



Entrepreneurial Behaviour of Fish Farmers in Dhamtari District of Chhattisgarh

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ABSTRACT

Fish farming is emerging as a vital occupation highlighting its important in the mainstream agricultural sectors and supporting millions of livelihoods in the world. Inland fish farming is one of the major sectors apart from coastlines utilizing water bodies such as rivers, reservoirs, perennial and seasonal ponds in the village. The study was carried out to assess the entrepreneurial behaviour of fish farmers by selecting the total of 150 fish farmers through proportionate stratified random sampling technique. The data were collected by personal interview method with the help of structured interview schedule and statistically analyzed after subjecting the data. The findings revealed that the majority of the fish farmers had medium level (68.00%) of entrepreneurial behaviour followed by low (16.67%) and high (15.33%) level of entrepreneurial behaviour of fish farmers, respectively. Further, the data of all eight attributes of entrepreneurial behaviour of fish farmers revealed that cosmopolitaness and risk orientation (both of equal 65.33%), innovativeness (59.33%), leadership ability (83.33%), economic motivation (80.00%), decision making ability (84.00%), achievement motivation (80.66%) and information seeking behaviour (65.33%) were also found the medium level of entrepreneurial behaviour of fish farmers. Hence, it is recommended that converting the low and medium level to high level of entrepreneurial behaviour of fish farmers, enhancing the knowledge of fish farmers by the subject experts through organizing the awareness cum trainings and capacity building programmes to improve the knowledge level and change in mindset of fish farmers towards positive direction will ultimately led to their adoption of the innovative techniques as well as undertaking the fish farming as a business venture.

Keywords: Entrepreneurial behaviour, Farmers, Inland fish farming.

INTRODUCTION

Entrepreneurial behaviour is defined as “Not necessarily doing new things but also doing things in a new way that has already been done” (Narayanawamy, 1996). Entrepreneurs are constantly seeking innovative solutions to problems and finding unique ways to stand out in a competitive market. They are not afraid to take risks and challenge the status quo, often pushing boundaries and thinking outside the box. This mindset of creativity and adaptability is essential for success in the ever-evolving business world and it comprises nine attributes: innovativeness, decision making ability, achievement motivation, risk orientation, coordination ability, information seeking behaviour, planning ability, cosmopolitaness and self-confidence (Chaudhari *et al*, 2007).

Entrepreneurship is a catalyst for economic development in all sectors and fisheries is no exception. Fish farming is a good opportunity for entrepreneurship, especially in rural areas. The demand for fish is growing fast because it is a healthy source of protein (Singh *et al*, 2020). Fish also grow quickly and need less feed compared to animals like goats or cows, which means more profit. Today, fish farming uses new technology, has low risk and creates employment. So, starting fish farming can be a smart business for young people and farmers. It also supports sustainable development and contributes to national economy (Samadi and Aghajani, 2020). Despite the potential, rural entrepreneurs face multiple challenges such as lack of access to capital, training, market linkage and exposure to modern techniques. In the fisheries sector, these problems are even more pronounced due to limited awareness, traditional practices and infrastructure gaps.

Table 1: Entrepreneurial behaviour of fish farmers *n=150

Sr. No.	Entrepreneurial behaviour	Frequency	Percentage
1	Low (score less than 149)	25	16.67
2	Medium (score from 149 to 183)	102	68.00
3	High (score more than 183)	23	15.33
Total		150	100.00

$\bar{X}=165.96$ $\sigma=16.94$ *n= Number of respondents

Table 2: Attributes-wise entrepreneurial behaviour of fish farmers *n=150

Sr. No.	Attributes	Category	Frequency	Percentage
1	Cosmopolitaness Mean=11.54 *S.D.=4.09	Low	13	8.67
		Medium	98	65.33
		High	39	26.00
2	Risk orientation Mean=15.88 S.D.=1.48	Low	15	10.00
		Medium	98	65.33
		High	37	24.67
3	Innovativeness Mean=49.12 S.D.=24.89	Low	35	23.33
		Medium	89	59.33
		High	26	17.34
4	Leadership ability Mean=10.06 S.D.=1.21	Low	9	6.00
		Medium	125	83.33
		High	16	10.67
5	Economic motivation Mean=19.84 S.D.=1.57	Low	17	11.33
		Medium	120	80.00
		High	13	8.67
6	Decision making ability Mean=15.38 S.D.=1.77	Low	8	5.33
		Medium	126	84.00
		High	16	10.67
7	Achievement motivation Mean=16.68 S.D.=1.90	Low	19	12.67
		Medium	121	80.66
		High	10	6.67
8	Information seeking behaviour Mean=17.42 S.D.=5.32	Low	27	18.00
		Medium	98	65.33
		High	25	16.67

*S.D. = Standard deviation

In the year 2022, global fisheries and aquaculture production was recorded 223.2 million tonnes, with an estimated 61.8 million people engaged in the primary sector. Fisheries and aquaculture are expected to support around 600 million livelihoods, including those of subsistence and secondary sector workers as well as their dependents. Per capita intake of aquatic food increased from 9.9 kg in the 1960s to a record high of 20.7 kg in 2022 (FAO, 2024). In India, culture-based fisheries are predominantly practiced in the inland fishing sector, with Chhattisgarh state ranking sixth in production and achieving fish production of 6.52 lakh tonnes in the year 2022–23. In the state, approximately 2.20 lakh individuals were engaged in fisheries activities, including pond culture, cage culture, recirculatory aquaculture systems and

capture fishing (Anonymous, 2023). In perspective of rising global production and growing dependence on fish as food, it is important to study how fish farmer's socio-economic backgrounds shape their entrepreneurial behaviour. These behaviours are crucial for efficient fish farm management, risk-taking and innovation adoption. However, fish farmers come from diverse socio-economic backgrounds, which can heavily influence their entrepreneurial tendencies. Many fish farmers having lack of education, resources and other social capital needed to excel in the business aspect of fish farming. Therefore, keeping all these facts in mind, the present study was undertaken with the specific objective to study the entrepreneurial behaviour of fish farmers in Dhamtari district of Chhattisgarh.

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MATERIALS AND METHODS

The present study was conducted in Dhamtari district of Chhattisgarh which consists of four blocks *i.e.* Kurud, Magarlod, Dhamtari and Nagri. From all the blocks, a total of 150 respondents were selected through proportionate stratified random sampling technique for the study purpose. The data were collected personally by using of pre-tested structured interview schedule. The collected data were classified and analyzed by using of appropriate statistical tools like frequency, percentage, mean and standard deviation. In this study, entrepreneurial behaviour is operationally defined as the outcome of eight attributes, each attribute accompanied by specific statements that were adapted to suit the current study. These attributes were included cosmopoliteness, risk orientation, innovativeness, leadership ability, economic motivation, decision making ability, achievement motivation and information seeking behaviour. Furthermore, this behaviour was categorized into three distinct groups by using the mean and standard deviation. The procedure constituted statements for which the responses of the fish farmers were recorded on five-point continuum namely-strongly agree, agree, undecided, disagree and strongly disagree. For affirmative statements, a score of 4, 3, 2, 1 and 0 respectively, was given to the response category and for negative statements the scoring was countermanded. Then the cumulative scores of all the statements were given to their attributes accordingly. Thereafter the fish farmers were grouped into three categories of specific behaviour attribute based on the total scores arrived under the consideration *viz.*, low (less than, Mean $\pm$ SD), medium (between, Mean $\pm$ SD) and high (more than, Mean + SD) entrepreneurial behaviour of fish farmers.

RESULTS AND DISCUSSION

Entrepreneurial behaviour of fish farmers

The data depicted in Table 1 revealed that majority of the fish farmers *i.e.* 68.00 percent fell under the medium level of entrepreneurial behaviour followed by 16.67 percent were under the low level of entrepreneurial behaviour, whereas only 15.33 percent fish farmers were under the high level of entrepreneurial behaviour which means majority of the respondents who involved in the fish farming were having medium level of entrepreneurial behaviour as well as they were taking medium interest to adopt the fish farming as a business venture. Significant opportunities exist to uplift the low entrepreneurial behaviour of fish farmers in further improving the

capabilities of fish farmers into converting the medium-level to high level of entrepreneurial behaviour. Strengthening entrepreneurial skills and development a supportive ecosystem can significantly increase the involvement and interest in performing fish farming as an entrepreneurial venture at suitable stage. The findings were supported with the findings of Pandey and De (2015), Khoshmaram *et al* (2018), Maity and Saha (2020), Seth *et al* (2020), Ranjitha and Raghuprasad (2021), Gilkari and Dohat (2022), Paudel *et al* (2022), Edirisinghe *et al* (2023) and Remya and Alex (2023).

Attributes-wise entrepreneurial behaviour of the fish farmers

Cosmopoliteness

Cosmopoliteness of the respondents were identified by open-minded, globally oriented perspective, that can be assessed through various approaches to measure values, behaviours, attitudes and engagement with different cultures and ideas. The data in Table 2 reveals that 65.33 percent of the respondents had a medium level of cosmopoliteness, followed by 26.00 percent with a high level of cosmopoliteness and only 8.67 per cent had with a low level of cosmopoliteness respectively, under the entrepreneurial behaviour of fish farmers.

Risk orientation

The respondents had willingness to taken risk as shown in Table 2 reveals that brief sights to the study regarding risk bearing ability among fish farmers. The data reveals that majority of the respondents had medium level of risk orientation *i.e.* 65.33 percent followed by 24.67 percent had high level of risk orientation, whereas only 10.00 percent respondents had low level of risk orientation respectively, in the study area. It means majority of the fish farmers having medium level of risk orientation in terms of entrepreneurial behaviour.

Innovativeness

The ability to generate, adopt and implement the new ideas or solutions-varies depending on the individual and the technological advancement. The data of innovativeness attribute of the fish farmers was presented in Table 2 and shows that 59.33 percent respondents had medium level of innovativeness followed by 23.33 percent having low level of innovativeness, while only 17.34 percent respondents had high level of innovativeness respectively, under the entrepreneurial behaviour of fish farmers.

Leadership ability

The leadership ability encompasses a variety of skills, traits and behaviours that enable individuals to influence guide and motivate the others. The data presented in Table 2 indicates that 83.33 percent fish farmers having medium level of leadership ability followed by 10.67 percent were having high level of leadership ability, whereas only 6.00 percent fish farmers were having low level of leadership ability respectively. Hence, it can be said that more number of fish farmers having medium level of leadership ability in terms of entrepreneurial behaviour.

Economic motivation

Economic motivation refers to the drive or incentive that individuals or groups have to achieve economic goals, like income maximization, job security and financial success. The distribution of the respondents in economic motivation depicted in Table 2 reveals that most of the fish farmers were belonged to medium level of economic motivation *i.e.* 80.00 percent followed by low level of economic motivation (11.33%), whereas only 8.67 percent fish farmers were possessed as under high level of economic motivation respectively.

Decision making ability

Decision making ability reflects a person's capability to make choices that are logical, informed and effective, often under pressure or uncertainty. The data presented in Table 2 shows that majority of the fish farmers *i.e.* 84.00 percent were having medium level of decision-making ability followed by 10.67 percent fish farmers were having high level of decision-making ability, while only 5.33 percent fish farmers were having low decision-making ability.

Achievement motivation

The drive to gain, achieve success and pursue goals that directs the fish farmers to adopt innovative fish farming practices. The level of achievement motivation as shown in Table 2 reveals that 80.66 percent fish farmers had medium level of achievement motivation followed by low level of achievement motivation (12.67%), whereas only 6.67 percent fish farmers had high level of achievement motivation, respectively. Hence, it may be said that significant number of fish farmers were having medium level of achievement motivation in the study area.

Information seeking behaviour

Information seeking behaviour is the process by which an individual actively search and use of

information. The data in Table 2 reveals that majority of the fish farmers were having medium level of information seeking behaviour *i.e.* 65.33 percent, followed by 18.00 percent were as low level of information seeking behaviour, whereas 16.67 percent respondents were having high level of information seeking behaviour in the study area, respectively. Hence, it may be said that a greater number of fish farmers were having medium level of information seeking behaviour.

The major attributes of entrepreneurial behaviour were also found at medium level in influencing the adoption of improved fish farming practices. Fish farmers actively seeks to external influences, showing openness to new ideas. It can also be said that the traditional mindset of fish farmers might be prioritized to local interactions over external exposure. While as some of the fish farmers exhibited high risk tolerance which might be essential for adopting the innovative practices and tackling the critical operations in fish farming. Further improving the leadership skills is needed, which are essential for group activities and peer influence. The financial status, indicating a strong but not overwhelming drive for economic gain, possibly due to the resource constraints or lack of confidence in fish farming as a viable income source. Hence, concerned agencies should be given more emphasis to strengthen the fish farmers and minimizing the resource constraints.

Small group of fish farmers were ahead in decision-making timely and well- effective decisions, but converting from small group to bigger group, subject experts can provide technical guidance about improved fish farming and develop confidence in fish farmers related to decision making ability. In case of information-seeking behaviour, majority of the respondents had a medium level of interest in seeking information on improved fish farming practices. It means mostly the fish farmers had moderate contact with the extension agencies, subject experts and familiar with getting information from formal and informal sources as well as through electronic media also. Hence, extension agencies should encourage the fish farmers to getting the more information form reliable sources about the improved fish farming practices. Almost similar type of findings were also recorded by Haobijam *et al* (2016), Bantigue (2018), Khoshmaram *et al* (2018), Maity and Saha (2020), Seth *et al* (2020), Ranjitha and Raghuprasad (2021), Paudel *et al* (2022) and Remya and Alex (2023).

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CONCLUSION

From the above findings, it can be concluded that majority of the fish farmers had medium level of entrepreneurial behaviour, also including medium level of cosmopolitaness, risk orientation, innovativeness, leadership ability, economic motivation, decision-making ability, achievement motivation and information seeking behaviour of fish farmers. Hence, it is suggested that extension agencies and other concerned institutes should give more focus on targeted interventions on converting the medium level to high level of entrepreneurial behaviour among fish farmers to enhance their entrepreneurial behaviour and address barriers in adoption of fish farming. The findings of the study provide valuable insights for farmers, researchers, and extension personnel's, which are contributing in the fisheries sector.

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