium income group. Since the vegetable growers are from poor and medium income group, zero budget vegetable cultivation technologies and practices should be promoted as it is being promoted among poor women farmers of Bihar under Jeevika project.

***Key Words***: Socio-economic Profile, Problems, Vegetable Cultivation, farming experience, modern vegetable cultivation technologies

**Introduction**

India is one among the most vegetable growing countries. Vegetable crops play an important role in agricultural economy of India. India is known for its divergent climate and edaphic conditions. A large number of vegetable crops are grown by the farmers according to their suitability for climate, soils and socio-economic conditions. Vegetables make a major portion of human diet. Though the vegetable requirement is 300g/per day/per person, we are able to meet about 1/9th of the requirement only. Vegetables play a great role in essential nutrients, vitamins, minerals and fibre which may not be obtained only from staple food (Rawal and Ansari, 2020). A large number of vegetables in India have been introduced. However, a planned development in the field of vegetable production will not only improve the nutritional requirement for masses but can also meet the challenge of adequate food supply to the growing population in India (Hemathilake and Gunathilake, 2022). Vegetable production in Uttar Pradesh is still done in traditional way, however; extension is needed to make it organized (Ansari and Jantwal, 2019). Vegetables grows in wide variety of climatic conditions of Uttar Pradesh with main vegetables including potatoes, cauliflower, onions, cabbages, tomatoes and peas (Ahmad et al., 2017).

India is the second largest producer of vegetable in world next to China (Kumar and Ghosh, 2022). Current per capita consumption of vegetable is 175g per capita per day, which is far below recommended dose of 300g (ICMR). During 2023-2024, India produced 204.96 million metric tonnes of vegetables. Uttar Pradesh is second largest producer of vegetable after West Bengal (Sarkar et al., 2020). Despite all these achievements, vegetable farmers face many problems (Sharma et al., 2021). Hence, the understanding of profile and problems of vegetable farmers may help to make better policies for vegetable farmers (Rohit et al., 2017). Keeping this backdrop in mind, the present study was conducted in Jaunpur district of Uttar Pradesh with the following specific objectives.

1. To know the profile of vegetable growers.
2. To identify the problems in vegetables cultivation as perceived by the respondents.

**Research Methodology**

The study was conducted in the purposively selected Karanjakala Block of Jaunpur district in Uttar Pradesh. The data was collected from a sample of 214 families of 10 villages, which were selected randomly. The required information was collected through structured interview schedule. Collected data was tabulated and analyzed by using simple statistical techniques like frequency, percentage, mean, standard deviation and rank order.

**Result and discussion**

**Profile of the vegetable growers**

The profile of the vegetable growers was studied and the results so obtained are presented in this section. The data in Table 1 furnish information on distribution of the respondents with respect to their age.

**Table 1: Distribution of the respondents according to their age (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| 1. | <35 Years | 31 | 14.48 |
| 2. | 36 to 54 Years | 143 | 66.83 |
| 3. | 55 Years and above | 40 | 18.69 |
|  | Total | 214 | 100.00 |

**Mean = 44.67, SD = 9.19, Min = 28, Max = 72**

It is evident from the Table 1 that majority of the respondents (66.83 %) were in 36 to 54 years age category followed by 55 years and above (18.69%) and <35 years (14.48%). So, it focuses that the farmers of 36 to 54 years and 55 years and above age categories were mostly engaged in vegetable production in the area under study. This finding is similar to the findings reported by Kher (1996).

**Table 2: Distribution of the respondents according to their education (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| 1. | Illiterate | 22 | 10.28 |
| 2. | Primary | 7 | 03.27 |
| 3. | Middle | 16 | 07.47 |
| 4 | High School | 47 | 21.97 |
| 5. | Intermediate | 51 | 23.83 |
| 6. | Graduate | 44 | 20.57 |
| 7. | Post graduate | 27 | 12.61 |
|  | **Total** | **214** | **100.00** |

The Table 2 reveals that 10.28per cent respondents were illiterate. Among literate respondents the level of education ranged between primary and post-graduate. The education levels in descending order were found as Intermediate (23.83%), High school (21.97%), Graduate (20.57%), Post-graduate (12.61%), Middle (7.47%) and Primary (3.27%). This finding is contrary to the findings reported by Chandra (2000). Higher education and training in farmers helps them to choose proper management practices and preventive measures against diseases and pests in vegetables (Gautam et al., 2017).

**Table 3: Distribution of the respondents according to their caste category (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| **1.** | General Caste | 58 | 27.11 |
| **2.** | Other Backward Caste | 85 | 39.72 |
| **3.** | Schedule Caste | 71 | 33.17 |
| **Total:** | **214** | **100.00** |

The above Table 3 focuses that the majority of vegetable growers (39.72%) belong to other backward caste followed by scheduled caste (33.17%) and general caste (27.11%). It seems from the findings that major chunk of vegetable growers were from OBC and SC category. It may be because of cast based occupation factor. It has been seen in the study area that Maurya, Patel, Sonkar caste people are engaged in vegetable cultivation from generations. Their main occupation is growing and marketing the vegetables in local market. This finding is in line with the findings reported by Malik (1997).

**Table 4: Distribution of the respondents according to their family type (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| **1.** | Single | 86 | 40.18 |
| **2.** | Joint | 128 | 59.82 |
| **Total:** | **214** | **100.00** |

The above Table 4 projects that majority (59.82%) of the respondents were from joint families, while 40.18per cent respondents were from single family system. This finding is in line with the findings reported by Chand (2004).

**Table 5: Distribution of the respondents according to their family size (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| **1.** | Up to 5 members (small) | 87 | 40.65 |
| **2.** | Above 5 members (large) | 127 | 59.35 |
| **Total:** | **214** | **100.00** |

**Mean = 7.65, SD=2.12, Min=3, Max=20**

It is evident from Table 5 that 40.65per cent respondents were from small family followed by large size family (59.35%). The average size of the family was observed to be 7.65 members. This means that family size of the vegetable growers in the study area is relatively large. It might be due to joint family system prevailing in the study area. Vegetable cultivation is labor intensive occupation. Joint families have more number of people which makes the vegetable cultivation easier as compared to nuclear families having smaller family size.

**Table 6: Distribution of the respondents according to their size of land holding (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| **1.** | Marginal (below 1.0 ha) | 62 | 28.97 |
| **2.** | Small (1 to 2 ha) | 69 | 32.24 |
| **3.** | Large ( above 2 ha) | 83 | 38.79 |
| **Total:** | **214** | **100.00** |

**Mean = 1.83, SD= 0.70, Min= 0.25, Max= 5**

The Table 6 indicates that the most of the respondents (38.79%) were large farmers followed by small farmers (32.24%) and marginal farmers (28.97%). The average size of land holding of the respondents was found to be 1.83 ha. Hence, it may be said that all type of farmers were doing vegetable cultivation. It may be because of good market prices of vegetables. This finding is contrary to the findings reported by Kaur (1993).

**Table 7: Distribution of the respondents according to their occupation (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| **1.** | Agriculture | 134 | 62.62 |
| **2.** | Caste based occupation | 06 | 02.80 |
| **3.** | Service + Agriculture | 35 | 16.36 |
| **4.** | Business + Agriculture | 39 | 18.22 |
| **Total:** | **214** | **100.00** |

Table 7 reveals that the majority of the respondents (62.62%) had agriculture as their main occupation followed by business (18.22%), service (16.36%) and caste based occupation (2.80%). This finding is in line with the findings reported by Sonkar (2009).

**Table 8: Distribution of the respondents according to their family income (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| **1.** | Low Income (Upto Rs 161145) | 70 | 32.71 |
| **2.** | Medium Income (**Rs** 161146 to 271453) | 81 | 37.85 |
| **3.** | High Income (**Rs** 271454 and above) | 63 | 29.44 |
| **Total:** | **214** | **100.00** |

**Mean = 216299.06, SD = 55154.32, Min= 65000, Max= 655000**

It is obvious from Table 8 that majority (37.85%) of the respondents were from medium income group followed by low income group (32.71%) and high income group (29.44%). The average income was observed to be Rs. 216299.06 with a range of minimum Rs 65,000 to maximum Rs 6,55,000. This finding is contrary to the findings reported by Lal (2006).

**Table 9: Distribution of the respondents according to their farming experience (**n=214)

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No** | **Categories** | **Frequency** | **Percentage** |
| **1.** | Up to 20 years | 59 | 27.57 |
| **2.** | 21 to 32 years | 110 | 51.40 |
| **3.** | 33 years and above | 45 | 21.03 |
|  | Total | 214 | 100.00 |

**Mean = 26.47, SD = 6.36, Min=13, Max=55**

The data presented in Table 9 show that more than half of the respondents (51.40%) were having 21 to 32 years of farming experience followed by up to 20 years of experience (27.57%) and 33 years and above experience (21.03%). The mean score of agriculture experience was found to be 26.47 years with a range from minimum 13 to maximum 55 years. Thus, it can be said that the maximum number of respondents were having more than 20 years of farming experience

**Problems perceived by the vegetable growers**

**Table 10: Distribution of respondents according to perceived problems in vegetable cultivation**

|  |  |  |  |
| --- | --- | --- | --- |
| **S. No.** | **Items** | **F (%)****n=1563** | **Rank order** |
| 1. | Unawareness about the modern vegetable cultivation technologies | 175(11.19) | II |
| 2. | Low level of literacy | 142(9.09) | VIII |
| 3. | Confined social contact and interaction | 135(8.64) | X |
| 4. | Lack of mass media exposure | 155(9.92) | VI |
| 5. | Lack of extension contact | 163(10.43) | IV |
| 6. | Lack of attitude for commercial farming of vegetable | 137(8.77) | IX |
| 7. | Low cognitive level about the potentialities of high yielding varieties of vegetable crop | 157(10.04) | V |
| 8. | Lack of knowledge about appropriate marketing of vegetable products for more income | 148(9.47) | VII |
| 9 | Lack of Govt. and Non-Govt. institutions for imparting training to the vegetable growers | 177(11.32) | I |
| 10 | Lack of information about Govt. and Non-Govt. training institutions | 174(11.13) | III |
|  | **Total** | **1563** |  |

# Multiple responses were allowed

The Table 10 reveals that lack of Govt. and Non-Govt. institutions for imparting training to the vegetable growers was perceived as the major problem, followed by Unawareness about the modern vegetable cultivation technologies (rank II), Lack of information about Govt. and Non-Govt. training institutions (rank III), Lack of extension contact (rank IV), Low cognitive level about the potentialities of high yielding varieties of vegetable crop (rank V), Lack of mass media exposure (rank VI), Lack of knowledge about appropriate marketing of vegetable products for more income (rank VII), Low level of literacy (rank VIII), Lack of attitude for commercial farming of vegetable (rank IX), Confined social contact and interaction (rank X). Hence it may be said that, every problem has a considerable degree of seriousness which were responsible for not having training facilities available on vegetable grower’s level. These finding are in line with the findings reported by Chand (2004), Thyagarajan and Prabu (2005), and Sonkar (2009).

**Conclusion**

The findings of the present study hold a great potential in the field of extension education research as well as for planning and implementation of need based training to the vegetable growers. Lack of Govt. and Non-Govt. institutions for imparting training to the vegetable growers and unawareness about the modern vegetable cultivation technology were the major problems reported by vegetable growers. On the basis of findings it is suggested that Govt. should open more number of farmer’s training centers for imparting training to the vegetable growers. Extension workers should use mass media for creating awareness about the modern vegetable cultivation technologies. Gramin Gyan Kendras and KVK need to be established in this part of the country. Since the vegetable growers are from poor and medium income group, zero budget vegetable cultivation technologies and practices should be promoted as it is being promoted among poor women farmers of Bihar under Jeevika project.

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