

## Factors Influencing Entrepreneurial Behaviour of Vegetable Growers

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### ABSTRACT

*Entrepreneurial behavior of a farmer is influenced by several factors. A study was conducted during 2007 in Uttarakhand state to find out the factors influencing entrepreneurial behaviour of vegetable growers. The path analysis revealed that socio-economic status, caste, ability to coordinate farming activities and value orientation had direct effect on entrepreneurial behaviour of vegetable growers. Other variables viz. education, marketing facilities, sources of information utilization, training received and experience in farming influenced indirectly the entrepreneurial behaviour of vegetable growers.*

**Key words:** Vegetable growers; Entrepreneurial behaviour; Path analysis;

**E**ntrepreneurship, 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; Palmurugan et al., 2008; Subrahmanyewari et al., 2007). Understanding of such behaviour is essential to improve the quality of extension services offered by the institutional and non-institutional 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).

Indian farmers are growing vegetable from a long time as a part of tradition and India ranks next to China in area and production. However, a shift has taken place in acreages in early 1980s with the commencement of multinational companies in farming and processing

sector. This may be attributed to sporadic attempts of the progressive farmers who could visualize the opportunities in the scenario of globalization and World Trade Organization. The farmers in hill areas of Uttarakhand are still lagging behind due to various technological and socio-psychological factors. Cultivation of vegetable is restricted mainly to few pockets ranging from mid to high hills and valley areas. Vegetable cultivation is viewed as non-entrepreneurial traditional activity. There are three major components of support system of vegetable production in hills i.e. i) extension and training ii) marketing and iii) input supply. Performance of vegetable growing business depends on support of these three factors. There is a need to catalyze the process in order to strengthen demand and supply chain. Now it has been realized that vertical increase in production and productivity is possible through inoculation of the entrepreneurial qualities among the farming communities in general. Keeping this in view, the present study was designed to find out the factors influencing directly as well as indirectly entrepreneurial behaviour of vegetable growers.

### METHODOLOGY

The study was carried out during 2007 in the districts of Nainital and Almora of Kumaon division of Uttarakhand state. The district of Nainital and Almora



rank number one and two respectively in terms of vegetable production and acreages. Multi stage random sampling was used to select the respondents. A list of major vegetable growing development blocks was obtained from the District Horticulture Office of the selected district. Two villages from each development block having maximum area under vegetable cultivation were selected. Thus, finally eight villages namely Budhibana and Parwara (Dhari development block), Kafulta and Khalad (Betalgat development block) from Nainital district and Tunakot and Tipola (Tarikhhet development block) and Natadol and Mor patyuri (Langara development block) from Almora district were selected. A sample of 15 respondents from each village was selected randomly constituting a total 120 respondents for the study. Data were collected through structured interview schedule at their field/residence viz. education, socio-economic status, caste, training received, sources of information utilization, marketing facilities, ability to coordinate farming activities, value orientation and farming experience. On the basis of scores obtained in relation to above characteristics (social profile) the respondents were classified with the help of arithmetic mean and standard deviation in three categories as low, medium and high. For the present study entrepreneurial behaviour has been operationalized as assemblage of personality characteristics and environmental factors contributing in transformation of physical, natural and human resources into marketable product. Path analysis was used to understand the route of influence of predictor variables (social profile) on entrepreneurial behaviour of vegetable growers. It is most commonly used in the field of evolution, where it is important to separate out genetic and environmental influence. Path analysis allows these variables to exist side by side.

## RESULTS AND DISCUSSION

In the state of Uttarakhand, out of 7, 53,711 ha net sown area (Govt. of Uttarakhand, 2008-09) around 81, 800 ha *i.e.* 10.85% (NHB, 2009-10) is used for vegetable cultivation. Major vegetables grown are vegetable pea, potato, tomato, cabbage, cauliflower, French bean, capsicum, brinjal etc. Generally in hills a family of vegetable grower consists of 5-6 members with marginal land holding (2000-3000 m<sup>2</sup>) and annual income of up to Rs.50,000. Dairy as essential component of the system contributes 20-30% in agricultural income *i.e.* usually Rs.20,000-30,000/annum. Details of the

social profile of vegetable growers are presented in Table 1.

**Table 1. Social profile of vegetable growers (N=120)**

Attribute	Category	No. (%)
Education	Low (<1.87)	12.00 (10.00)
	Medium (1.87-4.45)	76.00 (80.00)
	High (>4.45)	12.00 (10.00)
SE status	Low (<154.10)	17.00 (06.66)
	Medium (154.10-439.71)	88.00 (73.33)
	High (>439.71)	15.00 (12.50)
Caste	General	106.00 (88.32)
	OBC	01.00 (00.83)
	SC	13.00 (10.79)
Training received	Low (<1.25)	103.00 (85.83)
	Medium (1.25-3.30)	07.00 (05.83)
	High (>3.30)	10.00 (08.33)
Sources of information utilization	Low (<2.54)	8.00 (06.66)
	Medium (2.54-8.00)	99.00 (82.50)
	High (>8.00)	13.00 (10.23)
Marketing facilities	Low (<8.30)	22.00 (18.33)
	Medium (8.30-14.95)	75.00 (62.50)
	High (>14.95)	23.00 (19.16)
Ability to coordinate farming activities	Low (<5.29)	25.00 (20.83)
	Medium (5.29-10.65)	95.00 (79.16)
	High (>10.65)	-
Value orientation	Low (<19.67)	11.00 (09.16)
	Medium (19.67-23.82)	38.00 (31.66)
	High (>23.82)	71.00 (59.16)
Farming experience	Low (<14.16)	16.00 (13.33)
	Medium (14.16-42.45)	86.00 (71.66)
	High (>42.45)	18.00 (15.00)

Figures in parenthesis indicate percentage

Most of the respondents (80.00%) belonged to medium category of education *i.e.* education up to high school. Majority of the respondents (73.33%) were in medium category of socio-economic status. This might have helped in taking risks related to adoption of new technologies. This might have also encouraged them to utilize more of available assistance by using multiple channels to get the inputs as well as sale of their vegetable produce than the vegetable growers of lower socio-economic status. Majority of the vegetable growers (88.32%) belonged to the general caste (normally *Rajput* and *Brahmin*) category. They owned land and engaged in vegetable cultivation. In contrary to the above facts, majority of the respondents (85.83%) were under low training received category. The reasons cited by the respondents were venue of training, duration of training, other social responsibilities and household



work, distance and accommodation. Most of the respondents (82.50 %) were in medium category of sources of information utilization. In this respect, relatives and traders were main sources for information on marketing agency, market preference of consumers, package of practices of vegetable cultivation etc. Most of the respondents (62.50 %) replied that marketing

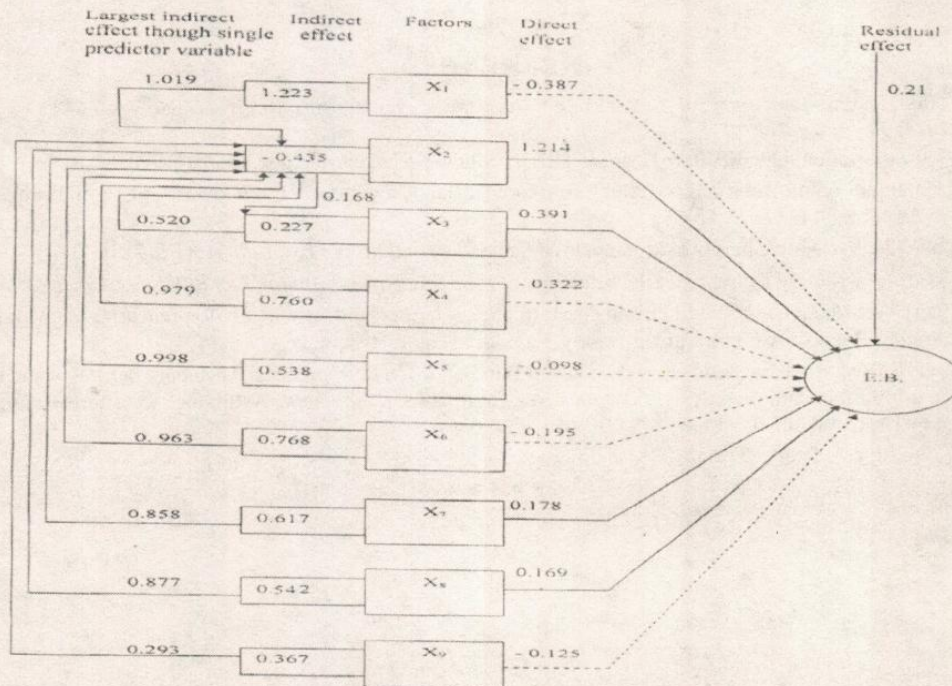
facilities were available at near by their villages. Mainly private transport was used to procure farm inputs from the private shops. Majority of the respondents (79.16 %) were in medium category of ability to coordinate farming activities. They completed the farm operations timely in order to harvest the vegetable crops early/ timely and to avoid the on/off farm related problems.

**Table 2. Direct (diagonal) and indirect effect and correlation coefficient of predictor variables on entrepreneurial behaviour of vegetable growers (N=120)**

Variables	EDU	SES	CAS	TRR	SIU	MAF	ACF	VAL	FEX	r value
EDU	-0.387	1.019	0.303	-0.153	-0.055	-0.138	0.158	0.125	-0.036	0.837**
SES		1.214	0.168	-0.260	-0.081	-0.155	0.126	0.122	-0.030	0.779**
CAS			0.391	-0.039	-0.016	-0.084	0.124	0.073	-0.052	0.618**
TRR				-0.322	-0.079	-0.121	0.050	0.072	-0.006	0.438**
SIU					-0.098	-0.145	0.078	0.104	-0.035	0.489**
MAF						-0.195	0.104	0.108	-0.030	0.573**
ACF							0.178	0.128	-0.049	0.797**
VAL								0.169	-0.031	0.711**
FEX									-0.125	0.242*

\*\* Significant at 0.01 level, \* Significant at 0.05 level, Residual = 0.21

Where : EDU= Education, SES= Socio-economic status, CAS= Caste, TRR= Training received, SIU= Sources of information utilization, MAF= Marketing facilities, ACF= Ability to coordinate farming activities, VAL= Value orientation, FEX= Farming experience



**Fig 1: Path diagram showing direct, indirect and largest indirect effect of predictor variables on entrepreneurial behaviour of vegetable growers**



For that, they sought the help of family members and relatives. Majority of the respondents (59.16%) had high value orientation in term of high aspiration to raise the level of income and living style. Majority of the vegetable growers (71.66%) had farming experience of 14-35 years. This might have helped in management of field related problems ranging from pests and diseases to marketing of the fresh vegetables.

It could be concluded from the correlation and path values of Table 2 that socio-economic status (1.214), caste (0.391), ability to coordinate farming activities (0.178) and value orientation (0.169) were crucial for entrepreneurial behaviour of vegetable growers. The variables like, education (-0.387) followed by sources of information utilization (-0.322), marketing facilities (-0.195) training received (-0.098) and experience in farming (-0.125) had direct negative impact on entrepreneurial behaviour. It was interesting to observe that socio-economic status (-0.435) had indirect negative impact on entrepreneurial behaviour. It is also evident that education (1.223) exerted maximum indirect effect on entrepreneurial behaviour through socio-economic status. In sampled area, basic education might have helped in understanding of know-what, know-why,

know-how and know- where type of knowledge of the vegetable growers. However, high education in the area has been a negative source (-0.387) of entrepreneurial behaviour because the educated persons tend to seek shelter of alternative source of livelihood rather than engaging in risk taking enterprise, the positive indirect effect also gives this impression that the educated youth tends to encourage the entrepreneurship amongst others rather than engaging himself. The effect of all factors was channeled through caste (Fig. 1).

### CONCLUSION

The path analysis indicated that socio-economic status, caste, ability to coordinate farming activities and value orientation had higher direct effect on entrepreneurial behaviour of vegetable growers of Uttarakhand. Socio-economic status and caste emerged as the most important factors through which higher indirect effect of other factors were channeled. These factors can be taken care of by the implementing agencies in hill state while selecting the beneficiaries for entrepreneurship development programmes.

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