RESEARCH ARTICLE.........

Study on self-confidence of dairy farmers and relationship with their personal attributes

RAKESH AHUJA, S.P. SINGH, S. S. SANGWAN, GAUTAM **AND ANIKA MALIK**

Author for Corresponding -

ANIKA MALIK
Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Sciences, Lala Lajput Rai University of Veterinary and Animal Sciences, HISAR (HARYANA) INDIA
Email : anikadhundwal@ gmail.com

See end of the article for
Coopted authors'

ABSTRACT...... Dairy enterprise could play a more constructive role in promoting rural welfare and reducing poverty by generating employment at farm level is increasingly being recognized. The present study was conducted on 160 dairy farmers selected from 12 villages of Hisar and Jind districts of Haryana to assess the self-confidence among dairy entrepreneurs about animal husbandry practices. Self-confidence was measured by using innovative scale which consisted of five practices in respect of the dairy management. The respondents were grouped into three categories namely low, medium and high level of self-confidence using mean and one standard deviation. The data were collected through pre-tested structured interview schedule by holding personal interview with the dairy farmers during 2014-15. The overall analysis revealed that 36.88 per cent of dairy farmers had medium level of self-confidence while 33.1 per cent and 30 per cent of dairy farmers were having low and high level of self-confidence, respectively. It is evident from the correlation analysis that educational qualification, size of land holding, annual income, caste, dairy farming experience, extension contact, social participation, mass media exposure, economic motivation, scientific orientation, attitude towards dairy farming and market orientation showed positive and significant relationship (P<1) with self-confidence of dairy farmers while age also having significant but negative correlation with self-confidence of dairy farmers. The negative correlation of age with self-confidence of dairy farmers may be attributed to the reason that with the advancing age farmers become more inclined towards traditional practices due to lack of energy, change proneness, decision making ability and progressive attitude. Almost similar results were also seen in case of small, medium and large categories of farmers. Further, regression analysis revealed that two independent variables namely, caste and economic motivation were found to have positive and significant values of 't' for 'b'. The multiple co-efficient determinant (R^2) further implies that all the thirteen variables had together explained 91.25 per cent of variation towards self-confidence of dairy farmers.

KEY WORDS...... Self-confidence, Economic motivation, Scientific orientation, Dairy farmers

RAKESH AHUJA, S.P. SINGH, S. S. SANGWAN, GAUTAM **and** **ANIKA MALIK**

INTRODUCTION...

The animal husbandry sector plays an important and vital role in providing a source of food, rich in animal protein to the general public and supplementary income to the economically weaker section of the society like S.C., S.T. and small farmers, marginal farmers and agricultural labourers. Haryana holds a special place in the field of milk production and it is truly known as the 'Milk Pail' of the country. More than 80 per cent of the State milk comes from buffaloes alone. The state is proud to be the home-tract of one of the best buffalo breeds of the world *i.e.* 'Murrah'. Buffalo has also been recognized to be the animal of the 21st century and thus, systematic improvement of buffaloes for milk production of the country is a foregone conclusion. There is a great demand of this high yielding elite breed not only from within but outside the country as well. Most of the states procure breeding stock from Haryana for up gradation of their low producing buffaloes. The state is quite conscious of conserving, improving and fast multiplying this unique genetic stock of buffaloes by promoting breeding activities in the State (Anonymous, 2012). The milk production in the state during the year 2011-12 and 2012-13 was 66.61 lakh tonne and 70.40 lakh tonnes, respectively. The per capita per day milk availability in the state for the year 2011-12 and 2012-13 was 720 g and 767 g, respectively, which is the second highest in the country (Anonymous, 2014).

Technology transformation for sustainable production, productivity and profitability depends on the decisions and action of millions of farmers. Agricultural scientists in the country are striving towards developing appropriate technologies to suit to complex and diverse agro-ecological situations at the farm level (Anonymous, 2010). Economic growth happens when a society embraces and encourages entrepreneurial behaviour; when it values achievement and when there are a lot of people who are 'competent, resourceful and enterprising' (Kahan, 2012). When the desire for achievement becomes a dominant concern for a person it is expressed in restlessness, driving energy to aim at attaining excellence, getting ahead, beating competitors, doing things better, faster, more efficiently and finding unique solutions to different problems. This need of self-confidence leads people to become entrepreneurs. Such people with strong self-confidence set challenges, goals, demanding more efforts and goals, which are possible to attain. Keeping the above facts in mind, this study was planned to assess the level of self-confidence in dairy farmers as well as their relationship with personality traits.

RESEARCH METHODS......................................

The study was carried out in Hisar and Jind districts of Haryana of India. These districts were selected on the basis of highest concentration of cattle and buffalo. Multi-stage sampling procedure was adopted in this study. Two subdivisions, namely Hisar and Jind were selected from Hisar and Jind districts, respectively. In the next stage, one CD block, namely Hisar-I and one CD block, namely Adampur were randomly selected from Hisar subdivision. Likewise from Jind subdivision, Jind CD block and Pillukhera CD block were selected randomly. Three villages were randomly chosen from each CD block. In this way 12 villages were selected from both districts. Village wise list of buffalo and cattle owners having more than 8 animals (cattle and buffalo) was prepared and 80 farmers were chosen from each selected district from that list by using proportionate population sampling technique. Therefore, 160 farmers constituted the sampling unit for this study. Self-confidence was measured by using self-confidence scale consisted of six statements. Each statement had two options and out of these, one was concerned with self-confidence and 1 score was assigned accordingly. Thus, the total score for each dairy farmer on his self-confidence would range from zero to five. Thirteen important independent variables (personality traits) namely age, educational qualification, size of land holding, income, caste, dairy farming experience, extension contact, social participation, mass media exposure, scientific orientation, risk orientation, attitude of farmers towards dairy farming and market orientation were selected. These independent variables were measured by using schedule/available measurement techniques. The respondents were grouped into three categories namely low, medium and high level of self-confidence using mean and one standard deviation. The data were collected through pre-tested structured interview schedule by holding personal interview with the dairy farmers during 2014-15.

RESEARCH FINDINGS AND ANALYSIS...........

The results obtained from the present investigation

Table 1 : Distribution of the respondents according to various personality traits				(n=160)
Sr. No.	Attributes	Category	Overall	
			frequency	%
1.	Age	Young (Below 31 years)	18	11.25
		Middle (31-55 years)	136	85.00
		Old (Above 55 years)	6	3.75
		Mean	41.84	
		S.D.	9.43	
2.	Educational qualification	Illiterate	6	3.75
		Primary	20	12.50
		Middle	23	14.38
		High School	35	21.88
		Secondary	64	40.00
		Graduate and above	12	7.50
		Mean	3.04	
		S.D.	1.30	
3.	Size of land holding	Landless	15	9.38
		Small (Below 2 hecs.)	72	45.00
		Medium (2 - 4 hecs.)	52	32.50
		Large (Above 4 hecs.)	21	13.13
		Mean	1.49	
		S.D.	0.84	
4.	Annual income	Low (Below 1.41 lakh)	23	14.38
		Medium (1.41 - 4.71 lakh)	118	73.75
		High (Above 4.71 lakh)	19	11.88
		Mean	305.97	
		S.D.	165.85	
5.	Caste	SC/ST	37	23.13
		OBC	49	30.63
		General	74	46.25
		Mean	2.23	
		S.D.	0.80	
6.	Dairy farming experience	Low (Below 6 years)	28	17.50
		Medium (6-30 years)	97	60.63
		High (Above 30 years)	35	21.88
		Mean	18.45	
		S.D.	12.88	
7	Extension contact	Low (Below 5)	31	19.38
		Medium (5-9)	105	65.63
		High (Above 9)	24	15.00
		Mean	7.29	
		S.D.	2.51	
8.	Social participation	No social participation	101	63.13
		Low	59	36.88
		Medium	0	0
		High	0	0
		Mean	0.43	
		S.D.	0.64	

Table 1: Contd……………

RAKESH AHUJA, S.P. SINGH, S. S. SANGWAN, GAUTAM **AND ANIKA MALIK**

Table 1 : Contd………

9.	Mass media exposure	Low (Below 5)	60		37.50
		Medium (5-9)	62		38.75
		High (Above 9)	38		23.75
		Mean		7.38	
		S.D.		2.89	
10.	Economic motivation	Low (Below 11)	64		40.00
		Medium (11 - 15)	79		49.38
		High (Above 15)	17		10.63
		Mean		12.7	
		S.D.		2.55	
11.	Scientific orientation	Low (Below 10)	32		20.00
		Medium (10-12)	96		60.00
		High (Above 12)	32		20.00
		Mean		11.28	
		S.D.		2.47	
12.	Attitude towards dairy farming	Unfavourable (Below 11)	27		16.88
		Favourable (11 - 15)	103		64.38
		Highly favourable (Above 15)	30		18.75
		Mean		13.06	
		S.D.		3.42	
13.	Market orientation	Low (Below 9)	44		27.50
		Medium (9 - 11)	71		44.38
		High (Above 11)	45		28.13
		Mean		10.23	
		S.D.		1.61	

as well as relevant discussion have been summarized under the following heads :

Profile of the respondents:

Profile of the respondents is presented in Table 1. It is evident from the table that majority of the respondents (85%) belonged to middle age group (31-55 yrs), 96.25 per cent were literate farmers, had medium level of extension contact and also medium level of mass media exposure. 53.75 per cent of them were having medium herd size, 49.38 per cent of the dairy farmers had medium economic motivation and 83.22 per cent of respondents had favourable attitude toward dairy farming. Majority of them also had favourable market orientation.

Level of self-confidence:

The information given in Table 2 reveal that 40.48 per cent of small farmers had low level of self-confidence while 35.71 and 23.81 per cent of them were found to have high and medium level of self-confidence,

Table 2 : Distribution of dairy farmers on the basis of self-confidence

Self-confidence		Small farmers		Medium farmers		Large farmers		Overall farmers	
		F	%	F	%	F	%	F	%
	Low (Below 5)	17	40.48	40	46.51	6	18.75	63	39.38
	Medium (5 – 6)	10	23.81	32	37.21	6	18.75	48	30.00
	High (Above 6)	15	35.71	14	16.28	20	62.50	49	30.63
	Mean	3.86		4.60		5.44		4.58	
	S.D.	1.42		1.04		0.79		1.23	

F= Frequency

respectively. Similarly in medium farmer's category, maximum percentage (46.51%) of farmers were also having low level of self-confidence followed by medium (37.21%) and high level (16.28%) of self-confidence, respectively. The dairy farmers were not enough confident about their abilities to improve their dairy enterprise and were not so much success for running dairy enterprise. This may be the reason of low self-confidence.

In case of large category of dairy farmers majority (62.50%) of total number of large farmers were having high level of self-confidence while remaining both two categories (low and medium) were sharing equal distributions (18.75% in each) of farmers. Patel *et al.* (2014) revealed in their study that majority (55%) of dairy farmers had medium level of self-confidence followed by 22.5 per cent each fallen in high and low level of self-confidence in Panagar block of Jabalpur district of M.P.

Table 3: Correlation between personality traits and self confidence of farmers

Sr. No.	Traits	Small 'r' value	Medium 'r' value	Large 'r' value	Overall 'r' value
1.	Age	-0.32*	-0.31**	-0.05	-0.24**
2.	Educational qualification	0.61**	0.16	0.23	0.34**
3.	Size of land holding	0.45**	0.279**	0.51**	0.43**
4.	Annual income	0.25	0.05	0.22	0.26**
5.	Caste	0.82**	0.50**	0.59**	0.64**
6.	Dairy farming experience	0.395**	0.210	0.15	0.32**
7.	Extension contact	0.89**	0.52**	0.66**	0.73**
8.	Social participation	0.02	0.00	0.14	0.25**
9.	Mass media exposure	0.84**	0.40**	0.68**	0.67**
10.	Economic motivation	0.93**	0.62**	0.84**	0.82**
11.	Scientific orientation	0.90**	0.66**	0.82**	0.81**
12.	Attitude towards dairy farming	0.90**	0.68**	0.88**	0.81**
13.	Market orientation	0.85**	0.58**	0.74**	0.76**

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

Table 4 : Regression co-efficients between personality traits and self confidence of dairy farmers

Sr. No.	Traits	Small 'b' value	Small 't' value	Medium 'b' value	Medium 't' value	Large 'b' value	Large 't' value	Overall 'b' value	Overall 't' value
1.	Age	-0.003	-0.202	-0.01	-1.06	0.00	-0.33	0.00	-0.23
2.	Educational qualification	0.020	0.200	-0.01	-0.12	0.06	0.63	0.08	1.73
3.	Size of land holding	0.003	0.020	0.00	0.03	0.17	1.46	0.02	0.23
4.	Annual income	0.003	0.957	0.00	0.63	0.00	-0.24	0.00	-0.64
5.	Caste	0.309	1.388	0.17	0.96	0.04	0.25	0.22	2.14*
6.	Dairy farming experience	-0.001	-0.039	0.00	0.30	0.01	0.81	0.01	0.94
7.	Extension contact	0.206	0.865	-0.02	-0.09	-0.01	-0.08	0.02	0.22
8.	Social participation	0.049	0.076	0.05	0.33	-0.03	-0.17	0.01	0.05
9.	Mass media exposure	-0.021	-0.131	-0.01	-0.09	-0.12	-1.52	0.00	-0.05
10.	Economic motivation	0.386	2.831**	0.18	3.49**	0.14	2.46*	0.20	3.11**
11.	Scientific orientation	0.000	-0.002	-0.06	-0.29	-0.02	-0.18	-0.05	-0.57
12.	Attitude towards dairy farming	-0.063	-0.475	0.24	1.58	0.22	2.32*	0.13	1.73
13.	Market orientation	-0.159	-1.138	-0.19	-0.88	0.01	0.05	-0.01	-0.07
R square		0.9065		0.8850		0.8556		0.9125	
F value		20.886**		5.6515**		8.2066**		28.368**	

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

Similarly Mariammal and Seethalakshmi (2017) reported that more than three-fifth (62.33%) of the women dairy farmers had high self-confidence, 33.00 per cent had medium self-confidence and 4.67 per cent had low self-confidence in Dindigul district of Tamil Nadu. Higher level of confidence among large category of famers may be due to their high level of profile (education, mass media exposure, economic orientation, market orientation, etc.).

Among all the three categories only the large farmers were having comparatively more extent of self-confidence. The reason might be that they are prepared to expend energy and mental effort as they expect and often receive appropriate or, in their terms, valuable rewards. Also, they are flexible and opportunistic because they believe they have the capacity to become involved across a broad range of situations. Overall maximum (39.38%) per cent of farmers was having low level of self-confidence while remaining 30.63 and 30 per cent of farmers were belonged to medium and high level of self-confidence, respectively. These findings are almost in accordance with Kayensuza (2012) while contradictory trend was observed by Lawrence and Ganguli (2012). Almost similar results were also reported by Satish *et al.* (2017) in their study in Aurangabad and Jalna districts of Marathwada region of Maharashtra.

Relationship between personality traits and self confidence of dairy farmers:

To determine relationship between personal attributes and self-confidence of dairy farmers, zero order correlation co-efficients were worked out. Table 3 depicts that among small category of the respondents, age (r = - 0.32) had negative and significant relationship (P<0.05) with self-confidence whereas educational qualification (r = 0.61), size of land holding (r = 0.45), caste (r = 0.82), dairy farming experience (r = 0.395), extension contact (r = 0.89), mass media exposure (r = 0.84), economic motivation (r = 0.93), scientific orientation (r = 0.90), attitude towards dairy farming (r = 0.90) and market orientation (r = 0.85) were found to have positively and significantly correlated (P < 0.01). Annual income (r = 0.25) and social participation (r = 0.02) had no significant correlation with self-confidence at any level of significance. In case of medium category of farmers, size of land holding (r = 0.279), caste (r =

0.50), extension contact (r = 0.52), mass media exposure (r = 0.40), economic motivation (r = 0.62), scientific orientation (r = 0.66), attitude towards dairy farming (r = 0.68) and market orientation (r = 0.58) of the dairy farmers had positively and significantly correlated (P < 0.01) with self-confidence whereas, age of the respondents (r = -0.31) was negatively significant at same level of significance. Among the large category of farmers, size of land holding (r = 0.51), caste (r = 0.59), extension contact (r = 0.66), mass media exposure (r = 0.68), economic motivation (r = 0.84), scientific orientation (r = 0.82), attitude towards dairy farming (r = 0.88) and market orientation (r = 0.74) were found to have significant relationship (P < 0.01) with self-confidence.

The analysis of 160 respondents depicts that age of the respondents (r = -0.24) had negative and significant correlation (P < 0.01) with self-confidence while educational qualification (r = 0.34), size of land holding (r = 0.43), annual income (r = 0.26), caste (r = 0.64), dairy farming experience (r = 0.32), extension contact (r = 0.73), social participation (r = 0.25), mass media exposure (r = 0.67), economic motivation (r = 0.82), scientific orientation (r = 0.81), attitude towards dairy farming (r = 0.81) and market orientation (r = 0.76) had positive and significant relationship (P<0.01) with the self- confidence of farmers. Similar work related to the present investigation was also carried out by Baindha (2011) and Chandrapaul (1998).

Contribution of personality traits towards self-confidence of dairy farmers:

Regression analysis of overall respondents (Table 4) reveals that caste (b = 0.22) and economic motivation (b = 0.20) were found to have positive and significant values (P<0.01) of 't' for 'b'. All the thirteen variables jointly explained 91.25 per cent of variation towards the self-confidence. Category-wise analysis indicates that economic motivation had positive and significant regression co-efficients with self-confidence in all the three categories of dairy farmers. Hence, economic motivation was emerged as an important factor which influences self-confidence of the farmers. The co-efficient of determinant (R^2) value was also found highly significant and exhibited 90.65, 88.50 and 85.56 per cent variation towards self-confidence in case of small, medium and large categories of dairy farmers.

Conclusion:

Maximum percentage of small farmers (40.48%) and medium categories (46.51%) of dairy farmers had low level of self-confidence while in case of large category of farmers, majority (62.50%) of them were having high level of self-confidence. This imply that large dairy farmers are having natural instinct to co-ordinate actions out of their social system to explore more opportunities for commercial dairy farming which in turn results in increase in benefits accompanied by increase in their self-confidence in dairy farming practices. Organization of various training programmes for dairy farmers to improve marketing practices in order to increase self-confidence can play a very important role in furtherance of entrepreneurs of this society. Self-confidence in any entrepreneur is a well recognized factor very since long. As the self-confidence is the degree of belief in one's own abilities in achieving the things one wishes. The formal education also plays as a means to nurture and boost up the self-confidence among the children and adults. The low level of self-confidence of the dairy farmers was found among small and medium farmers. Therefore, efforts should be made to increase the level of self-confidence through intensive training programmes, group discussion, tours, field visits, awareness campaign etc. for socio-economic upliftment of the dairy farmers. Economic motivation also played an important role in case of self-confidence, therefore, farmers should motivate for scientific dairy farming.

COOPTED AUTHORS' –
RAKESH AHUJA, S. P. SINGH, S.S. SANGWAN AND GAUTAM, Department of Veterinary and Animal Husbandry Extension Education, College of Veterinary Sciences, Lala Lajput Rai University of Veterinary and Animal Sciences, HISAR (HARYANA) INDIA
Email: rakesh.ahuja2009@gmail.com; spsingh.vet@gmail.com; hod.vae@luvas.edu.in; gautamhisar@gmail.com

LITERATURE CITED..

Anonymous (2010). Farm Innovators, 2010, ICAR, NEW DELHI, INDIA.

Anonymous (2012). 19th *Livestock census-2012.* All India Report. Department of Animal Husbandry, Dairying and Fisheries Ministry of Agriculture Government of India New Delhi, Chapter- 3: 11.

Anonymous (2014). *Economic survey of Haryana -2013-14.* Department of Economics and Statistical Analysis, Panchkula, Haryana : pp. 40.

Baindha, A. (2011). Entrepreneurial behaviour of milk processors in Karnal district of Haryana. M.V.Sc. Thesis, National Dairy Research Institute, Karnal, HARYANA (INDIA).

Chandrapaul, K. (1998). A study on entrepreneurial behaviour of vegetable growers in Krishna district of Andhra Pradesh. M.Sc. (Ag.) Thesis, Acharya N.G. Ranga Agricultural University, Hyderabad, A.P. (INDIA).

Kahan, D. (2012). *Entrepreneurship in farming.* Food and Agriculture Organization of the United Nations Rome.

Kayensuza, L. (2012). Entrepreneurial behaviour on scientific dairy farming among youth of Manipur. M.V.Sc. Thesis, National Dairy Research Institute, Karnal, HARYANA (INDIA).

Lawrence, C. and Ganguli, D. (2012). Entrepreneurial behaviour of dairy farmers in Tamil Nadu. *Indian Res. J. Extn. Edu.,* **12** (1): 66-70.

Mariammal, R. and Seethalakshmi, M. (2017). Entrepreneurial behaviour of dairy women in Dindigul district of Tamil Nadu. *Internat. J. Sci. Environ. & Technol.*, **6**(4): 2539 – 2547.

Patel, Pooja, Patel, M.M., Badodia, S.K. and Sharma, Prabhakar (2014). Entrepreneurial behaviour of dairy farmers. *Indian Res. J. Extn. Edu.,* **14** (2):46-49.

Satish, M. Sadashive, Santosh, S. Pathade, Manish, N. Sawant, N., Ramesh and Pordhiya, K.I. (2017). Entrepreneurial behaviour of dairy farmers: A study in Marathwada region of Maharashtra. *Internat. J. Curr. Microbiol. App. Sci.*,**6** (7): 97-101. https://doi.org/10.20546/ijcmas.2017.607.011.

12th Year
★★★★★ of Excellence ★★★★★