Indian J. Fish., 62 (1): 149-152, 2015

Note

Entrepreneurial behaviour of tribal fish farmers in Tripura, north-east India

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ABSTRACT

Tripura, second smallest state in the north-eastern part of India has been witnessing significant growth in freshwater aquaculture in recent years. Entrepreneurial interest coupled with support from the Government is the main reason for this development. Entrepreneurial attributes like innovativeness, achievement motivation, risk taking and leadership abilities influenced the behavioural dynamics of fish farmers. In the present study an attempt was made to understand entrepreneurial behaviour of tribal fish farmers in Tripura State. Data were collected using interview schedule from 90 farmers selected randomly from two districts of Tripura. Respondents were found to possess medium level of innovativeness, motivation, risk taking ability and leadership qualities. Information source utilisation and level of aspiration were found to influence entrepreneurial behaviour of the farmers. Tailor made entrepreneurship development programme based on the attributes identified in the study would further boost entrepreneurial interest in aquaculture sector of the state in future.

Keywords: Entrepreneur, Entrepreneurial behaviour, Tribal fish farmers, Tripura

The economy of Tripura State is primarily agrarian and characterised by high rate of poverty, low per-capita income, low capital formation, inadequate infrastructure facilities, geographical isolation and communication bottlenecks, inadequate exploitation and use of forest and mineral resources, low progress in industrial field and high unemployment (Anon., 2012-13). Majority of the population (83%) lives in rural areas and around 97.4% of the tribal population of the state resides in rural areas. The priority before the State Government is the improvement in the quality of life, especially of scheduled tribes, scheduled castes, religious minorities and other backward classes as envisaged in "Approach to People's Plan in Tripura" (Tripura State Planning Board, 1999). Out of the total population of fish famers of Tripura 1,50,194), scheduled tribes form about 40% (Anon., 2010-11). Fisheries and aquaculture are considered as important economic activities for income generation, gainful employment and to ensure nutritional security of rural masses in Tripura (Das, 2012). During the last decade, Tripura made the most significant growth in fish production among all north-eastern states (Debnath, 2011). However, import of fish is still continuing from states like West Bengal, Andhra Pradesh and also from the neighbouring country of Bangladesh in order to fill up the gap between demand and supply in the state (Das *et al.*, 2013). Development of fisheries sector must go a long way to solve this problem. Thus, the situation in the region explicitly points out to the need for this sector's development, both to meet dietary requirement and economic development (Sinha and Pandey, 2012). Entrepreneurship development in fisheries and aquaculture in the state is imperative to attain this goal. Entrepreneurship behaviour of the people is the outcome of complex socio-economic, political, cultural and psychological factors. Entrepreneur is the key individual who makes things happen and form the catalyst that brings about this change. Both the quantity and quality of entrepreneurs are of utmost significance for achieving the goal of economic development. The myth that entrepreneurs are born with some innate traits is fortunately no longer held. In entrepreneurship, the individual is the most important element. In recent years, freshwater aquaculture sector witnessed phenomenal growth. Government supports coupled with increased entrepreneurial interest have led to this development. A large number of farmers from tribal communities have started commercial aquaculture ventures. In view of the above, and considering the proportion of population of tribal fish farmers in the state and their partnership in production of fish, productivity and production potential,

the present study was undertaken with an objective to study the entrepreneurial behaviour of the tribal fish farmers and to identify the factors influencing it.

The west and south districts of Tripura were selected for the study based on the size and density of the tribal fish farmers' population. Two blocks from West Tripura District and one block from South Tripura were selected randomly. Five villages within the blocks were selected based on the density of the tribal fish farmers. Thereafter, 6 respondents were selected randomly from each village totaling a size of 90 respondents. Based on the available literature and opinion of the experts in the field of extension, seven selected components of entrepreneurial behaviour *viz*., innovativeness, farm decision making, achievement motivation, knowledge of farming enterprise, risk taking ability, leadership ability and cosmopoliteness were measured in this study. The attributes namely innovativeness, knowledge of farming and leadership ability of the tribal farmers, were measured using scales following Chandramouli (2005). Similarly, variables like decision making and risk taking ability of the farmers were measured using the scale of Nagesha (2006). The scale devised by Cantril (1965) was used for measuring level of aspiration. The respondents were grouped into three categories, keeping the mean and standard deviation as check. The pre-tested structured interview schedule was administered for collection of data and analysis of data was done using multidimensional scaling technique of SPSS-15 besides conventional correlation and regression analyses.

Socio-personal characteristics of farmers play an important role in the shaping and development of entrepreneurial traits as indicated by earlier studies. The entrepreneurial traits of an entrepreneur determine the level of innovativeness, achievement motivation and other traits associated with entrepreneurship development.

The socio-personal characteristic included were age, education, social participation, land holding and income of the farmers (Table 1). The results indicated that majority of the tribal fish farmers were in old age (52.22%) followed by middle age groups (34.45%) and only 13.33% of them belonged to young age group. Higher literacy levels (91.12%) were observed in tribal fish farmers of Tripura. However, the frequency distribution of fish farmers was found skewed to lower education categories like primary (32), middle (27) and high school (16). The results further indicated that, only 11.11% of tribal fish farmers were members of any social organisations, indicating poor social participation. Majority (75.56%) of tribal fish farmers had small size (<5 acre) of land holding. Similarly 44.44% of the tribal fish farmers were found in low income group and 25.55% were in medium income category. These results indicated that a large segment of tribal fish farmers of Tripura are having low income level, small land holding, less social participation, lower level of education and belongs to old age group. Gupta and Dey (2014) also observed similar socio-economic profile of fish farmers from Nagaon District of Assam, India.

Table 1. Distribution of respondents according to their socio-economic and psychological profile (n=90)

Socio-economic characteristics	Frequency	Percentage
Age		
Young (<35 yrs)	12	13.33
Middle (36-50 yrs)	31	34.45
Old (> 50yrs)	47	52.22
Level of education		
Illiterate	8	08.88
Primary school	32	35.55
Middle school	27	30.00
High school	16	17.78
Higher secondary school	6	06.67
Graduate	1	01.11
Post-graduate	-	00.00
Social participation		
Non- member of organization	80	88.88
Member of organization	10	11.11
Landholding		
Small (<5acres)	68	75.56
Medium (5acres)	17	18.89
Big (>5acres)	5	05.55
Income		
Low (up to ₹ 50,000)	40	44.44
Medium (₹ 50,000-100,000)	23	25.55
High (Above ₹ 100,000)	27	30.00
Level of aspiration*		
Low (<$\bar{X}$–1 SD)	12	13.33
Medium ($\bar{X}$±1 SD)	66	73.33
High (>$\bar{X}$+1 SD)	12	13.33
Total	90	100

* $\bar{X}$ = 15.17, SD = 3.67

Innovativeness, decision-making ability and achievement motivation are some of the important traits of entrepreneurship (Table 2). The analysis of the study showed that majority (80%) of tribal fish farmers had medium level of innovativeness, 65.56% had medium level farm decision making ability and 81.11% had medium level of achievement motivation. Further, it is observed that 65.56% farmers were capable of undertaking a moderate degree of risk in respect of new ventures and initiatives and majority (68.89%) of the tribal fish farmers had medium level of knowledge about improved package of practices for scientific fish culture. The level of leadership was also found moderate (67.78 %) and 71.11% of respondents had medium level of cosmopoliteness. These results indicated that the tribal fish farmers of Tripura had medium level of

Table 2. Distribution of respondents according to their level of entrepreneurial characteristics (n=90)

Dimensions of entrepreneurial characteristics	Level	Frequency	Percentage
Innovativeness	Low	17	18.89
	Medium	72	80.00
	High	1	1.11
Farm decision making	Low	16	17.78
	Medium	59	65.56
	High	15	16.67
Achievement motivation	Low	11	12.22
	Medium	73	81.11
	High	6	6.67
Risk taking ability	Low	21	23.33
	Medium	59	65.56
	High	10	11.11
Knowledge of fish farming	Low	18	20.00
	Medium	62	68.89
	High	10	11.11
Leadership ability	Low	10	11.11
	Medium	61	67.78
	High	19	21.11
Cosmopoliteness	Low	0	0
	Medium	64	71.11
	High	26	28.89

entrepreneurship. Similar types of studies from agriculture sector from the mainland India also reported medium levels of entrepreneurial behaviour (Jha, 2012; Mohapatra and Sahu, 2012).

Entrepreneurial behaviour was taken as a function of seven components *viz.,* innovativeness, farm decision making, achievement motivation, knowledge of farming enterprises, risk taking ability, leadership ability and cosmopoliteness. The sum of scores of all these seven components constitutes the score for entrepreneurial behaviour of the respondents. The characteristics such as level of aspiration, extension participation and information source utilisation were positively and significantly correlated with entrepreneurial behaviour (Table 3).

The correlation analysis of entrepreneurial behaviour and socio-economic variables showed that out of 9 variables tested, three variables such as level of aspiration (r=0.466), extension participation (r = 0.391) and information source utilisation (r = 0.482) were positively and significantly correlated with entrepreneurial behaviour. Hence, it may be inferred that respondents with higher level of aspiration, extension participation as well as uses of various information sources for farm information possessed greater degree of entrepreneurship behaviour.

The results of regression analysis are given in (Table 4). The 't' values of the regression coefficient indicates the significant variables influencing the entrepreneurial behaviour of the tribal farmers.

Table 3. Association of socio-economic and personal variables with overall entrepreneurial behaviour of respondents (n=90)

Variables	r' Value
Age	0.015^{NS}
Education	0.143^{NS}
Land holding	-0.068^{NS}
Social participation	-0.001^{NS}
Annual income	0.134^{NS}
Level of aspiration	0.466**
Mass media participation	0.029^{NS}
Extension participation	0.391**
Information source utilisation	0.482**

***: Significant at 0.01 level of probability, NS: Non-significant*

Table 4. Multiple regression analysis of the predictor variables and the response variable-overall entrepreneurial behaviour of the respondents

Variables	b	SE (b)	't' Values
Age	-.750	.868	-.863^{NS}
Education	.791	.647	1.223^{NS}
Land holding	-1.585	1.052	-1.507^{NS}
Social participation	-1.507	1.936	-.778^{NS}
Annual income	-.228	.765	-.299^{NS}
Level of aspiration	.573	.196	2.921**
Mass media participation	-.345	.238	-1.450^{NS}
Extension participation	.266	.183	1.454^{NS}
Information source utilisation	.254	.102	2.505*

*R^2= 0.388, F = 5.646 significant at 0.01 level of probability, ** Significant at 0.01 level of probability, * Significant at 0.05 level of probability,* NS: Non-significant

The regression coefficient of the predictor variables like age, size of land holding and mass media participation were found having an inverse relationship with the response variable. The regression coefficient of other predictor variables *viz*., education and extension participation were positive, showing a direct relationship with the response variable entrepreneurial behaviour. The predictor variables like level of aspiration and information source utilisation have significant role in determining the level of entrepreneurial traits of the tribal fish farmers at 0.01% and 0.05% respectively.

The above discussed results indicated that as far as entrepreneurial attributes are concerned, majority of the tribal fish farmers possessed medium level of innovativeness, farm decision making, achievement motivation, risk taking ability, knowledge of fish farming, leadership ability and cosmopoliteness. Presently, it is observed that only the level of aspiration and information source utilisation were found important in influencing the entrepreneurial attributes of the tribal fish farmers. The findings of this study suggest that the Entrepreneurship Development Programmes (EDP) may be taken up for selected beneficiaries identified based on the above attributes and the tribal fish farmers may be further

motivated for increasing the fish production, income and employment thereby ensuring equitable development of the state.

Acknowledgements

The first author is grateful to Dr. M. Rohini Kumar, Director Research, CAU, Imphal, Dr. J. R. Dhanze, Former Dean, College of Fisheries, CAU, Agartala, Tripura and Dr. M. Sinha, Ex-Director CIFRI and Advisor (Fisheries), Government of Tripura for the wholehearted cooperation rendered to undertake the study.

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Date of Receipt : 18.08.2013
Date of Acceptance : 26.07.2014