



Socio-Economic symptoms of sugarcane growers in Meerut District of western U.P. India

Ashwani Kumar¹ and O.K.Tiwari²

Department of Agricultural Extension,

¹CSSS (PG) College, Machhara, Meerut

² A.S.College, Lakhaoti, Bulandshahr

*Corresponding Author E-mail: ak5206428@gmail.com

ABSTRACT

The present investigation was carried out during the year 2019-20 in Meerut district of western U. P. to know the socio-economic symptoms of sugarcane growers. A total of 125 sugarcane growers constituted the sample size for the investigated and data were collected randomly by means of personal interview with the help of schedule. The socioeconomic approach is mainly concerned with the social, economic, and political aspects of individuals or social groups in society. Variations of these factors are responsible for the variations in socioeconomic characteristics of farmers. Age categories: Study indicates that majority of the sugarcane farmers (50.42%) Cast: It was found that 37.92 per cent of sugarcane farmers belonged to General, Education: The majority (34.17%) of the sugarcane farmers had up to intermediate Marital stage: Study indicates that majority of the sugarcane farmers (50.42%) were found optimum age from 21-25. Family type: Study indicates that majority of the sugarcane farmers (70.84%) were found joint family. Size of family: Study indicates that majority of the sugarcane farmers were family size of medium 47.92 per cent. Live stock possession: Study indicates that majority of the sugarcane farmers were medium dairy size of family 27.51 per cent. Annual Income: The table 1 reveals that the annual income of 48.34% sugarcane farmers was found in the medium category of 50001 to 1,00,000 followed. Sugarcane insect pest management: Study indicates that majority of the sugarcane farmers were found use of inorganic fertilizer 52.92 percent.

Key words: Socio-economic, Sugarcane, Growers.

Received 11.05.2021

Revised 22.06.2021

Accepted 15.07.2021

INTRODUCTION

Sugarcane (*Saccharum officinarum* L.) is the main sources of sugar in India and holds a prominent position as a cash crop. India is the world's largest consumer and the second largest producer of sugar, topped only by Brazil. Nearly 2.8 lakh farmers have been cultivating sugarcane in the vast area of 4.4 lakh acres and over 11 crore people are directly or indirectly dependent on the sugar industry in the country. Sugarcane is one of the important commercial crops of India, grown in an area of 3.93 m. ha with annual production of 170 M.T. Sugarcane productivity in India is around 67 t/ha. It is one of the most important food-cum-cash crop grown in the country, providing employment to a larger number of people, in addition to earning considerable foreign exchange. The sugarcane sector plays a significant role in Indian economy as it provides raw material for sugar and industries producing alcohol, paper, chemicals and cattle feed. The sugarcane processing network consisting of 762 installed sugar mills has a number of associated industries and backward and forward linkages[1-5]. Due to multi-purpose uses of sugarcane and its by products in various industries, the demand for increased production of sugarcane is growing. There has been a steady growth in area under sugarcane cultivation in India. The area was only 17.07 lakh hectares in 1950-51; it increased to 51.11 lakh hectares in 2018-19. The production of sugarcane was about 123.86 million tonnes by the mid-seventies, which rose to 400.15 million tonnes in 2018-19. The average productivity was 78.23 tonnes/hectare in that year. Uttar Pradesh is the main sugarcane-growing state in the country, allocating about 22 lakh hectares for cane cultivation, followed by Maharashtra with about 8.98 lakh hectares [6-7]. Karnataka, Tamil Nadu, Gujarat and Andhra Pradesh are other major cane-growing states in the tropical region. In the sub-tropical region, Bihar, Haryana, Uttarakhand and Punjab are the key cane-growing states, besides UP. Sugarcane is a labour-intensive crop of long duration (12 months in the sub-tropical region and 12-18 months in the tropical region), which requires 150-180 labour days per hectare in sub-tropical and around 250-300 days in the tropical

south region. Most of the operations in cane cultivation are carried out manually and the use of machinery is limited to operations like field preparation by a majority of the farmers [8]. The human labour (HL) component accounted for 32.3% of the total cost of sugarcane cultivation and the factor share of labour in the value of output has marginally increased from 4.5% to 4.7% at the all-India level.

MATERIAL AND METHODS

Present investigation 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 120 farmer respondents. The data were collected through personal interview. The data were analysed and find out the tabulation, percentage and rank order. A total of 120 farmers were under investigation during the two consecutive years 2018-2019. Precise sampling and investigated 30 farmers from each village and a total of sixty (120) farmers were selected under production of sugarcane in surrounding area of sugarcane. They were provided with plug trays, farm yard manure (FYM), improved seeds of sugarcane 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, Gram Panchayat, Sarpanch, Sachive and progressive farmers through direct face to face interviews. Frequency, percentage and mean yield and income were used as statistical tools for the study for sugarcane growers.

RESULTS AND DISCUSSION

The socioeconomic approach is mainly concerned with the social, economic, and political aspects of individuals or social groups in society. 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 Table 1.

Age categories: Study indicates that majority of the sugarcane farmers (50.42%) were in middle age 36-50 age group, 39.84 per cent of vegetable farmers belonged to old age 50 above group & 30.01 per cent sugarcane farmers were in young age 25-35 group.

Cast: It was found that 37.92 per cent of sugarcane farmers belonged to General, followed by OBC caste category in 25.42 %, SC (9.17%) and. Only (2.02 %) respondent was found from ST category.

Education: The majority (34.17%) of the sugarcane farmers had up to intermediate followed by high school level (30.42%), graguante level (17.51%).

Marital stage: Study indicates that majority of the sugarcane farmers (50.42%) were found optimum age from 21-25 followed by later age more than 25 year old (31.67 %).

Family type: Study indicates that majority of the sugarcane farmers (70.84%) were found joint family and single family are 36.26 per cent sugarcane growers.

Size of family: Study indicates that majority of the sugarcane farmers were family size of medium 47.92 per cent followed by small family 33.76 per cent of sugarcane growers.

Land holding size: Study depicts that 59.17 per cent of sugarcane 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 23.34 per cent and 17.51 per cent, respectively.

Live stock possession: Study indicates that majority of the sugarcane farmers were medium dairy size of family 27.51 per cent followed by Big dairy farming 18.34 per cent.

Annual Income: The table 1 reveals that the annual income of 48.34% sugarcane farmers was found in the medium category of 50001 to 1,00,000 followed by 42.09 per cent vegetable farmers in low income category (upto 100000) and 18.34 per cent sugarcane farmers in high income category (below than 50,000).

Sugarcane insect pest management: Study indicates that majority of the sugarcane farmers were found use of inorganic fertilizer 52.92 percent followed by 37.42 use of cultural practices, 34.17 per cent use of mechanical & organic manure and very less than bio logical pest management 15.84 per cent.

Table: 1. Socio economic symptoms of sugarcane production mean two consecutive years (2018-19 and 2019-20)

Socio-economic characteristics of sugarcane growers	Particular N=120					
	2018-19		2019-20		Pooled	
Age categories (years)	Frequency	%	Frequency	%	Freq.	%
Young age (25- 35)	34	28.34	38	31.67	36.00	30.01
Middle age (36 to 50)	59	49.17	62	51.67	60.50	50.42
Old age (above 50)	47	37.17	51	42.50	49.00	39.84
Cast						
General caste	43	35.84	48	40.00	45.50	37.92
Other backward caste (OBC)	28	23.34	33	27.50	30.50	25.42
Scheduled caste (SC)	10	08.34	12	10.00	11.00	9.17
Scheduled Tribe (ST)	02	01.67	03	02.50	2.50	2.09
Education						
Primary school	09	07.50	12	10.0	10.50	8.75
Middle school	17	14.17	21	17.50	19.00	15.84
High school	34	28.34	39	32.50	36.50	30.42
Intermediate	39	32.50	43	35.84	41.00	34.17
Graduate	23	19.17	19	15.84	21.00	17.51
Post graduate	16	13.34	14	11.67	15.00	12.51
Marital Stage						
Early age (Up to 20)	36	30.00	38	31.67	37.00	30.84
Optimum age (From 21 to 25)	58	48.34	63	52.50	60.50	50.42
Late age (More than 25 years)	39	32.50	37	30.84	38.00	31.67
Family type						
Single Family	43	35.84	44	36.67	43.50	36.26
Joint Family	87	72.50	83	69.17	85.00	70.84
Size of family						
Small (1- 4 members)	38	31.67	43	35.84	40.50	33.76
Medium (5-13 members)	56	46.67	59	49.17	57.50	47.92
Large (more than 13 members)	18	15.00	21	17.50	19.50	16.25
Land holding size						
Marginal (below 1 ha)	73	60.84	69	57.50	71.00	59.17
Small (1-2 ha)	27	22.50	29	24.17	28.00	23.34
Medium (2-4 ha)	19	15.84	23	19.17	21.00	17.51
Large (above 4 ha)	12	10.00	16	13.34	14.00	11.67
Live stock Possession						
Small dairy (1-4 milch animal)	13	10.84	16	13.34	14.50	12.09
Medium dairy (5-14 milch animal)	32	26.67	34	28.34	33.00	27.51
Big dairy (more than 14 milch animal)	19	15.84	25	20.84	22.00	18.34
Annual Farm Income						
Low (Below Rs. 50,000/-)	21	17.50	23	19.17	22.00	18.34
Medium (Rs. 50,001-1,00,000/-)	57	47.50	59	49.17	58.00	48.34
High (Above 1,00,000/-)	49	40.84	52	43.34	50.50	42.09
Sugarcane insect pest management						
Cultural control	42	34.00	49	40.84	45.50	37.42
Mechanical control	37	30.84	45	37.50	41.00	34.17
Biological pest control	15	12.50	23	19.17	19.00	15.84
Use of bio-pesticides	21	17.50	29	24.17	25.00	20.84
Application of organic manures	37	30.84	45	37.50	41.00	34.17
Use of inorganic fertilizer	68	56.67	59	49.17	63.50	52.92

CONCLUSION

It is concluded that majority of the respondents' belonged to old age group, other backward caste, married in optimum age and read and write. The socioeconomic approach is mainly concerned with the social, economic, and political aspects of individuals or social groups in society. Variations of these factors

are responsible for the variations in socioeconomic characteristics of farmers. Age categories: Study indicates that majority of the sugarcane farmers (50.42%) Cast: It was found that 37.92 per cent of sugarcane farmers belonged to General, Education: The majority (34.17%) of the sugarcane farmers had up to intermediate Marital stage: Study indicates that majority of the sugarcane farmers (50.42%) were found optimum age from 21-25. Family type: Study indicates that majority of the sugarcane farmers (70.84%) were found joint family. Size of family: Study indicates that majority of the sugarcane farmers were family size of medium 47.92 per cent. Live stock possession: Study indicates that majority of the sugarcane farmers were medium dairy size of family 27.51 per cent. Annual Income: The table 1 reveals that the annual income of 48.34% sugarcane farmers was found in the medium category of 50001 to 1,00,000 followed. Sugarcane insect pest management: Study indicates that majority of the sugarcane farmers were found use of inorganic fertilizer 52.92 percent.

REFERENCES

1. Arun Kumar Pal, Rahul Katiyar, H.C. Singh and Rajmani (2017). Socio-Economic Profile of Sugarcane Growers in District Moradabad, Uttar Pradesh, India; *Int.J.Curr.Microbiol.App.Sci* (2017) 6(9): 1217-1229.
2. Dan Singh, R.N. Yadav, D.K. Singh, Gopal Singh, Rajendra Singh and Balvir Singh (2018) .Effectiveness of Extension Methods for Knowledge and Skill Development *Indian Journal of Extension Education* Vol. 54, No. 4, (147-152).
3. Dheerendra Kumar, A. S. Maurya, Jagatpal, Sanjay Kumar¹ and Gaurav Kumar (2017). Socio-Economic Characteristics of Sugarcane Growers in Hamirpur District of Uttar Pradesh; *Int. J. Pure App. Biosci.* 5 (6): 571-573.
4. Lalit Kumar Verma and Arun Solanki (2020). Cost and Returns Analysis of Sugarcane Production in Baghpat district of Western Uttar Pradesh, India; *Int.J.Curr.Microbiol.App.Sci* (2020) 9(1): 733-739.
5. Mohammad Imran Khan, Sharad Bisen and Gaurav Mahajan (2020). Socio-Economic Profile of Vegetable Growers under Horticulture based Module of Farmer FIRST Project in Balaghat (M.P.), India; *Int.J.Curr.Microbiol.App.Sci* (2020) 9(3): 3252-3257.
6. Nisha, DP Malik, KK Kundu and Neeraj (2020). Economic returns and elements influencing sugarcane cultivation in Haryana; *International Journal of Chemical Studies* 2020; 8(3): 2776-2780
7. S.P. Singh, B. Gangwar and M.P. Singh (2007). Economics of Sugarcane-based Farming System in Western Uttar Pradesh; *Agricultural Economics Research Review* Vol. 21 January-June 2008 pp 109-117.
8. Subhash Chandra, Vinay Kumar Rawat and Satish Chandra Verma (2020). The profitability of sugar cane cultivation on the sample farmers Basti district in Eastern U. P. ; *The Pharma Innovation Journal*; SP-10(10): 524-529.

CITATION OF THIS ARTICLE

Ashwani Kumar and O.K.Tiwari. Socio-Economic symptoms of sugarcane growers in Meerut District of western U.P. India. *Bull. Env. Pharmacol. Life Sci.*, Vol10[8] July 2021 : 218-221