

Research Article

A study on entrepreneurial behaviour of vegetable growers in Bhopal district of M.P.

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SUMMARY : Study was conducted in Bhopal district of M.P. in 2011. From two selected blocks, five villages were selected randomly from each block and 12 farmers were randomly selected from each selected village. In this way there were total 120 respondents. The present study is an endeavour to fill some of the gaps in the area of farm entrepreneurship where the studies are insufficient. The investigation is confined to 10 villages in Agri Export Zone (AEZ) for vegetables in Madhya Pradesh. It was intended to conceptualize the entrepreneurial behaviour of the vegetable growers in terms of their socio-personal, agro-economic, extension communication and socio- psychological traits. The findings of the study are expected to be useful in identifying farm entrepreneurs for involving them in agriculture development. The mean value of entrepreneurial behaviour of small vegetable growers was lower than overall mean. The overall mean and percentage distribution of economic motivation of the vegetable growers indicated that majority of respondents had medium level of economic motivation. The overall mean and percentage distribution of vegetable growers according to their knowledge about vegetable production technology indicated that majority of respondents had medium level of knowledge about vegetable production technology. It also indicated that the knowledge about vegetable production technology of the small farmers was lower than the medium and large.

KEY WORDS :

Improved vegetable production technology, Constraints, Entrepreneurial behaviour

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BACKGROUND AND OBJECTIVES

Entrepreneurship, a form of human behaviour, is indispensable for the growth and development of any society. Generally, the entrepreneur is considered as a person who initiates, organizes the activities, manages and controls the affairs of business unit combining the factors of production to supply goods and services. Farmers deciding to take particular crop or use scientific methods to grow crops also exhibit entrepreneurial behaviour (Rao and De, 2009; Palmuragan *et al.*, 2008 and Subrahmanyeswari *et al.*, 2007). Understanding of such behaviour is essential to improve the quality of extension services offered by the institutional and noninstitutional agencies. Since vegetable cultivation is a capital intensive and risky, 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. Entrepreneurial behaviour is influenced by individual, situational, psychological, social and experiential factors (Rao, 1985).

Vegetable is widely growing crops throughout the country as a commercial crop. Vegetable cultivation apart from balanced diet, being a good source of income and employment, plays an important role in empower of farmers. vegetables based farming is emerging as powerful engines for economic growth in rural India. We can say that “a key step of economic development of farmers will be to diversify their cereal based production system to include more cash crops

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including vegetables". Vegetables constitute an important item of human diet. vegetable provides all the nutrient components, like carbohydrates, proteins, fat, vitamins and water along with roughages, which are essential constituents of a balanced diet. The daily minimum requirement of vegetables, according to a dietician, is 284 g per health. But the present production and consumption of vegetable in the country are very inadequate, being only about one-fourth to one-third of the requirement. In order to improve the quality of the diet of the people, 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. The growing population and per capita income are pushing up the demand for food, which needs to be met through improved productivity per unit area and time. In this perspective, significance of vegetables is noteworthy for several reasons. First, vegetables crops produce more edible energy and protein per unit area and time than many other food crop. Second, for small and marginal farmers, vegetables fit well into multiple well as intercropping systems due to its short duration and compatibility of cultivation with other crops. Thirdly, the high profitability of vegetables as a cash crop has made it a valuable commercial enterprise. And last, this crop is well suited in Indian conditions and enjoys a wide range of seasonal adaptability. Vegetable in India is now grown over 1.3 million hectares with an annual production of 23.6 million tones (Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India, 2004-05). About 90 per cent of total vegetables area is located in sub-tropical plains, 6 per cent in hills and 4 per cent in plateau region of peninsular India. Madhya Pradesh is one of the largest in the production of vegetables. But still the per capita consumption of vegetable is comparatively small due to lower productivity per unit of area. Vegetables cultivated in almost all the districts of the states but for commercial purpose it is chiefly grown in Bhopal, Indore, Jabalpur, Rewa, Sagar, Gwalior and Chhindwara districts of Madhya Pradesh. Currently vegetables market requirement revolve around availability of quality vegetables for export purpose, vegetables having cookery properties suited to domestic consumers and quality raw material for processing. Vegetables cultivation, however, requires higher capital investment in comparison to other cereal crops. It is also a highly risky crop considering the natural hazards as well as the day-to-day fluctuating wholesale price index. In general vegetables growers are more interested to get maximum profit. The overall objective of the study was to explore the entrepreneurial behaviour of vegetable growers. The specific objectives of the study were as under:

- To study the entrepreneurial behaviour of vegetable growers.

- To analyze the economic motivation of the vegetable growers and their entrepreneurial behaviour.
- To assess the constraints perceived by the vegetable growers in service, production storage and marketing.

RESOURCES AND METHODS

The study was conducted in Bhopal district. Most of the farmers of Bhopal district cultivate vegetables and send them to far away markets. It was serving a great deal of convenience for the research worker in terms of accessibility, ease of rapport building, time, money and efforts. Bhopal is located in the central part of India, and is just north of the upper limit of the Vindhya mountain ranges. The study was conducted in Agri-export zone of Malwa plateau for vegetables. There are six districts covered under Agri-export zone for vegetables. Out of these districts, Bhoapl was selected randomly. From two selected blocks, five villages were selected randomly from each block and 12 farmers were randomly selected from each selected village. In this way total 120 respondents were selected for the collection of primary data. It has been operationally defined as the experience of the respondents in terms of year of cultivation of vegetables. On the basis of experience in vegetables cultivation, the respondents were classified into low, medium and high on the basis of Mean \pm 1 SD. The institutional participation of the respondents was measured with the help of structured schedule. During collection of data, the respondents were asked about their association with various organizations within and outside their village. According to institutional participation of respondents, the mean and standard deviation were worked out and the respondents were grouped into three categories as low institutional participation ($<$ mean -SD), medium institutional participation (between mean \pm SD) and high institutional participation ($>$ mean + SD).

OBSERVATIONS AND ANALYSIS

The main purpose of the present investigation was to study the entrepreneurial behaviour of vegetable growers in Malwa region of Madhya Pradesh. Entrepreneurial behaviour of vegetable growers has been extensively studied in terms of risk taking hope of success, persistence, feed back usage, self-confidence, knowledge ability, persuasion ability, manageability, innovativeness and achievement motivation.

It is clear from Table 1 that out of the total respondents, 67.5 per cent had medium, 16.7 per cent had high and 15.8 per cent had low level of entrepreneurship. Among large holding vegetable growers, 72 per cent of them had medium, 26 per cent had high and only 2 per cent had low level of entrepreneurship. Regarding small farmers, 61.8 per cent of them had medium, 35.3 per cent had low and 2.9 per cent high level of entrepreneurship. Table further reveals that the over

Table 1: Distribution of the respondents according to their entrepreneurial behaviour

Entrepreneurial behaviour	Small (n=34)		Medium (n=36)		Large (n=50)		Total (n=120)	
	No.	%	No.	%	No.	%	No.	%
Low (<138)	12	35.3	6	35.3	1	2.0	19	15.8
Medium (138 to 176)	21	61.8	24	61.8	36	72.0	81	67.5
High (>176)	1	2.9	6	2.9	13	26.0	20	16.7
Mean	144.9		158.4		165.0		157.3	
S.D.	14.1		18.4		17.5		18.7	
"t" value	Small and medium = 3.42**		Small and large = 5.57**		Medium and large = 1.70			

** indicate significance of values at P=0.01

Table 2: Distribution of the respondents according to their economic motivation

Economic motivation	Small (n=34)		Medium (n=36)		Large (n=50)		Total (n=120)	
	No.	%	No.	%	No.	%	No.	%
Low (<22)	2	5.9	3	8.3	2	4.0	7	5.8
Medium (22 to 29)	29	85.3	29	80.6	35	70.0	93	77.5
High (>29)	3	8.8	4	11.1	13	26.0	20	16.7
Mean	25.18		26.11		26.58		26.04	
S.D.	3.65		3.18		2.75		3.18	
"t" value	Small and medium = 1.14		Small and large = 2.01*		Medium and large = 0.73			

* indicate significance of value at P=0.05

Table 3: Distribution of the respondents according to their knowledge about vegetable production technology

Vegetable production technology	Small (n=34)		Medium (n=36)		Large (n=50)		Total (n=120)	
	No.	%	No.	%	No.	%	No.	%
Low (<9)	7	20.6	5	13.9	4	8.0	16	13.3
Medium (9 to 13)	27	79.4	26	72.2	35	70.0	88	73.3
High (>13)	0	0.0	5	13.9	11	22.0	16	13.3
Mean	10.15		11.36		12.02		11.29	
S.D.	2.05		2.02		1.76		2.06	
"t" value	Small and medium = 2.49*		Small and large = 4.48**		Medium and large = 1.61			

* and ** indicate significance of values at P=0.05 and 0.01, respectively

Table 4: Constraints faced by the vegetable growers in service

Sr. No.	Constraints	Frequency (n=120)	Percentage
1.	Non-availability of co-operative societies	25	21
2.	Non-availability of fertilizer depot	30	25
3.	Non-availability of agro-service centre	22	18
4.	Non-availability of seed shop	23	19
5.	Non-availability of pesticides shop and other services providing plant protection appliances	20	17

Table 5: Constraints faced by the vegetable growers in production

Sr. No.	Constraints	Frequency (n=120)	Percentage
1.	Non-availability of improved seed	28	23
2.	Non-availability of skilled labour	20	17
3.	Non-availability of information regarding technical guidance	26	22
4.	High cost of inputs	22	18
5.	Non-availability of irrigation sources	24	20

all mean entrepreneurship score was 157.3. The mean entrepreneurial score of small, medium and large holding vegetable growers were 144.9, 158.4 and 165.0, respectively. The mean value of entrepreneurial behaviour of large and medium holding vegetable growers was higher than overall mean (157.3), while the mean value of entrepreneurial behaviour of small vegetable growers was lower than overall mean. The t-test revealed that the mean value of small vs. medium and small vs. large holding vegetable growers varied significantly, whereas medium vs. large holding vegetable growers did not vary significantly from each other. The finding is similar for the results reported by Patel *et al.* (2003).

The t-test revealed that the mean score of small vs. large farmers varied significantly, while small vs medium and medium vs. large was did not varied with each other. Thus, the overall mean and percentage distribution of economic motivation of the vegetable growers indicated that the majority of respondents had medium level of economic motivation (Table 2).

Table 3 shows the percentage distribution of knowledge about vegetable production technology of the vegetable growers. It is evident from the table that out of the total respondents, 73.3 per cent respondents belonged to medium knowledge group about vegetable production technology whereas, 13.3 per cent belonged to high and 13.3 per cent belonged to low knowledge about vegetable production technology group. Table also presents the data regarding mean score of knowledge about vegetable production technology. The overall mean score of knowledge about vegetable production technology was 11.29. The mean score of small, medium and large farmers was 10.15, 11.36 and 12.02, respectively. The mean value of medium and large farmers was higher than the overall mean, while the mean score of small

farmers was lower than the overall mean score value. The t-test indicated that the mean score of small vs medium and small vs large farmers varied with each other, while medium and large did not differ significantly.

Thus, the overall mean and percentage distribution of vegetable growers according to their knowledge about vegetable production technology indicated that the majority of respondents had medium level of knowledge about vegetable production technology. It also indicated that the knowledge about vegetable production technology of the small farmers was lower than the medium and large. The finding was similar to the results reported by Vijay Kumar *et al.* (2003).

Table 4 presents the information regarding constraints perceived by vegetable growers in service. It is obvious from table that 25 per cent farmers had constraints regarding non-availability of fertilizer depot, while 21 per cent had constraint regarding non-availability of co-operative societies, 19 per cent perceived non-availability of seed shops, 18 per cent perceived non-availability of agro-service centre and 17 per cent perceived non-availability of pesticides shop and other service providing plant protection appliances.

Table 5 indicates the information regarding constraints faced by vegetable growers in production. It is clear from the table that about 23 per cent farmers faced problem of non-availability of improved seed, 22 per cent faced problem of non-availability of information regarding technical guidance, 20 per cent had problem of non-availability of irrigation sources and 18 per cent farmers faced problem of high cost of inputs.

Table 6 indicates the information regarding constraints faced by vegetable growers in storage. It is clear from the table that about 25 per cent farmers faced problem of non-availability and high cost of cold storage, 23 per cent faced problem of high cost of warehouse, 23 per cent expressed low capacity

Table 6: Constraints faced by the vegetable growers in storage

Sr.No.	Constraints	Frequency (n=120)	Percentage
1.	Lack of private and co-operative cold storage	12	10
2.	Non-availability and high cost of cold storage`	30	25
3.	Low capacity of warehouses	28	23
4.	Lack of scientific storage	22	18
5.	Long distance of warehouse	28	23

Table 7: Constraints faced by the vegetable growers in marketing

Sr. No.	Constraints	Frequency (n=120)	Percentage
1.	Lack of regulated market	24	20
2.	Lack of transportation facilities	34	28
3.	Low market price of produce	32	27
4.	Interference of broker in marketing of produce	16	13
5.	Lack of knowledge of marketing information	14	12

of warehouse, 18 per cent had problem of lack of scientific storage and 10 per cent farmers faced problem regarding lack of private and co-operative cold storage.

The data in Table 7 present the information regarding constraints perceived by vegetable growers in marketing. It is obvious from table that 28 per cent farmers had marketing constraints in lack of transportation facilities, while 27 per cent had constraints of low market price of produce, 20 per cent perceived lack of regulated market, 13 per cent perceived interference of broker in marketing of produce and 12 per cent perceived lack of knowledge of marketing information. These findings were in results line of those reported by Waman and Patil (2000).

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