Entrepreneurial Behaviour of Tribal Dairy Farmers in Balrampur District of Northern Hill Region of Chhattisgarh

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ABSTRACT

Entrepreneurs play an important role in the economic development of the society. The study was conducted during 2018-19 to know the entrepreneurial behaviour of tribal dairy farmers in Balrampur District of northern hill region of Chhattisgarh. The data were collected by pre-tested interview schedule from 120 interviewees. The results of the study found that majority of the respondents exhibited medium level (72.50%) entrepreneurial behaviour. The correlation of entrepreneurial behaviour among the eighteen independent variables; only seven variables (Land Holding, Mass Media, Income Status, Herd Size, Total Milk Production, Milk Sale and Attitude) showed the positive significant relationship. Regression analysis had shown all the 18 independent variables put together have influenced significant variation in entrepreneurial behaviour to the extent of 35.10 per cent. Path analysis approach depicted that total milk production had the highest total effect on entrepreneurial behaviour followed by Income Status and Landholding.

Keywords: Dairy farming, Entrepreneurial behaviour, Path analysis, Socio-economic status, Tribal dairy farmers

INTRODUCTION

In recent years the country has achieved a milestone in milk production because milking has been practiced in India as a rural farming undertaking at a tremendous level. Entrepreneurial is one of the possible ways to make rural people more competent in dairy farming. The total cattle population in rural and urban areas 514.11 million respectively with a percentage share of 95.78 per cent for rural and 4.22 per cent for urban area where female cattle (cow) population is 145.91 million, increased by 18.6 per cent over the previous census 2012 (Animal Census Report, 2019). The country's vast livestock resources play an important role in both the national economy and the socio-economic development of millions of rural and tribal households. Today's sustainable and financially viable dairy farming, that through

entrepreneurship can efficiently generate income and self-employment, is required precisely (Patel *et al.,* 2014). India's milk production has risen gradually over the last two and a half decades and is second in the world to produce of milk (Chaudhary *et al.,* 2017). Entrepreneurs play an important role in the economic development of the society. They are considered as the valuable assets and the human resources which are having a lot of potential inside them and have to tap out carefully for having the fruitful results. Entrepreneurs are those people who exhibit common traits such as single-mindedness, drive, ambition, creative, problem solving, practical and goal-oriented. Personal qualities of an Agri-entrepreneur significantly affect the agribusiness. Self-criticism, effective leadership, market orientation and unique creativity are important for successful entrepreneurship development (Karthikeyen *et al.,* 2017). Dairy enterprise,

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next to crop production not merely provides continuous income and progressively improves dietary standards of family, but also supplements the income and reduces unemployment to a large number of the rural poor (Bhosale, 2014). It is now comprehended that enterprise contributes mightily in many ways to the development of a nation, i.e. the assembly and use of various materials, risks, innovation and imitation of cost-cutting and quantity-increasing production methods, widening market horizons and the planning and management of the production unit at different levels. A country's active economic growth depends essentially on the number of entrepreneurs' capabilities. In this proper regard, entrepreneurship is one of the key inputs for the production of the milk enterprise that can generously provide the phenomenal economic growth of the agriculture community (Chaurasiya *et al.,* 2016).

The state of Chhattisgarh has also performed an important role by efficiently generating self-employment through the dairy sector in the rural areas which in turn provides nutritious food to the rural folks. Total number of livestock in Chhattisgarh is 1.544 crore where the cattle and buffalo population is 1.1206 crore (NABARD, 2017). Considering the critical importance of dairy farming in the tribal region, it is a need for the development of entrepreneurship and this is one of the ways to make rural people more competent in dairy farming. The present study was conducted to assess the Entrepreneurial behaviour of tribal dairy farmers in the study area and to find out relation between the independent variables and entrepreneur behaviour of tribal dairy farmers in the study area.

METHODOLOGY

The study was conducted during the year 2018-19 in Balrampur District of northern hill Region, Chhattisgarh. The methodology suggested by Ray and Mondal (2011), Chaudhary *et al.* (2013) and Barua (2015) was followed with required modifications as per the context and objective of the present study to investigate. The present study followed ex –post facto research design

Chhattisgarh state consists of 27 districts, out of which Balrampur- Ramanujgang district was selected

purposively. Out of total six blocks in Balrampur-Ramanujganj district namely, Balrampur, Ramchandrapur, Wadrafnagar, Raipur, Shankargarh and Kusmi (Samri) only two blocks namely Ramchanderpur and Balrampur were selected purposively. From Ramchanderpur block 2 villages and Balrampur block 2 villages were selected based on maximum availability of dairy farmer in the villages. In this way, the villages, Keoli, Gamhariya, from Ramchaderpur block and Manikpur, Kotarki from Balrampur block were selected for the study. A list of farm families who are engaged in Dairy farming was prepared. From the list of each selected village, 30 farm families were selected randomly. In this way, a total of 120 farm families (30* 4 = 120), were selected as respondents.

The collection of data was taken through a personal interview with the help of a pre-tested structured schedule. In the present study, eighteen independent variables viz. Age, Gender, Caste, Family Size, Family Type, Experience in Dairy Farming, Education, Social participation, Mass media Exposure, Social contact, landholding, Economic motivation, Income Status, livestock possession, Total milk production, milk consumption, milk sale and attitudes and one dependent variable entrepreneurial behaviour have been taken into consideration. The Entrepreneurial behaviour is the psychological dimension of an entrepreneur due to which he or she undertake enterprise and continuously attempt to perform better and better. (Akhouri *et al.,* 1999) stated that certain social motives are significantly related to entrepreneurial behaviour for the present study, thirty statement was included with three response categorized as 'always', 'sometimes', and 'never'. The score assigned were 3, 2 and 1 for given response respectively. The Entrepreneurial behaviour data was calculated and compared the relationship between the dependent and independent variables through the using of statistic tool viz. frequency, percentage, simple correlation, regression and path analysis with the help of SPSS version 16.0 software as well as the help of OPSTATE Website. The information was collected by directly asking the respondent and then categorized by used cumulative square root frequency for classification as the mean and standard deviation in the following categories:

RESULT AND DISCUSSION

Entrepreneur behaviour is the composite measure of thirty components. The data in Table 1 shows that majority (72.50%) of the respondents had a medium level of entrepreneurial behaviour, 15.00 per cent of the respondents scored low level of entrepreneurial behaviour and 12.50 per cent of the respondents had a high level of entrepreneurial behaviour. The mean score of the total distribution was 58.03 and standard deviation of the distribution was 8.23. From the results, it is clear that most of the dairy farmers had medium entrepreneurial behaviour. This might be due to the major components of the dairy farmers together reflected their medium entrepreneurial behaviour.

It was found from Table 2 that among eighteen independent variables (age, gender, caste, family size, family type, experience in dairy farming, education, social participation, mass media exposure, social contact, landholding, economic motivation, income status, livestock possession, total milk production, milk consumption, milk sale and attitudes) only five variables viz. landholding, annual income, total milk production, milk sale, and attitude of dairy farmer showed positive and significant relationship at one per cent level of probability, whereas mass media exposure, herd size showed positive and significant relationship at five per cent level of probability. Age, gender, caste, family size, family type, experience in dairy farming, education, social participation extension contact economic motivation and milk consumption did not establish any significant relationship with entrepreneurial behaviour.

Multiple regression analysis was carried out to know the importance of independent variables with their prediction ability in explaining the dependent variable of respondents. The regression coefficient (b) values and 't' values are revealed from the Table 3 and the analysis shows that all the 18 independent variables (age, gender, caste, family size, family type, experience in dairy farming,

Table 1: Entrepreneurial Behaviour of tribal dairy farmers

Mean	S. D.	Category	Frequency	Percentage
58.03	8.23	Low < 50	18	15.00
		Medium 50 – 66	87	72.50
		High > 66	15	12.50

Table 2: Correlation between Variables

S.N.	Variable	Mean	Std. Deviation	'r' Value
1.	Age (X_1)	41.4333	14.36893	0.169
2.	Gender (X_2)	1.1333	.34136	0.019
3.	Cast (X_3)	3.0583	1.10230	-0.032
4.	Family size (X_4)	7.2250	4.61722	0.079
5.	Family type (X_5)	1.4167	.49507	0.104
6.	Land holding (X_6)	1.3283	1.42009	0.388**
7.	Experience in dairying (X_7)	26.7083	14.82525	0.178
8.	Education (X_8)	1.6667	1.68699	0.108
9.	Social participation (X_9)	7.3833	2.26105	0.113
10.	Mass media exposure (X_{10})	3.9167	2.68072	0.230*
11.	Extension contact (X_1)	5.5583	1.70908	-0.078
12.	Economic motivation (X_{12})	22.0417	3.27043	0.055
13.	Income status (X_{13})	9.36503	7520.75727	0.455**
14.	Herd size (X_{14})	13.6583	15.13996	0.216*
15.	Total milk production (X_{15})	3.9167	3.67600	0.324**
16.	Milk consumption (X_{16})	.9500	.49323	0.167
17.	Milk sale (X_{17})	3.0042	3.49053	0.317**
18.	Attitude (X_{18})	34.6333	2.71916	0.286**

**Correlation is significant at the 0.01 level (2-tailed), *Correlation is significant at the 0.05 level (2-tailed)

Table 3: Regression between Variables

S.N.	Variable	'b' Value	't' Value
1.	Age (X_1)	0.69	0.676
2.	Gender (X_2)	1.485	0.691
3.	Cast (X_3)	-0.19	-0.029
4.	Family size (X_4)	-0.028	-0.171
5.	Family type (X_5)	2.457	1.756
6.	Landholding (X_6)	1.121	1.557
7.	Experience in dairying (X_7)	-0.014	-0.134
8.	Education (X_8)	-0.648	-1.028
9.	Social participation (X_9)	0.219	0.663
10.	Mass media exposure (X_{10})	0.844	2.138*
11.	Extension contact (X_1)	-0.794	-1.865
12.	Economic motivation (X_{12})	-0.128	-0.522
13.	Income status (X_{13})	0.00	1.426
14.	Herd size (X_{14})	0.17	0.258
15.	Total milk production (X_{15})	4.388	1.495
16.	Milk consumption (X_{16})	-1.120	-1.391
17.	Milk sale (X_{17})	-1.344	-1.459
18.	Attitude (X_{18})	0.618	2.175*

*Significant at the 0.05 level (2-tailed).
$R^2 = 0.351$; F value = 3.035

education, social participation, mass media exposure, social contact, landholding, economic motivation, income status, livestock possession, total milk production, milk consumption, milk sale and attitudes) put together have influenced significant variation in entrepreneurial behaviour to the extent of 35.10 per cent and also shows that among eighteen independent variables only two variables mass media exposure and attitude of the dairy farmer was showing positively significant at 0.05% confidence level.

Path analysis is a technique that aims at determining the direct and indirect effects among the number of variables and thereby helps to a quantitative interpretation to the interrelationships within a known or an assumed casual system that exist in some specific population. The basic theorem of path analysis states that the zero-order correlation between any two variables is equals to the sum of the products of the paths and correlations between all the variables in the system. In this technique, the direct and indirect effects are measured by a quantity (standardized partial regression) called the path coefficient. A path coefficient is an absolute number without any physical unit, whatever the actual units of measurement for the variables. It indicates the extent to which the variance in a dependent variable is determined by the variance of the independent variable. Result extracted from path analysis shows that independent variable affected (direct and indirect effect) on entrepreneurial behaviour.

It has been found from Table 4 that the variable Income status (X13) 0.0522 has the highest total indirect effect on entrepreneurial behaviour (Y1) whereas landholding (X6) 0.0377 and attitude (X18) 0.0168 has been second and third position respectively. Total milk production (X15) 3.842 had the highest direct effect, milk sale (X17) 3.393 and mass media exposure (X10) 0.076 has been the second and third passion direct effect respectively. Total milk production (X15) 0.636 had the highest total effect on entrepreneurial behaviour where income status (X13) 0.105 and landholding (X6) 0.075 has been the second and third passion in total effect respectively.

The potential explanation for this assumption may be that respondents with greater holdings will be likely to seek specific scientific modifications. As a corporate behaviour of dairy farmer's results, farmers with a larger total of milk production are likely to have a strong desire to know about and be more open to a new practice, thus improving the know-how, income status and landholding which directly and indirectly imitate their entrepreneurial behaviour. Considering that dairy is a highly remunerative enterprise, entrepreneurs also expect exponential escalation of total milk production and are competing firmly to carry out efforts. Milking practice has a positive impact on entrepreneurial behaviour, as it provides the basis for the dynamic potential of an enterprise, the opportunity to learn and adapt to changing circumstances. The logical explanation might be that dairy farmers with total milk production may be more involved in and employ the latest innovation in their dairy enterprises. These findings are consistent with the observations provided (Porchezhiyan *et al.*, 2016).

Table 4: Path Analysis: Entrepreneurial behaviour of Tribal dairy farmers (Y1) Vs 18 Variable

S.No.	Variable	Total indirect effect	Direct effect	Total effect	Priority of total effect
1.	Age (X_1)	0.006	0.015	0.021	6
2.	Gender (X_2)	-0.003	0.004	0.001	11
3.	Cast (X_3)	0.000	0.000	0.000	12
4.	Family size (X_4)	-0.002	0.000	-0.001	13
5.	Family type (X_5)	-0.007	0.022	0.015	7
6.	Land holding (X_6)	0.0377 (second)	0.038	0.075	3
7.	Experience in dairying (X_7)	-0.005	0.001	-0.004	15
8.	Education (X_8)	-0.032	0.018	-0.014	16
9.	Social participation (X_9)	0.003	0.004	0.007	10
10.	Mass media exposure (X_{10})	-0.013	0.076 (third)	0.063	4
11.	Extension contact (X_{11})	-0.014	0.027	0.013	8
12.	Economic motivation (X_{12})	-0.005	0.003	-0.003	14
13.	Income status (X_{13})	0.0522 (first)	0.053	0.105	2
14.	Herd size (X_{14})	0.006	0.001	0.007	9
15.	Total milk production (X_{15})	-3.206	3.842(first)	0.636	1
16.	Milk consumption (X_{16})	-0.102	0.061	-0.041	17
17.	Milk sale (X_{17})	-3.977	3.393 (Second)	-0.585	18
18.	Attitude (X_{18})	0.0168 (third)	0.042	0.058	5

CONCLUSION

The study was concluded that majority of the respondents fall under the medium level of entrepreneurial behaviour followed by low and high level of entrepreneurial behaviour. Hence special consideration is required to develop the entrepreneurial abilities in dairy farmers. There is a possibility to enhance these traits among dairy farm. Among eighteen independent variables, only seven variables viz. Landholding, annual income, total milk production, milk sale, attitude of the dairy farmer, mass media exposure, herd size were having positive and highly significant relationship with their entrepreneurial behaviour. Regression analysis had shown all the 18 independent variables put together have influenced significant variation in entrepreneurial behaviour to the extent of 35.10 per cent, significant at 0.05 per cent confidence level. Path analysis shows that independent variable affected (direct and indirect effect) on entrepreneurial behaviour where total milk production had the highest total effect on entrepreneurial behaviour remaining Income status and Landholding has been the second and third passion in total effect respectively. It is, therefore, necessary to raise awareness among dairy farmers about the commercial viability and profitability of dairy farming and make them successful in the region. The medium level of entrepreneurial behaviour concerning selected components has focused on the need for farmers to expose recent developments and technologies in the field of dairy farming. The fact that most farmers have a medium level of entrepreneurial behaviour is a clear indication of the opportunity to push them towards a high level of entrepreneurship. Efforts for increased awareness and knowledge in dairy production techniques through various innovative extension methods exclusively designed for the target group is urgently needed.

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