

## A Study on Entrepreneurial Behaviour of Dairy Farmers

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### ABSTRACT

Taking into account the importance of developing entrepreneurial behaviour of dairy farmers, the present investigation was undertaken in Latur district of Maharashtra. A sample of 120 dairy farmers were selected from the district following a multistage random sampling procedure. It was observed that majority of the dairy farmers under study were from medium dairy farming experience having secondary school level of education along with semi-medium and medium land holding. Majority of the respondents had small family size medium level of annual income, herd size, social participation, extension contact, market orientation, and use of sources of information. Majority of the respondents were under medium level of entrepreneurial behaviour. On calculation of Entrepreneurial Behaviour Index (EBI) of the dairy farmers, majority of the respondents belonged to low category of entrepreneurial behavior.

**Key words:** Entrepreneurship, behaviour, profile, dairy farmers.

### INTRODUCTION

The entrepreneurs are key persons of any country for promoting economic growth and technological change. Dairy Enterprise, next to agriculture, not only provides continuous income and improves dietary standards of family but also provides employment to a large number of the rural people. India owns the largest livestock population in the world, accounting for nearly 57 per cent of the world buffalo population and 16 per cent of the cattle population. India continues to be the largest producer of milk in the world. The activity of an individual to decide adopting certain enterprises to make profit is regarded as entrepreneurial behaviour. The future progress of dairy farmers in the country depends on the development of entrepreneurial characteristics among dairy farmers. So it is important to analyse the entrepreneurial behaviour of dairy farmers.

### METHODOLOGY

The study was conducted in Latur district. Two tahsils and from each tahsil four villages were selected randomly. A list of dairy entrepreneurs (possessing minimum two milch animals such as cows/buffaloes/both) from these eight villages was obtained. From this list, fifteen respondents from each village were selected randomly for the study comprising the total sample of 120 respondents. In view with above objectives the multistage random sampling was used to select district, tahsil, village and dairy farmers. The data were collected with the help of pre-designed interview schedule by contacting the sample dairy farmers personally. The help of local leaders,

Gramsevaks, Talathies, Agricultural Assistants from State Department of Agriculture & Revenue was taken for approaching the dairy farmers with a view to develop rapport with them in order to get more reliable information.

Entrepreneurial behaviour of dairy farmers was measured in terms of six dimensions namely, innovativeness, achievement motivation, decision making ability, risk orientation, information seeking behavior and cosmopolitaness. On the basis of summing up the scores of all the six components of the entrepreneurial behaviour of the dairy farmers they were categorized into three categories namely low, medium and high on the basis of Mean and Standard Deviation. For the measurement of Entrepreneurial behaviour of dairy farmers, the scale developed by Chaudhari. (2006) was used. The formula for calculation of Entrepreneurial Behaviour Index (EBI) of the respondents is given below:

$$\text{Entrepreneurial Behaviour Index (EBI)} = \frac{\sum_{n=1}^6 T_n/M_n}{\sum_{n=1}^6 R_{cn}} \times 100$$

Where,

T<sub>n</sub> = Total obtained score of the component "n"

M<sub>n</sub> = Maximum obtainable score of the component "n"

R<sub>cn</sub> = Scale value of the component "n"

n = Number of components which are six in this context

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n1 = Innovativeness

n2 = Achievement motivation

n3 = Decision making ability

n4 = Risk orientation

n5 = Information seeking behaviour

n6 = Cosmopolitanness

The scale values of each component of the entrepreneurial behaviour was given by Chaudhari *et al.*, (2006) are as follows,

**Table 1: Scale values of components of entrepreneurial behaviour.**

Components	Scale values
Innovativeness	9.82
Achievement motivation	3.93
Decision making ability	6.60
Risk orientation	8.01
Information seeking behaviour	5.22
Cosmopolitanness	1.65

## RESULTS AND DISCUSSION

**Personal characteristics of dairy farmers :** The study of personal characteristics was made with reference to dairy farming experience, education, family type, land holding, occupation, annual income, herd size, extension contact, market orientation, social participation and use of sources of information.

**Table 2: Distribution of respondents according to their personal characteristics**

Category	n = 120	
	Frequency (f)	Percentage (%)
<b>Dairy Experience</b>		
Low (Up to 7 years)	25	20.83
Medium (8 to 12years)	78	65.00
High (Above 12 years)	17	14.17
	Mean	<b>9.68</b>
	SD	<b>2.8639</b>
<b>Education</b>		
Illiterate (no education)	11	09.17
Primary School (1 <sup>st</sup> - 4 <sup>th</sup> Stds.)	10	08.33
Middle School (5 <sup>th</sup> - 7 <sup>th</sup> Stds.)	25	20.84
Secondary School (8 <sup>th</sup> -10 <sup>th</sup> Stds.)	46	38.33
Higher Secondary School (11 <sup>th</sup> and 12 <sup>th</sup> Stds.)	17	14.17
Graduate (more than 12 <sup>th</sup> Stds.)	11	09.17

### Family size

Small (Up to 5 members)	44	36.66
Medium (6 members)	43	35.84
Large (7 and above members)	33	27.50
Mean		<b>6.050</b>
SD		<b>1.4252</b>

### Land holding

Small (1.1 to 2.0 ha.)	14	11.66
Semi-medium (2.1 to 4.0 ha.)	53	44.17
Medium (4.1 to 10.00 ha.)	53	44.17

### Occupation

Dairy + Agriculture	95	79.16
Dairy + Agriculture +Business	17	14.17
Dairy + Agriculture + Service	08	0667
Mean		<b>1.275</b>
SD		<b>0.5792</b>

### Annual income

Low (Up to Rs. 2,33,467 /yr.)	27	22.50
Medium (Rs. 2,33,468 to 6,43,698 /yr.)	73	60.83
High (Rs. 6,43,699 and above /yr.)	20	16.67
Mean		<b>4,38,583</b>
SD		<b>205116</b>

### Herd size

Small (Up to 3 milch animals.)	22	18.33
Medium (4 to 5 milch animals.)	70	58.33
Large (Above 5 milch animals.)	28	23.34
Mean		<b>4.6</b>
SD		<b>1.2595</b>

### Extension contact

Low (Up 5.22)	28	23.33
Medium (5.23 to 9.09)	82	68.33
High (Above 9.10)	10	08.34
Mean		<b>7.16</b>
SD		<b>1.94</b>

### Market orientation

Low (Up to 8.89)	21	17.50
Medium (8.90 to 11.65)	73	60.83
High (Above 11.65)	26	21.67
Mean		<b>10.275</b>
SD		<b>1.3779</b>

### Social Participation

Low (Up to 5.78)	10	08.33
Medium (5.79 to 13.54)	93	77.50
High (Above 13.54)	17	14.17
Mean		<b>9.6584</b>
SD		<b>3.8773</b>

### Use of Sources of Information

#### (A) Personal contacts

Low (Up to 10.52)	16	13.34
Medium (10.53 to 15.61)	87	72.50
High (15.62 and above)	17	14.16
Mean		<b>13.075</b>
SD		<b>2.5541</b>

<b>(B) Group contacts</b>		
Low (Up to 4.10)	35	29.17
Medium (4.11 to 7.11)	69	57.50
High (7.12 and above)	16	13.33
	Mean	<b>5.6167</b>
	SD	<b>1.5128</b>
<b>C) Mass contacts</b>		
Low (Up to 7.90)	10	08.33
Medium (7.91 to 10.81)	93	77.50
High (10.82 and above)	17	14.17
	Mean	<b>9.3583</b>
	SD	<b>1.4540</b>

It was noticed from Table 2 that majority of dairy farmers (65.00 %) had medium dairy farming experience. Regarding education, 38.33 per cent of dairy farmers were educated up to Secondary School level and 9.17 per cent of dairy farmers were illiterate. Majority of the respondents (36.66 %) were having small family size followed by 35.84 per cent of the respondents had medium family size.

It is also observed during the study that 44.17 per cent dairy farmers possessed semi-medium and medium land holding. As regards to occupation, majority of the respondents (79.16%) were engaged in dairy and agriculture enterprise. The findings also indicate that 60.83 per cent of dairy farmers had medium level of annual income and 22.50 per cent of dairy farmers had low level of annual income. More than half of the respondents (58.33%) were having medium herd size. It was also found that 68.33 per cent dairy farmers had medium extension contact with different extension personnel. As regards to market orientation, more than half of dairy farmers *i.e.*, 60.83 per cent had medium level of market orientation.

It was also noticed from Table 2 that, 77.50 per cent of the respondents had medium social participation and 14.17 per cent of the respondents were found in high category of social participation. Regarding the use of sources of information, more than half of the respondents *i.e.*, 72.50 per cent were having medium level of personal contacts. In relation to group contacts of the respondents, majority of the respondents (57.50%) were categorized under medium level of group contact category. While, relating to mass contacts, it indicates that more than half of the respondents *i.e.*, 77.50 per cent had high level of mass contacts.

**Entrepreneurial behaviour of dairy farmers:** The dependent variable *i.e.* entrepreneurial behaviour of dairy farmers was measured in terms of six dimensions namely,

innovativeness, achievement motivation, decision making ability, risk orientation, information seeking behavior and cosmopolitanness.

**Table 3: Distribution of the respondents according to their individual entrepreneurial characteristics n=120**

Categories	Frequency	Percentage
<b>Innovativeness</b>		
Low	13	10.83
Medium	05	04.17
High	102	85.00
	Mean	<b>56.60</b>
	SD	<b>7.21</b>
<b>Achievement Motivation</b>		
Low (Mean – SD)	40	33.33
Medium (Mean)	32	26.67
High (Mean + SD)	48	40.00
	Mean	<b>10.275</b>
	SD	<b>1.3779</b>
<b>Decision Making Ability</b>		
Poor (Mean – SD)	19	15.83
Moderate (Mean)	78	65.00
Good (Mean + SD)	23	19.17
	Mean	<b>10.191</b>
	SD	<b>1.5840</b>
<b>Risk Orientation</b>		
Low (Mean – SD)	17	14.17
Medium (Mean)	86	71.66
High (Mean + SD)	17	14.17
	Mean	<b>9.0166</b>
	SD	<b>1.5663</b>
<b>Information Seeking Behaviour</b>		
Low (Mean – SD)	31	25.83
Medium (Mean)	75	62.50
High (Mean + SD)	14	11.67
	Mean	<b>15.5</b>
	SD	<b>1.8964</b>
<b>Cosmopolitanness</b>		
Low (Mean – SD)	29	24.17
Medium (Mean)	68	56.66
High (Mean + SD)	23	19.17
	Mean	<b>8.875</b>
	SD	<b>1.7079</b>

**Individual entrepreneurial characteristics of dairy farmers**

**Innovativeness:**

Table 3 indicates that majority of the respondents (85.00%) had low innovativeness, followed by 10.83 per cent of the respondents having high innovativeness and only 4.17 per cent of the respondents had medium

innovativeness. The low innovativeness of small farmers might be due to their low education, smaller size of land holding and less social participation which leads to restricted information about new technologies. The findings are in the line with the studies conducted by Bhagyalaxmi *et al.*, (2003), Pandeti (2005) and Chaudhari (2006).

**Achievement Motivation:** It is apparent from the Table 3 that one third (33.33%) dairy farmers had low achievement motivation, whereas 26.67 per cent of dairy farmers belonged to medium achievement motivation category and 40.00 per cent of them were categorized under high achievement motivation category. The probable reason behind high achievement motivation may be due to their enthusiasm and zeal to become economically sound. The present findings are in inconformity with the studies conducted by Chaudhari (2006).

**Decision Making Ability:** The data from Table 3 show that, there were 65.00 per cent dairy farmers who had moderate decision making ability whereas, 15.83 per cent of dairy farmers belonged to poor decision making ability and 19.17 per cent of dairy farmers had good decision making ability. Majority of dairy farmers were in moderate decision making power. This might be due to their medium annual income, marginal and medium size of land holding and low education level as compared to other dairy farmers. The results of study are in the line with the findings of Chandrapaul (1998), Vijaykumar (2001), Chaudhari (2006) and Nagesh (2006).

**Risk orientation:** It is evident from Table 3 that 71.66 per cent of dairy farmers had medium risk orientation whereas, 14.17 per cent of dairy farmers belonged to each low and high category of risk orientation. The reason for majority of the respondents having medium risk orientation may be due to semi-medium and medium land holding category. Other possible reason for low and medium risk orientation of dairy farmers could be attributed that their old age and medium market orientation and annual income hinder them to take up the activities, which involve high risk. The findings of the study are in line with the studies of Subramanyam (2002), Bhagyalaxmi *et al.*, (2003), Suresh (2004), Nagesha (2005) and Chaudhari (2006).

**Information Seeking Behaviour:** It could be seen from Table 3 that majority of dairy farmers *i.e.*, 62.50 per cent of dairy farmers had medium information seeking behaviour, followed by 11.67 per cent of dairy farmers had high information seeking behaviour. However, 25.83 per cent of them had low information seeking behaviour.

The possible reason for majority of dairy farmers to fall in medium information seeking behaviour category might be due to their medium education and average financial conditions. The findings of Suresh (2004) and Pandeti (2005) are in the line of this result.

**Cosmopolitanness:** It is evident from Table 3 that 24.17 per cent of dairy farmers belonged to low level of cosmopolitanness followed by 19.17 per cent of respondents had high level of cosmopolitanness whereas, 56.66 per cent dairy farmers categorized under medium level of cosmopolitanness. Majority of the respondents were having medium cosmopolitanness as they were having medium annual income, size of land holding and unavailability of extension workers of public and private organizations locally. Low level of education may be the other reason behind such results. The findings of study are in the line with findings of Patel *et al.*, (2003), Suresh (2004) and Chaudhari (2006).

**Overall entrepreneurial behavior:** The perusal of Table 4 indicates that 17.50 per cent of dairy farmers belonged low entrepreneurial behaviour and 67.50 percent had medium, followed by 15.00 per cent of dairy farmers had high entrepreneurial behaviour. The possible reason for majority of respondents having medium entrepreneurial behaviour might be due to their medium financial condition, semi-medium size of land holding to take risk and late adoption of new technologies besides medium in innovativeness and medium information seeking behaviour. These are in the line with the results of Patil *et al.*, (1999), Nagesha (2005), Pandeti (2005), and Nagesh (2006), Gondkar *et al.*, (2012), who found that majority of the respondents had medium entrepreneurial behaviour.

**Table 4: Distribution of the respondents according to their overall entrepreneurial behaviour Index**

n=120		
Categories	Frequency (f)	Percentage (%)
Low (Up to 92.63)	21	17.50
Medium (92.64 to 115.56)	81	67.50
High (115.57 and above)	18	15.00
	<b>120</b>	<b>100.00</b>
	Mean	<b>104.1</b>
	SD	<b>11.4659</b>

**Entrepreneurial Behaviour Index (EBI):** It is evident from Table 5, that 36.67 per cent of dairy farmers belonged to low level category of entrepreneurial behaviour, followed by 33.33 per cent respondents had medium level of entrepreneurial behavior whereas, 30.00 per cent dairy farmers categorized under high level of entrepreneurial behaviour.

**Table 5: Distribution of respondents according to their Entrepreneurial Behaviour Index (EBI)**

n = 120		
Categories	Frequency (F)	Percentage (%)
Low (Up to 76.62)	44	36.67
Medium (76.63 to 95.59)	40	33.33
High (95.60 and above)	36	30.00
	<b>120</b>	<b>100</b>
	Mean	<b>86.114</b>
	SD	<b>9.492</b>

### CONCLUSIONS

From the research it was found that, majority of the dairy farmers under study were from medium dairy farming experience and secondary school level of education along with dairy farming agriculture as their occupation and most of the dairy farmers possessed semi-medium and medium land holding. Majority of the respondents had small family size, medium level of annual income, herd size, social participation and extension contact, market orientation, and use of sources of information. It could be concluded from this study that majority of the respondents had medium level of entrepreneurial behaviour. The major indicators of the entrepreneurial behaviour *i.e.*, innovativeness, achievement motivation, decision making ability, risk orientation, information seeking behaviour and cosmopolitanism showed that they are good entrepreneurs. There is a need to standardize the practices to improve economic condition, information seeking behaviour, cosmopolitanism and other weak points of the dairy farmers. As most of the dairy farmers had low level of innovativeness, there is a need to expose the dairy farmers to new developments in agricultural dairy, and motivate them to adopt the new technologies by organizing group discussions, meetings, study tours and field trips. The fact that majority of the dairy farmers had medium entrepreneurial behaviour which is a clear indication of the progressiveness of the dairy farmers. Therefore, it calls for intensification of educational efforts and policy support to the dairy farmers by the field extension workers of the development departments, NGOs and private organizations.

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