



# ENTREPRENEURIAL BEHAVIOUR OF WOMEN DAIRY FARMERS OF KERALA STATE

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## Abstract

The present study was undertaken in three districts of Kerala, viz., Ernakulam, Palakkad and Thrissur. A proportionate stratified multistage random sampling procedure was used to select 153 respondents from, Vandazhi panchayat in Alathur block, Karukutty panchayat in Angamali block and Nadathara panchayat in Ollukara block. A sample of 51 women dairy farmers were selected from each panchayat so as to include 17 women each with one, two and more than two cow units. Data were collected through the personal interview method with a structured pretested interview schedule. Entrepreneurial Behaviour (EB) was measured by developing an index known as the Entrepreneurial Behaviour Index (EBI) as described by Senthilvinayagam (1999). Most of the respondents in the one cow category in this study exhibited entrepreneurial characteristics that qualified them to fall in the medium category (56.86%) whereas 43.13 per cent were placed in the category indicating a low level of entrepreneurial behaviour. In the case of respondents with two cow units, most of the women (78.44%) fell in the medium level category with respect to entrepreneurial behaviour. Results of the analysis of variance

between the three herd size respondents indicated that there were significant differences between the respondents of three herd sizes with regard to the entrepreneurial behaviour index and all the dimension of entrepreneurial behaviour as well.

**Key words :** Entrepreneurial behaviour, women dairy farmers

The term entrepreneur has been widely perceived as referring to those engaged in industrial activity; however it has in recent times been extended to agriculture and animal husbandry as well. This argument stems from the increased business character of agriculture and animal husbandry where the success or failure of the farming activity is contingent upon the creativity of the operator's response to the challenge. Thus even in farming activities, the traits and characteristics normally associated with entrepreneurs may play a decisive role in deciding its success.

The introduction of new breeds of dairy cattle, improved feed technology and

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other developments in the animal husbandry field have initiated the transformation of the dairy sector as well. Any advancement in technology can never be fruitful until farmers become entrepreneurs. It was believed that entrepreneurs are born and not made. However, recent research on promoting entrepreneurship seems to show that entrepreneurship can be planned and developed. The dairy sector in Kerala is at the cross roads. On the one hand, cheaper milk from neighbouring states flood the market as native production cannot meet the demand while on the other hand, fragmentation of land holdings, high feed and labour costs, threaten the very existence of this sector. But in a highly literate, health conscious state, there is still a huge demand for fresh milk produced locally; consumers are willing to pay more for farm fresh milk. To combat the unfavourable situation of course there are technologies, but remarkable growth can be achieved only if proper entrepreneurial skill and hard work are geared up appropriately. Women all over India have traditionally been involved in dairying. In Kerala as well, women play an important role in the dairy sector. However, there have not been any studies on the entrepreneurial behaviour of women dairy farmers in the state.

In view of the serious setbacks faced by the dairy sector in the state, it is important to look into this aspect as well so that appropriate measures to promote entrepreneurial personalities can be taken.

Keeping this in view, the present study was conducted with the objective of measuring the entrepreneurial behaviour of the women dairy farmers using a standardized index.

### Materials and Methods

The present study was undertaken in three districts of the state of Kerala which were selected from the six districts with the highest cattle population using simple random sampling. The present study was undertaken in the three districts selected were Ernakulam, Palakkad and Thrissur. A multistage random sampling procedure was used to select the respondents. In the first stage, from each of the three districts selected, simple random

sampling was used to select one block from among the first four blocks with the highest cattle population. According, Alathur, Angamali and Ollukara blocks were selected from Palakkad, Ernakulam and Thrissur districts respectively. From among the nine panchayats in Alathur block, Vandazhi panchayat was selected while from among then nine panchayats in Angamali block, Karukutty panchayat was selected and from among five panchayats in Ollukara block, Nadathara panchayath was selected, in each case by using the procedure of simple random sampling. In the third stage of sampling, from each panchayath, the main milk society with the highest milk collection was identified and from each society a list of all the women dairy farmers with one, two and more that two cows was prepared. A proportionate stratified sample of 51 women dairy farmers were selected from each panchayat so as to include 17 women each with one, two and more than two cow units. Thus the final sample contained a total of 153 farm women, 51 each with one, two and more than two cow units from each of the three panchayats. Data were collected through the personal interview method with a structured pretested interview schedule.

Entrepreneurial Behaviour (EB) was measured by developing an index known as the Entrepreneurial Behaviour Index (EBI) as described by Senthilvinayagam (1999). The dimensions of entrepreneurial behaviour to be included in the study were selected after consultation with extension scientists and experts and extensive review of literature. De and Rao (2001) compiled a list of several dimensions of entrepreneurial behaviour that were significant as well as non significant in past studies.

A total of 14 dimensions related to entrepreneurial were identified. The identified dimensions related to entrepreneurial behaviour were sent to 40 Extension scientists for judging their relevancy for inclusion in the final format of the interview schedule. Judges included extension scientists working in various institutes under the Indian Council for Agricultural Research, the Indian Veterinary Research Institute and other Veterinary Colleges. They were asked to rate the variables

on a four point continuum with scores of 4,3,2, and 1 representing most relevant, relevant, less relevant, and least relevant respectively. They were also requested to suggest any other variable which they considered relevant. From a total of 40 judges selected for rating, responses were obtained from 32 judges. Dimensions were selected based on mean relevancy scores. Variables with mean relevancy scores above the means were selected for inclusion in the final study. Out of the 14 dimensions of entrepreneurial behaviour, 7 dimensions were selected. Entrepreneurial Behaviour Index was thus developed as a weighted index of all the seven dimensions viz., innovation proneness, risk orientation, achievement orientation. This was measured by formulating a mathematically formulated index as described below:

$$EBI = \frac{\sum i - k \omega_i \left( \frac{x_i}{x_{max}} \right)}{\sum i - k \omega_i}$$

Where EBI= Entrepreneurial Behaviour Index,

$i$  =  $i$ th dimension,

$k$  = number of dimensions,

$w_i$  = relevancy rating of the  $i$ th dimension,

$x_i$  = score of the  $i$ th dimension

and  $x_{max}$  = maximum score of the  $i$ th dimension

The range of this index was between zero and 7 and the respondents were categorized into three groups viz., high, medium and low using mean and standard deviation.

## Results and Discussion

The results of the study as evidenced by data in Table 1 indicated that none of the

women with one cow units fell in the category of high entrepreneurial behaviour. Most of the respondents in the one cow category in this study exhibited entrepreneurial characteristics that qualified them to fall in the medium category (56.86%) whereas 43.13 per cent were placed in the category indicating a low level of entrepreneurial behaviour.

Just over one third (37.25 %) of the women with than two cows had entrepreneurial characteristics that qualified them to be placed in the category indicating a high level of entrepreneurial behaviour while the rest (62.75%) had medium level. None of the women with more than two cows fell in the category indicating a low level of entrepreneurial behaviour. In the case of respondents with two cow units, most of the women (78.44%) fell in the medium level category with respect to entrepreneurial behaviour. Very few women with two cows fell in the low (11.38%) and high (9.80%) categories with respect to entrepreneurial behaviour.

Results of the analysis of variance between the three herd size respondents as evident from Table 2 indicated that there were significant differences between the respondents of three herd size with regard to the entrepreneurial behaviour index and all the dimension of entrepreneurial behaviour as well.

Pair wise comparisons between the three groups indicated that there was significant difference between the means of the three groups for all the dimension studied as well as for the entrepreneurial behaviour index.

**Table 1.** Distribution of respondents according to their level of entrepreneurial behaviour

Category	Herd size							
	One cow		Two cows		More than two cows		Total	
	f	%	f	%	f	%	f	%
Low	22	43.13	6	11.76	0	0	28	18.30
Medium	29	56.87	40	78.44	32	62.75	101	66.01
High	0	0	5	9.80	19	37.25	24	15.69
Total	51	100.00	51	100.00	51	100.00	153	100.00

Mean: 4.33

SD: 1.23

**Table 2.** Analysis of variance between the three herd size respondents with respect to Entrepreneurial behaviour index

Entrepreneurial behaviour index	Between Groups	87.641	2	43.820	45.964	.000***
	Within Groups	143.005	150	.953		
	Total	230.645	152			

\*\*Significant at 0.01 level

**Table 3.** Duncan's Multiple Range Test

Entrepreneurial behaviour index		Subset for alpha=.05		
Groups	N	1	2	3
1cow	51	3.4102		
2 cows	51		4.3161	
>2 cows	51			5.2639
<b>Significance</b>		<b>1.000</b>	<b>1.000</b>	<b>1.000</b>

In the present study, two thirds of the respondents fell in the medium level of entrepreneurial behaviour which is similar to the findings of Boruah *et al.* (2015) who observed that 63 per cent of tribal winter vegetable growers of Jorhat district, Assam had medium levels of entrepreneurial behaviour. The findings of the present study also concur with those of Gamit *et al.* (2015) who observed that just over two thirds of dairy farmers of Surat district of Gujarat had medium levels of entrepreneurial behaviour. Ahjua *et al.* also made similar findings among dairy farmers of Jind and Hisar districts of Haryana. Further, the present study also sheds light on the fact that just over fifteen per cent of women dairy farmers studied had high levels of entrepreneurial behaviour which was similar to levels observed by Gamit *et al.* (2015). The three categories of respondents differed significantly with respect to the entrepreneurial behaviour scores. Boruah *et al.* (2015) also observed that size of the operational land holding was significantly and positively correlated with entrepreneurial behaviour.

Though women with large herd sizes had higher entrepreneurial behaviour indices when compared to other women, only one third of them fell in the high category. Among women with medium sized herds, only around ten percent fell in the high category while none of the women with small herds had high

entrepreneurial behaviour. These results point to the need for concerted efforts on the parts of agencies to promote entrepreneurial traits among the women dairy farmers of the state so as to ensure the economic viability of the dairy enterprises.

### References

- Ahuja, R., Singh, S.P., Sangwan, S.S. and Gautam. 2016. Entrepreneurial behaviour of dairy farmers in Haryana. *Haryana Vet.* **55**: 6-11.
- Boruah, R., Borua, S., Deka, C.R. and Borah, D. 2015. Entrepreneurial behaviour of tribal winter vegetable growers in Jorhat District of Assam. *Indian J. Ext.Edu.* **15**: 65-69.
- De, D. and Rao, M.S. 2001. Axiomatic theory of entrepreneurial behaviour of farmers. *MANGEEExt. Res. Rev.* **2**: 100-124.
- Gamit, M.P., Durgga Rani, V., Bhabhor, K.K., Tyagi, K.K. and Rathod, A.D. 2015. *Int.J.Adv.Multidisciplinary Res.* **2**: 50-56.
- Senthilvinayagam, S. 1999. Entrepreneurial behaviour of agri-business operators. *Ph.D. thesis*, Kerala Agricultural University, Vellanikara 221p. ■