



Socio-economic profile of vegetables growers at different size group of farms in District Meerut western U.P.

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ABSTRACT

The present investigation attempts to scrutinize the socio-economic profile of vegetable farmers of District-Meerut Uttar Pradesh. The study was conducted in four villages located at Meerut district comprise of 4 blocks in which one blocks namely i.e. Mawana, Parichitgarh, Macchhara and Khakhonda were purposively selected. Four villages from four blocks were purposively selected vegetables growers. Thus the total sample size was of 125 farmer respondents. The data were collected through personal interview. The data were analysed and find out the tabulation, percentage and rank order. The findings of the study reveal that, the 52.0 per cent of the vegetable farmers had high school education. Among the sample about 46.4 per cent of farmers were small. The study revealed that the farmer can get an additional income of about Rs. 910 per day.in addition to their routine work from their production of different vegetables.

Key words: Socio-economic profile, sugarcane grower farmers, different Size groups of farms

Received 21.05.2021

Revised 22.06.2021

Accepted 15.07.2021

INTRODUCTION

Among the low income households vegetable cultivation has an increasingly important commercial role to play. It has great potentiality and scope for improving socio-economic condition of small and marginal farmers as vegetable growing in comparison to food grains cultivation provides higher yield and high economic return in short time. Vegetable growing being an intensive programme, it has more income per unit area and employment generation in short span of time [1]. In India where per capita availability of land has been gradually decreasing and as such the small holdings are becoming smaller day by day and the deprived farmers are in a fix to adopt modern agricultural practices [2]. The exorbitant increase in the price of agricultural inputs is making traditional agriculture less remunerative. Whatever they are India has been bestowed with wide range of climate and physico-geographical conditions and as such is most suitable for growing various kinds of vegetables. Vegetables are important constituents of Indian agriculture and nutritional security due to their short duration, higher production, nutritional richness, economic viability and ability to generate on-farm and off-farm employment[4,5]. India has witnessed voluminous increase in horticulture production over the last few years. Significant progress has been made in area expansion resulting in higher production. During 2017-18, the total area under horticulture crops was also up by 3.26 per cent at 25.66 million hectares (mha) from 24.85 million hectares (mha) in 2016-17. Horticulture production of the country is estimated to be 306.82 million tonnes during 2017-18, which is 2.05 per cent higher than the previous year's 300.64 million tonnes, and 8.5% higher than the past five years average production according to the third advance estimates of horticultural production released by the Agriculture Ministry. To address the problem of small, marginal or landless farmers, GOI started the Farmer The programme aims at enhancing farmer's scientist interface for technology development and application [6]. It was, therefore, required to study the profile of vegetable growers to get some knowledge about socio economic profile of vegetable growers.

MATERIAL AND METHODS

Present study was conducted in the adopted villages of Farmer Meerut district comprise of 4 blocks in which one blocks namely i.e. Mawana, Parichitgarh, Mawana and Khakhonda were purposively selected. Four villages from four blocks were purposively selected and sugarcane growers were selected from all

villages. Thus the total sample size was of 125 farmer respondents. The data were collected through personal interview with the help of pre structured schedule. The data were analysed and find out the tabulation, percentage and rank order. A total of 125 farmers were under study during the two consecutive years 2018-2019. Precise sampling and study twenty (125) farmers from each village and a total of sixty (125) farmers were selected under production of vegetables in surrounding area in house during the study. They were provided with plug trays, farm yard manure (FYM), improved seeds of vegetables, for an area of about 4000 m² (1acre) under Farmer Pre testing interview schedule was prepared for primary data collection, whereas the secondary data were collected from base line survey of the project, Gram Panchayat, Sarpanch, Sachive and progressive farmers through direct face to face interviews. Frequency, percentage distribution and mean yield and income were used as statistical tools for the study for vegetable growers.

RESULTS AND DISCUSSION

The socio-economic approach is mainly concerned with the social, economic, and political aspects of individuals or social groups in society. Generally the socioeconomic approach focuses on identifying the adaptive capacity of individuals or communities based on their internal characteristics such as age, education, size of land holding, social participation, and farm power and so on [1-3]. Variations of these factors are responsible for the variations in socioeconomic characteristics of farmers. The findings about the socioeconomic status of the study area are given in the Table 1.

On the basis of age

Investigation indicates that majority of the vegetable farmers (44.0%) were in middle age group, 22.4 per cent of vegetable farmers belonged to old age group and 31.67 per cent vegetable farmers were in young age group.

On the basis of education

Response with regards to education a higher percentage of (52.0 %) of respondents possessed high school and above level of formal education followed by middle school level (29.6 %), illiterate (0.04%) and primary level (17.06%) of education.

On the basis of Land Holding

Investigated depicts that 32.80 per cent of vegetable farmers were having less than 1 ha of land, thus belonged to marginal farmers category. The farmers who belonged to small and medium categories were 46.40 per cent and 0.08 per cent, respectively. Data also shows that none of vegetable farmers were having large land holding. Thus, it may be concluded that majority of the vegetable farmers were small farmers having 1.01 to 1 hectare of agricultural land. This is due to the fact that in Madhya Pradesh, per capita agricultural land is comparatively less. The other reason may be the fragmentation of the holdings due to nuclear family system [4].

On the basis of Social Participation

The table 1 shows that the high school participation 52.0 per cent of the vegetable farmers were the member of one organization, while medium 38.4 % were the member of 11-15 organizations. In this way, 80% of vegetable farmers were associated with the organizations like panchayats, cooperatives, youth-club, religious and political organization [5]. It can also be concluded that only 4.39% of vegetable farmers were holding office in one or more organization.

On the basis of Farm Power

Vegetables production from the farm power shows the number of instruments the farmer has to deploy for its agricultural needs and allied farming. For measuring the variable, open response from farmers was recorded. Table 1 depicts that majority of vegetable farmers (5.12%) had low level of farm power followed by medium level (2.48%). With regards to Psychological attributes of the respondent's i.e. economic motivation, scientific orientation and innovation proneness among the respondents were studied. With regards to economic motivation a higher percentage of (4.00 %) economic motivation was carried out by medium group of respondents followed by high group (3.28%) and low (2.56%). Scientific orientation was high among medium group of respondents i.e. 4.48% followed by high group of respondents (3.36 %) whereas low vegetable growers (2.48%) had high level of innovation proneness. (Table-1) In the study of communicational attributers of the respondent's due to time to time contact and providing need based trainings to the farmers by the farmer [7]. They had high mass media exposure 4.05% and followed by medium 3.36%. Contact with the development agencies high 4.0% followed by medium 3.36% in the Table-1.

The findings, income generation of the farmers through vegetable production of the investigation area are given in Table 2, reveals that the distribution of production potential of vegetables at farmer's field i.e. brinjal, tomato, okra, chilli and cabbage all were cultivated in 365, 365, 348, 300 and 285 m² followed by cauliflower, bitter guard and bottle guard in 125, 112, and 100 m² all vegetables were grown in total

2000 m² area. The production potential of vegetable in terms of average production showed that brinjal, followed by tomato was more remunerative in terms of production. The economic analysis of the inputs and out puts of the vegetables growers showed that on the basis of average production and cost involved in the production for the eight different vegetables (Table-3) shows that a family having an area of (½ acre) 2000 m² can earn net return of Rs. 12138 from brinjal followed by Rs. 11507 from tomato, Rs. 6469 from bitter melon, Rs. 5541 from cauliflower, Rs. 5038 from okra, Rs. 3997, Rs. 1375 from chilli and Rs. 1134 from bottle gourd. Further it shows that the farmer can get an additional income of about Rs. 910 per day in addition to their routine work with the production of different vegetables [2]. The socioeconomic characteristics of farmers are important for better policy options. On the basis of the findings it is suggested that socio-economic status of the farmers can be improved by imparting technical knowledge/training to vegetable farmers, increasing their education level and increasing their social participation are very needful.

Table.1 The socioeconomic profile of vegetable growers (Mean two consecutive years 2018-19 and 2019-20)

| S.No. | Categories of attributes | Categories of respondents | | | |
|--|--|---------------------------|----------------|-------------|----------|
| | | N-125 | | | Percent |
| A Socio personal attributes of the respondents | | | | | |
| 1. | Age | 2018-19 | 2019-20 | Mean | % |
| | Young (18 – 35 years) | 36 | 32 | 34 | 27.2 |
| | Middle (36 – 55 years) | 56 | 54 | 55 | 44.0 |
| | Old (above 55 years) | 27 | 29 | 28 | 22.4 |
| 2. | Education | | | | |
| | Illiterate | 06 | 04 | 05 | 0.04 |
| | Primary passed | 23 | 21 | 22 | 17.6 |
| | Middle passed | 36 | 38 | 37 | 29.6 |
| | High school passed and above | 67 | 63 | 65 | 52.0 |
| 3. | Size of land holdings | | | | |
| | Marginal (0.5 to 1.0 ha) | 43 | 39 | 41 | 32.8 |
| | Small (1.1 to 1.5 ha) | 59 | 57 | 58 | 46.4 |
| | Medium (1.6 to 2.0 ha) | 12 | 10 | 11 | 0.08 |
| | Large (2.1 to 2.5 ha) | 03 | 05 | 04 | 0.03 |
| 4. | Social participation | | | | |
| | Low (5 – 10) | 27 | 31 | 29 | 23.2 |
| | Medium (11 – 15) | 24 | 24 | 48 | 38.4 |
| | High (16 – 20) | 38 | 24 | 65 | 52.2 |
| 5. | Farm power | | | | |
| | Low (Up to 5) | 62 | 66 | 64 | 5.12 |
| | Medium (13 – 16) | 29 | 33 | 31 | 2.48 |
| | High (above 16) | 22 | 25 | 24 | 1.92 |
| 6. | Material process | | | | |
| | Low (Up to 12) | 49 | 53 | 51 | 4.08 |
| | Medium (13 – 16) | 38 | 42 | 40 | 3.20 |
| | High (above 16) | 29 | 33 | 31 | 2.48 |
| B Psychological attributes of the respondents | | | | | |
| 1 | Economic Motivation | | | | |
| | Low (24 – 30) | 30 | 34 | 32 | 2.56 |
| | Medium (31 – 36) | 51 | 49 | 50 | 4.00 |
| | High (37 – 42) | 39 | 43 | 41 | 3.28 |
| 2. | Scientific orientation | | | | |
| | Low (24 – 30) | 34 | 28 | 31 | 2.48 |
| | Medium (31 – 36) | 59 | 53 | 56 | 4.48 |
| | High (37 – 42) | 45 | 39 | 42 | 3.36 |
| 3 | Innovation proneness | | | | |
| | Low (Up to 5) | 19 | 23 | 21 | 1.68 |
| | Medium (6 – 9) | 39 | 43 | 41 | 3.28 |
| | High (above 9) | 51 | 53 | 52 | 4.16 |
| C Communicational attributes of the respondents | | | | | |
| 1. | Mass media exposure | | | | |
| | Low (up to 7) | 27 | 29 | 28 | 2.24 |
| | Medium (8 – 11) | 41 | 43 | 42 | 3.36 |
| | High (above 11) | 53 | 49 | 51 | 4.08 |
| 2. | Contact with development agencies | | | | |
| | Low (Up to 6) | 23 | 25 | 24 | 1.68 |
| | Medium (7 – 10) | 41 | 43 | 42 | 3.36 |
| | High (above 10) | 52 | 48 | 50 | 4.00 |

Table.2: Vegetables production potential at farmer's field (Mean two consecutive years 2018-19 and 2019-20))

| S. No. | Name of crop | Area (m ²) | | | Average production (Kg) | | | Duration (Days) | | |
|--------|--------------|------------------------|-------------|-------------|-------------------------|-------------|-------------|-----------------|------------|------------|
| | | 2018-19 | 2019-20 | Mean | 2018-19 | 2019-20 | Mean | 2018-19 | 2019-20 | Mean |
| 1 | Okara | 348 | 344 | 346 | 369 | 373 | 371 | 86 | 88 | 87 |
| 2 | Bottle Guard | 100 | 114 | 107 | 162 | 166 | 164 | 88 | 92 | 90 |
| 3 | Chilli | 300 | 350 | 325 | 152 | 164 | 158 | 140 | 142 | 141 |
| 4 | Brinjal | 365 | 365 | 365 | 1675 | 1547 | 1611 | 124 | 126 | 125 |
| 5 | Tomato | 365 | 331 | 348 | 1370 | 1236 | 1303 | 125 | 129 | 127 |
| 6 | Cabbage | 285 | 265 | 275 | 1317 | 1325 | 1321 | 114 | 116 | 115 |
| 7 | Cauliflower | 125 | 117 | 121 | 1065 | 1197 | 1131 | 109 | 115 | 112 |
| 8 | Bitter guard | 112 | 114 | 113 | 956 | 116 | 536 | 182 | 186 | 184 |
| | Total | 2000 | 2000 | 2000 | 7066 | 6124 | 6595 | 968 | 994 | 981 |

Table.3: Income generation of the production of vegetables from half acre area (Mean two consecutive years 2018-19 and 2019-20)

| S. No. | Name of crop | Area m ² | | | Cost of cultivation (Rs.) | | | Gross return (Rs.) | | | Net return (Rs.) | | | Net Income / Day | | |
|--------|--------------|---------------------|-------------|-------------|---------------------------|--------------|--------------|--------------------|--------------|--------------|------------------|--------------|--------------|------------------|------------|------------|
| | | 2018-19 | 2019-20 | Mean | 2018-19 | 2019-20 | Mean | 2018-19 | 2019-20 | Mean | 2018-19 | 2019-20 | Mean | 2018-19 | 2019-20 | Mean |
| 1 | Okara | 348 | 344 | 346 | 2823 | 2873 | 2848 | 8153 | 7619 | 7886 | 7886 | 2848 | 5038 | 98 | 94 | 96 |
| 2 | Bottle Guard | 100 | 114 | 107 | 765 | 629 | 697 | 1866 | 1796 | 1831 | 1831 | 697 | 1134 | 105 | 111 | 108 |
| 3 | Chilli | 300 | 350 | 325 | 1166 | 1130 | 1148 | 2532 | 2514 | 2523 | 2523 | 1148 | 1375 | 145 | 135 | 140 |
| 4 | Brinjal | 365 | 365 | 365 | 2176 | 2210 | 2193 | 14525 | 14137 | 14331 | 14331 | 2193 | 12138 | 135 | 133 | 134 |
| 5 | Tomato | 365 | 331 | 348 | 2676 | 2596 | 2636 | 14327 | 13959 | 14143 | 14143 | 2636 | 11507 | 138 | 136 | 137 |
| 6 | Cabbage | 285 | 265 | 275 | 2395 | 2415 | 2405 | 5945 | 6859 | 6402 | 6402 | 2405 | 3997 | 96 | 94 | 95 |
| 7 | Cauliflower | 125 | 117 | 121 | 1267 | 1213 | 1240 | 6780 | 6782 | 6781 | 6781 | 1240 | 5541 | 84 | 88 | 86 |
| 8 | Bitter guard | 112 | 114 | 113 | 1126 | 1152 | 1139 | 7321 | 7895 | 7608 | 7608 | 1139 | 6469 | 112 | 116 | 114 |
| | Total | 2000 | 2000 | 2000 | 14394 | 14218 | 14306 | 61449 | 61561 | 61505 | 61505 | 14306 | 47199 | 913 | 907 | 910 |

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CITATION OF THIS ARTICLE

Ashwani Kumar and O.K.Tiwari. Socio-economic profile of vegetables growers at different size group of farms in District Meerut western U.P. *Bull. Env. Pharmacol. Life Sci.*, Vol10[8] July 2021 : 222-226