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Entrepreneurial Orientation of Garlic Producers

Pawan Sharma[1], M. M. Patel[2] and V. B. Singh[3]

ABSTRACT

The study was conducted in Neemuch district of Madhya Pradesh to investigate the entrepreneurial orientation of garlic producers in terms of socio – personal, agro-economic, extension communication and socio-psychological traits. The data collected from 120 randomly selected respondents revealed that 66.67 per cent of garlic growers were having medium level of entrepreneurial orientation. The study also revealed that the variables viz. age, educational status, social participation, information source utilization, mass media exposure, cosmopoliteness and economic motivation had significant influence on entrepreneurial orientation of garlic producers.

Garlic is one of the popular commercial spice crops grown throughout India. This crop is grown for culinary and medicinal purpose. It is also an important source to earn foreign exchange, apart from meeting the domestic requirement of the country. India has been exporting garlic to Europe, North America, Australia and few Asian regions since pretty long time. India ranks second in area (1.16million ha) and third in production (0.51 million tones) with average yield of 4.41 t/ha. Among different states of India, Madhya Pradesh is the leading state accounting to more than 35 per cent of area (44.03 thousand hectares) and 38 per cent of production (176.33 thousand tonnes) with average yield of 4.11 t/ha.

In Madhya Pradesh, Malwa Plateau as a whole has been declared by the government as Agri-Export Zone for exporting vegetable crops viz. potato, garlic and onion. There is a great potential to increase the production of these crops in future specially in garlic, if the growers are oriented towards entrepreneurship and adoption of modern production technology. Garlic as a commercial crop needs entrepreneurial orientation.

In this plateau, the farmers have been diverted towards cultivation of garlic due to higher economic return as compared to general and seasonal crops. At present, the garlic producers are facing the problem of water scarcity, lack of knowledge about modern production technology, inadequate input supply and inadequate regular market for disposal of their production. Hence, there is a need to utilize the available resources judicially, adopt modern production technology for getting maximum profit and explore the adequate marketing opportunities. The socio–personal, agro-economic, extension communication and socio-psychological factors also play important roles in entrepreneurial orientation of the farmers.

Keeping this in view, it was felt necessary to analyze the entrepreneurial orientation of garlic producers in terms of socio–personal, agro-economic, extension communication and socio-psychological traits.

METHODOLOGY

A representative sample of 120 garlic producers was drawn from 10 randomly selected villages of two randomly selected blocks of purposively selected district (Neemuch) of Madhya Pradesh for collection of data. This district comes under Agri –Export Zone of Malwa Plateau. The data were collected through pre-tested

[1]Ex student, [2]Senior Scientist, Department of Extension Education, [3] Associate Professor, Department of Statistics, College of Agriculture, JNKVV, Indore, M.P

interview schedule. In this study the entrepreneurial orientation of the respondents was measured by Entrepreneurial Self Assessment Scale (Technonent Ashia 1981). The entrepreneurial orientation categories were formulated in low, medium and high on the basis of mean ± 1sd. The correlation analysis was carried out to find out the relationship between socio – personal, agro-economic, extension communication and socio-psychological variables with entrepreneurial orientation. To explain the contribution of selected factors on entrepreneurial orientation, stepwise multiple regression analysis was carried out.

RESULTS AND DISCUSSION

Socio-personal characteristics of garlic producers

In order to classify the socio-personal characteristics of garlic producers, it is very important to analyze these characteristics in depth. In all four socio- personal characteristics were studied using appropriate tools. It is clear from data that majority (64.2 %) of the respondents belonged to middle age group, had primary to middle school education. More than fifty per cent respondents belonged to medium family size and medium level of social participation (Table 1).

Agro-economic characteristics of garlic producers

In order to identify the agro-economic characteristics of garlic producers, it is imperative to analyze these characteristics in depth. In all four agro-economic characteristics were studied using appropriate tools. It is clear from data that majority (72.5%) of the respondents belonged to medium to large size operational land holding. The maximum proportion of them (42.5%) belonged to middle annual income (Table 2). The majority (70.83%) of respondents had medium level of farm mechanization and irrigation potentiality (71.67%)

Extension communication characteristics

Extension communication characteristics were also studied with respect to four attributes. The data on these attributes are presented in Table 3. It is clear from the data that the majority of respondents (68.3%) had medium level of information source utilization, extension participation (57.5%) and cosmopoliteness (64.17%) while, vast majority (76.67%) of the respondents were possessing medium mass media exposure.

Socio-psychological characteristics

In order to identify the socio-psychological characteristics it is necessary to analyze these characteristics in depth. In all, five characteristics were studied using suitable tools. It is apparent from the data that majority of the respondents (69.17%) had medium level of economic motivation, scientific orientation (61.67%), credit orientation (76%) and market orientation (74.17%) while seventy per cent had moderate attitude towards modern agriculture technology (Table 4).

Entrepreneurial orientation of garlic producers

The data reported in Table 5 presents the distribution of garlic producers according to their entrepreneurial orientation. It is clear from the findings that 66.67 per cent of garlic growers had medium level of entrepreneurship orientation while, only about 16 per cent had high and low level of entrepreneurship. However, the garlic producer should have high level of entrepreneurial orientation. Special attention is needed to develop the entrepreneurship for improving the commercialization of garlic cultivation. Similar findings were also reported by Patil *et al*. (1999) and Patel and Sanoria (1997).

Correlates of entrepreneurial orientation

With assumption that entrepreneurial orientation is inclined by socio-personal, agro-economic, social psychological and extension communication factors, the relationship of these variables with entrepreneurial orientation of garlic producers was analyzed. To assess the relationship between entrepreneurial orientation and selected variables the coefficient of correlation was computed and presented in Table 6. the data specified that correlation coefficients of fifteen variables, viz. age, educational status, family type, social participation operational land holding, total annual income, farm mechanization, information source utilization, extension participation, mass media exposure, cosmopoliteness, economic motivation attitude towards modern agricultural technology, scientific orientation, credit orientation and market orientation were positive and significant at 0.01 level of probability with entrepreneurial orientation while the correlation coefficient the age was negative and significant at 0.01 level of probability with entrepreneurial orientation. Further, correlation coefficient of irrigation potentiality with entrepreneurial orientation was negative and non- significant.

The multiple regression analysis was also carried out to find out the extent of influence of each variable towards the entrepreneurial orientation of garlic producers (Table 6). The perusal of data reveled that out of seventeen variables taken for analysis of regression, seven

variables namely age, and educational status, social participation, information source utilization, mass media exposure, cosmopoliteness and economic motivation were found to have significant contribution to entrepreneurial orientation of garlic producers.

Analysis of variance

The coefficient of determination (R^2) was 0.83 which indicates that 83 per cent variation in entrepreneurial orientation was explained by seventeen independent variables selected for the study (Table 6). Further the important seven variables namely age, educational status, social participation, information source utilization, mass media exposure, cosmopoliteness and economic motivation having significant influence on entrepreneurial orientation were analyze through stepwise regression analysis. The coefficient of determination (R^2) was 0.82 which indicates that 82 per cent variation in entrepreneurial orientation was explained by seven independent variables (Table 7).

It is clear from the above findings that seven variables showing significant contribution to entrepreneurial orientation need greater attention on the part of extension agencies to enhance the entrepreneurial orientation of garlic producers in the area.

Table 1: Distribution of the respondents according to their Socio-personal characteristics (N = 120)

S. No	Characteristic	Categories	Frequency	Percent	Mean	S.D.
1	Age (years)	Young (< 35)	28	23.3	42.8	9.70
		Middle (36 to 55)	77	64.2		
		Old (> 55)	15	12.5		
2	Education status	Illiterate	20	16.66	1.48	1.06
		Primary education	34	28.30		
		Middle education	48	40		
		Higher secondary education	13	10.8		
		UG level	1	0.83		
		PG level	1	0.83		
3	Family size (No.)	Small size (<5)	22	18.33	8.70	3.30
		Medium size(5-12)	64	53.33		
		Large size (>12)	34	28.33		
4	Social participation (score)	Low (<1.22)	22	18.33	2.11	1.79
		Medium (1.22-3.90)	69	57.50		
		High (>3.90)	29	24.17		

Table 2: Distribution of the respondents according to their agro-economic characteristic (N = 120)

S.No.	Characteristic	Categories	Frequency	Percent	Mean	S. D.
1	Operational land holding (ha.)	Small (<2)	33	27.50	5.08	2.28
		Medium (2.1-4.0)	47	39.17		
		Large (>4.0)	40	33.33		
2	Total annual income (Rs.)	Low (<50,000)	44	36.67	124308	71801
		Medium(50000-200000)	51	42.50		
		High(>2,00,000)	25	20.83		
3	Farm mechanization (score)	Low (<5.58)	18	15.00	9.89	4.31
		Medium(5.58-14.20)	85	70.83		
		High (>14.20)	17	14.17		
4	Irrigation potentiality (%)	Low (<55.4)	21	17.50	73.2	17.8
		Medium (55.4-91.0)	86	71.67		
		High (>91.00)	13	10.83		

Table 3: Distribution of the respondents according to their extension communication characteristics

(N = 120)

S.No	Characteristic	Categories	Freq.	Per cent	Mean	S.D.
1	Information source utilization (score)	Low (<6.91)	20	16.67	10.6	3.69
		Medium (6.91-14.29)	82	68.33		
		High (>14.29)	18	15.00		
2	Extension participation (score)	Low (<24.27)	26	21.67	47.68	23.41
		Medium(24.27-71.09)	69	57.50		
		High (>71.09)	25	20.83		
3	Mass media exposure (score)	Low (<1.89)	17	14.17	3.46	1.57
		Medium (1.89-5.05)	92	76.67		
		High (>5.05)	11	9.17		
4	Cosmopoliteness (score)	Low (<3.61)	20	16.67	5.60	1.99
		Medium(3.61-7.59)	77	64.17		
		High (>7.59)	23	19.17		

Table 4: Distribution of the respondents according to their socio-psychological characteristics

S. No.	Characteristic	Categories	Freq.	Percent	Mean	S. D.
1	Economic motivation (score)	Low (<20.81)	15	12.50	24.83	4.02
		Medium (20.81-28.85)	83	69.17		
		High (>28.85)	22	18.33		
2	Attitude towards modern agricultural technology (score)	Unfavorable (<22.93)	16	13.33	27.71	4.78
		Moderate(22.93-32.39)	84	70.00		
		Favorable(>32.39)	20	16.67		
3	Scientific orientation (score)	Low (<17.60)	19	15.83	22.69	5.09
		Medium (17.60-27.78)	74	61.67		
		High (>27.78)	27	22.50		
4	Credit orientation (score)	Low (<1.83)	14	11.67	3.19	1.36
		Medium (1.83-4.55)	76	63.33		
		High (>4.55)	30	25.00		
5	Market orientation (score)	Low (<18.74)	12	10.00	22.88	4.14
		Medium (18.74-27.02)	89	74.17		
		High (>27.02)	19	15.83		

Table 5: Distribution of the respondents according to their entrepreneurial orientation

Entrepreneurial orientation	Frequency	Percentage	Mean	S.D.
Low (<137)	20	16.67	165.6	28.3
Medium (137-193)	80	66.67		
High (>193)	20	16.67		

Table 6: Correlation and regression coefficient of socio-personal, agro-economic, socio- psychological and extension communication variables with entrepreneurial orientation

S. No.	Variable	Correlation coefficient (r)	Regression co-efficient "b"	Computed "t" value
Socio-personal variables				
1	Age	-0.75**	-1.10*	6.43
2	Education status	0.67**	1.54*	0.90
3	Family size	0.65**	0.54	1.00
4	Social participation	0.64**	1.77*	1.67
Agro-economic variables				
5	Operational land holding	0.37**	-0.27	0.23
6	Total annual income	0.39**	0.01	0.14
7	Farm mechanization	0.56**	-0.49	1.02
8	Irrigation potentiality	-0.17	0.10	1.21
Extension communication variables				
9	Information source utilization	0.78**	0.88*	1.28
10	Extension participation	0.74**	0.08	0.83
11	Mass media exposure	0.76**	3.67*	2.69
12	Cosmopoliteness	0.74**	2.41*	2.11
Socio-psychological variables				
13	Economic motivation	0.64**	1.14*	2.66
14	Attitude towards modern agricultural technology	0.56**	-0.62	1.76
15	Scientific orientation	0.74**	-0.25	0.54
16	Credit orientation	0.37**	0.09	0.09
17	Market orientation	0.67**	0.27	0.57

R^2 = 0.83 Intercept =148.75 F value = 30.33 with 17 and 102 DFS

** Significant at 0.01 level of probability * Significant at 0.5 level of probability

Table 7: Regression analysis of main selected characteristics of garlic producers with their entrepreneurial orientation

S. No.	Characteristic	Regression co-efficient "b"	Standard error for regression coefficient "b"	Computed "t" value
1	Age	-1.05*	0.15	6.92
2	Education status	1.99*	1.53	1.30
3	Social participation	1.16*	0.92	1.26
4	Information source utilization	0.83	0.60	1.29
5	Mass media exposure	3.36*	1.30	2.59
6	Cosmopoliteness	2.27*	1.01	2.25
7	Economic motivation	1.25*	0.38	3.35
	R^2 = 0.82 Intercept = 141.03	F value = 72.54 ** with 7 and 112 DFS		

** Significant at 0.01 level of probability * Significant at 0.5 level of probability

CONCLUSION

Garlic producers largely belong to medium level of education, social participation farm mechanization, information source utilization, extension participation, mass media exposure, cosmopoliteness, economic motivation, scientific orientation, credit orientation and market orientation. The study also revealed that the majority of garlic growers (66.67%) had medium level of entrepreneurship orientation. The age, educational status, social participation, information source utilization, mass media exposure, cosmopoliteness and economic motivation were the strong contributing factors for manipulating entrepreneurial orientation of garlic producers. Hence, these factors need greater attention on the part of extension agencies to enhance the entrepreneurial orientation of garlic producers in the area.

REFERENCES

Murali K and Anita Jhamatani (2003) Entrepreneurial Characteristics of Floriculture Farmers *Indian J Exten. Edun.* **29** (1&2):19-25

Patel, M.M and Y.C., Sanoria (1997) Correlates of Entrepreneurial behavior of sugarcane growers *Maharashtra. J. Extn. Edu.,* **16**: 344-346.

Patil, V.G., R.P, Mahadik and A.S., Patil (1999) Entrepreneurial behavior of little guard growers *Maharashtra. J. Extn. Edu.,* **18**:240-245.