Socio-Economical Profile and its Correlation with Entrepreneurial Behaviour of Vegetable Growers in Varanasi District of Uttar Pradesh

ABSTRACT

Vegetables are widely grown crops throughout the country as a commercial crop. Vegetables constitute an important item of human diet Vegetables are important constituents of Indian agriculture and nutritional security due to their short duration, high yield, nutritional richness, economic viability and ability to generate on-farm and off-farm employment. Our country is blessed with diverse agro-climates with distinct seasons, making it possible to grow wide array of vegetables. Farmers deciding to take particular crop or use scientific methods to grow crops exhibit entrepreneurial behaviour. Understanding of such behaviour is essential to improve the quality of extension services offered by the institutional and non-institutional agencies. So the present study was carried out during the year 2021-2022 in four blocks of Varanasi district of Uttar Pradesh with the objective to study the socio-economic profile of vegetable growers and to find out the correlation between socio-economic profile and entrepreneurial behaviour. Ex-post-facto design was selected as an appropriate research design to investigate the variables influencing the entrepreneurial behaviour of vegetable growers The present study was conducted on 160 respondents and data were collected through personal interview method with the help of interview schedule. The study revealed that the majority of vegetable growers (60.62 per cent) belonged to middle age group, (77.50 per cent) belong to Other Backward Caste, (36.25%) were having education up to intermediate level, (86.25 per cent) were married, (66.87 per cent) belonging to joint family system, (61.25 per cent) were having 5 to 8 members in a family, (92.50 per cent) were having Pucca house, (79.38 per cent) respondents were engaged in agriculture as main occupation, (53.75 per cent) respondents were having membership of only one social organizations, (38.75 per cent) were having 2 to 4 ha of land, (51.25 per cent) were having medium material possession, (30.00 per cent) were having Rs. 2 lakh to 3 lakh. The result from the study reveals that majority of the respondents belonged to medium socio-economic status (42.50 per cent) followed by high socio-economic status (31.87 percent) and remaining belonged to low socio-economic status (25.63 per cent). Most of the socio-economic variable were having positively and significantly correlation with entrepreneurial behaviour. The variable age was found to have negative correlation with entrepreneurial behaviour of vegetable growers. Thus the correlation analysis reveals that people with better education , more land holding, higher social participation, more material possession and higher annual income have higher entrepreneurial behavior in growing vegetables. While those farmers who were young are growing vegetable more successfully as an entrepreneur.

Key words- Socio-Economic variables, Agriculture, Vegetable growers, Entrepreneurial behaviour, Correlation.

1. INTRODUCTION

Vegetables are widely grown crops throughout the country as a commercial crop. Vegetables constitute an important item of human diet. Vegetables provides all the nutrient

component like carbohydrates, proteins, fat, vitamins, minerals and water along with roughages, which are essential constituents of a balanced diet. Vegetables are important constituents of Indian agriculture and nutritional security due to their short duration, high yield, nutritional richness, economic viability and ability to generate on-farm and off-farm employment. Our country is blessed with diverse agro-climates with distinct seasons, making it possible to grow wide array of vegetables. Most of the vegetables, being short duration crops, fit very well in the intensive cropping system and are capable of giving very high yields and very high economic returns to the growers. Vegetable based farming is emerging as powerful engine for economic growth in rural India. India is the 2nd largest producer of vegetables in the world after China. According to ICAR- IIVR Report (2019) the fruits and vegetables together share about 92% of total horticultural production in our country and Vegetables covers 7.14 percent of the world's total agricultural area. Major vegetables grown in India are Potato (26.75%), Onion (13.94%), and Tomato (10.12%). Cauliflower, Cabbage, Bean, Egg Plants, Cucumber, Garkin, Frozen Peas, Garlic and okra are other major vegetables grown in India. According to report of Ministry of Agriculture and Farmer's Welfare (2020) the total production of vegetables in India is 191.76 Million Tonnes from area of 10.35 Million Hectare. West Bengal is major vegetable producing state of India with total production of 29.29 Million tonnes from 1.49 Million Hectare area followed by Uttar Pradesh which has total production of 27.19 Million Tonnes from area of 1.27 Million Hectare (Department of Agriculture, Cooperation and Farmer's Welfare, 2020) .The contribution of vegetables remains highest (59-61%) in horticulture crop productions over the last five years. Globally India ranks second in vegetable production, however, the county is largest producer of okra and ranks second in production of green peas, tomato, potato, onion, cabbage, caulifower and brinjal. The vast production base of vegetables offers India tremendous opportunities for export. According to report of The Agricultural and Processed Food Products Export Development Authority (APEDA) during 2019-20, India exported vegetables worth Rs. 4,350.13 crores. Out of this the country has exported 7,50,111.99 MT of Fresh Vegetables other than Onion to the world for the worth of Rs. 2,029.43 crores and 2,53,276.92 MT of Processed Vegetables to the world for the worth of Rs. 2,760.57 crore in 2019-20. So apart from nutritional benefits, the production of vegetables improves the economy of a country as these are very good source of income and employment generation for rural people.

1.1 Statement of the Problem

Farmers deciding to take particular crop or use scientific methods to grow crops exhibit entrepreneurial behaviour (Rao and De, 2009; Palmurugan *et al.,* 2008). Understanding of such behaviour is essential to improve the quality of extension services offered by the institutional and non-institutional agencies. Since vegetable cultivation can be done round the year, a vegetable grower needs to possess the ability to take risk, innovativeness, imitative and capacity to marshal resources in order to run the enterprise successfully. These characteristics enable them to decide and accept to adopt appropriate scientific farming methods. Also, according to a dietician, the daily minimum requirement of vegetables, is 300 g per capita per day. In order to improve the quantity as well as quality diet of the people for better health, it is essential that the production of vegetables should be increased considerably. This object can be achieved by increasing the present area under vegetables and also by increasing the productivity per unit of area by adopting better and improved vegetable production technology and if a farmer posses

entrepreneurial behaviour he may emerge as an entrepreneur and solve the issue of desired production also. So there are wide scopes for Indian farmers to adopt vegetable farming as an enterprise and the future progress of farming in the country depends on the entrepreneurial behaviour of farmers. Thus the present study was undertaken with following objectives-

- **To study the socio-economical profile of vegetable growers**
- **To study the correlation between socio-economical profile and entrepreneurial behaviour of vegetable growers.**

2. METHODOLOGY

Ex-post-facto design was selected as an appropriate research design to investigate the variables influencing the entrepreneurial behaviour of vegetable growers in Varanasi district of Uttar Pradesh. Uttar Pradesh was purposively selected for the study as Uttar Pradesh is one of the major vegetables producing state of India sharing 14.18 percent of total vegetable produced in the country and contributing 12.3 percent of total area under vegetable production (Department of Agriculture, Cooperation and Farmer's Welfare, GOI, 2020). The present study was conducted in Varanasi district as most of the farmers of Varanasi district are engaged in vegetable production as vegetables are short term crop.

Varanasi district comprises of eight blocks, out of which four blocks namely Arajiline, Kashividyapith, Chiraigaon and Harahua were selected on the basis of maximum vegetable growers availability and highest area under vegetable production as reported by K.V.K Rjatalab Varanasi. A list of villages were prepared with the help of Block office. From each selected block 4 villages were selected randomly where vegetables are grown. Thus the total villages selected were 16 for the investigation. List of vegetable growers from selected villages were made and those farmers were selected who were growing vegetables not only for their personal consumption but for commercial purpose. Out of those farmers 10 vegetable growers were selected randomly from each village to make a sample size of 160 respondents. The data was collected through personal interview and collected data was coded, then analyzed using relevant statistical tools & techniques and find out frequency, percentage, arithmetic mean ,standard deviation and coefficient of correlation and the results were then interpreted.

3. RESULT AND DISCUSSION

3.1 Socio-economical profile of vegetable growers

Table 1 indicated that maximum numbers of respondents (60.62%) belong to middle age group followed by old age group (23.75 %) and the remaining belongs to young age (15.63%). It could be stated from the above findings that majority (60.62%) of the respondents were found in middle age group. The probable reason might be that the middle age farmers comparatively have free hand in financial affairs and they can take up an independent decision to implement their ideas. The above findings are in consonant with the findings of Ram *et al.* (2010).

It also reveals that maximum numbers of respondents (36.25%) were having Intermediate educational status followed by (26.88 %) High school, Middle school (18.12 %), Primary level (8.75 %), Graduation (8.13 %), post-graduation and above (1.87%). It can be concluded that majority of respondents (36.25 %) had Intermediate level of education. The probable reason for literacy among the respondents may be due to more primary and secondary level education facilities available in rural area and realization about the significance of education for the overall development of the life. The above findings are in agreement with that of Karat and Baby (2020).

Also maximum numbers of respondents (77.50%) belonged to other backward caste followed by (13.22%) general category and the remaining were (9.38 %) schedule caste/ schedule tribe. The above findings are in agreement with that of Singh *et al.* (2017).

The study reveals that maximum numbers of respondents (86.25 %) were married and the remaining (13.75 %) respondents were found unmarried. So it may be concluded that, the majority of respondents who were growing vegetables were found married., majority of (66.87 %) of respondents were living in joint family system and the remaining (33.13 %) respondents were living in the nuclear family system, majority of (61.25 %) of respondents were having 5-8 members in their family followed by (33.12 %) more than eight members and the remaining (5.63 %) up-to four members in family. maximum respondents (93.13 %) were having pucca house followed by (6.87%) mixed type of house there were nobody having kuccha house in the study area. This may be concluded that maximum respondents were living in pucca house and hence they possessed basic needs i.e. food, clothes and shelter. Majority of the farmers (38.75 %) belong to Medium farmers category with land holding of 2-4 ha followed by small farmer (35.62 %), Marginal farmers (14.38 %) and Large farmers (11.35 %). It may be concluded that, the maximum respondents (38.75 %) were having 2 to 4 ha of land which comes under medium farmers category. The possible reason could be that the main occupation of the respondents is agriculture and they must have inherited this land holding from their ancestors. Moreover, it might be easier to employ latest technology in medium farms as compared to marginal or small farms. The above finding gives conformity with study of Kumar and Aski (2016), Somvanshi *et al.* (2016) and Yewatkar *et al.* (2019).

Majority of the respondents (79.38 %) were engaged in agriculture followed by (16.25%) respondents were engaged in agriculture with business activities and the remaining (4.37 %) were engaged in agriculture along with service. majority of respondents were having membership of one social organization (53.75 %) followed by having no any membership for social organization (34.38 %) and the remaining (11.87 %) had membership of more than one social organization. It may be concluded that, most of the respondents were having membership of one social organization. This might be due to the fact that most of the respondents were member of farmer producer organization (FPOs), few respondents were members of Gram Panchayat, co-operative societies and Self Help Groups etc. So they have medium to high level of social participation. In terms of material possession majority of the respondents belongs to medium category (51.25 %), followed by high category (25.62 %) and low category (23.10 %). The above findings are in agreement with that of Tengli and Sharma (2017)

In terms of annual income majority of respondents were having Rs. 2 lakh to 3 lakh (30.00 %) followed by Rs. 1 lakhs to 2 lakhs (27.50%), More than Rs. 3 lakhs (24.38 %)and Less than Rs.1 lakh (18.12%). The probable reason, which could be attributed for varied income categories of respondents, is the different size of the land holdings for each

respondent, growing of various other crops and practicing of subsidiary occupations like business and service along with agriculture by the respondents.

Table 1 Distribution of respondents according to their socio-economical profile
N= 160

Variables	Particulars	Frequency	Percentage
Age	Young(Upto 25 years)	25	15.63
	Middle (26-50 years)	97	60.62
	Old (Above 50 years)	38	23.75
Education	Primary	14	8.75
	Middle school	29	18.12
	High school	43	26.88
	Intermediate	58	36.25
	Graduation	13	8.13
	Post Graduate and above	3	1.87
Caste	SC/ST	15	9.38
	OBC	124	77.50
	General	21	13.22
Marital Status	Unmarried	22	13.75
	Married	138	86.25
Family Type	Nuclear Family	53	33.13
	Joint Family	107	66.87
Family Size	Small (up to 4 member)	9	5.63
	Medium (5-8 member)	98	61.25
	Large (above 8 members)	53	33.12
Housing Pattern	Kachcha house	0	0.00
	Mixed house(Kachcha+Pucca)	11	6.87
	Pucca	149	93.13
Land Holding	Marginal (Below 1 Ha)	23	14.38
	Small (1-2 Ha)	57	35.62
	Medium (2-4 Ha)	62	38.75
	Large (Above 4 Ha)	18	11.35
Occupation	Agriculture	127	79.38
	Agriculture with Business	26	16.25
	Agriculture with Service	7	4.37
Social Participation	No member of any organization	55	34.38
	Member of one organization	86	53.75
	Member of more than one organization	19	11.87

Material Possession	Low (13-31 Medium (32-49 score) High (50-67)	37 82 41	23.13 51.25 25.62
Annual Income	Below Rs. 1,00,000 Rs. 1,00,001-2,00,000 Rs. 2,00,001-3,00,000 Above Rs. 3,00,001	29 44 48 39	18.12 27.50 30.00 24.38

3.2 Overall socio-economic status

The distribution of respondents according to their socio-economic status is shown in table 2 which indicates that majority of the respondents belonged to medium socio-economic status (42.50 %) followed by high socio-economic status (31.87 %) and remaining belonged to low socio-economic status (25.63 %). It may be concluded that, majority of the respondents belonged to medium-high socio-economic status. The probable reason for this could be that most of the respondents posses medium land holding, are indulge in agriculture as an occupation, have annual income in range of 2-3 lakhs, are members of 1-2 organization , have necessary material possession, lives in pucca house and are having basic education. It is in conformity with the findings of Mishra and Ghadei (2015).

Table 2 Distribution of respondents according to their Overall Socio-Economic Status

N=160

S.No.	Category	Frequency	Percentage
1	Low (31-54	41	25.63
2	Medium (55-77 score)	68	42.50
3	High (78-100)	51	31.87
	Total	160	100.00

Mean = 66.65 **S.D. = 18.20**

3.3 Correlation between socio-economical profile with entrepreneurial behaviour of vegetable growers

The result of the correlation analysis revealed that the entrepreneurial behaviour of vegetable growers were found to be positively and significantly correlated with their education , land holding, social participation , material possession and annual income at one per cent level of significance while occupation was found to have positive and significant correlation at five percent level of significance. The variable age was found to have negative correlation with entrepreneurial behaviour of vegetable growers. However, the rest of the variables, namely, caste, marital status, types of family, size of family and housing pattern were found to be positive but non-significantly correlated with the entrepreneurial behaviour of vegetable growers.

The possible reason for positive and significant relationship with education and landholding could be that land holding provides the economic base for the farmer to practice new agricultural technologies while education brings about behavioural changes in an individual and contributes to his self-development. Social participation enables the entrepreneur to have more social contact which in turn gives him an opportunity to share and gain enormous experiences and valuable information which indicated that higher the social

participation higher would be the entrepreneurial behaviour. Also if more farm implements, irrigation facilities and transport facilities would be available with farmers they can use these resources in an appropriate manner and timely to earn more profit. Thus, we can say that farmers who had entrepreneurial behaviour were having more material possession. Farmers with higher annual family income have higher purchasing power and as a result have an urge to invest in specialized farm operations. The higher income itself motivates the farmers to seek new technologies for improving their income and standard of living.

Table 3 Correlation Between Socio Economical Profile With Entrepreneurial Behaviour of Vegetable Growers N=160

Particulars	r value
Age	-.348**
Education	.793**
Cast	.123
Marital status	.016
Family type	.066
Family size	.054
Housing pattern	.299
Land holding	.858**
Occupation	.468*
Social participation	.844**
Material possession	806**
Annual income	.824**

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
N.S - Non significant

4. CONCLUSION

It can be concluded that majority of the vegetable growers were having medium socio-economic status with middle age , having intermediate level of education, belongs to Other Backward Caste, lives in Joint family system having 5-8 members in family, having 2-4 hac of land, pucca house with medium material possession and low social participation and most of the vegetable growers have annual income of Rs. 2-3 lakhs. Also the correlation analysis reveals that people with better education , more land holding, higher social participation, more material possession and higher annual income have higher entrepreneurial behavior in growing vegetables. While those farmers who were young are growing vegetable more successfully as an entrepreneur.

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