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Research Note

Awareness and Attitude of Prawn Farmers Towards Scientific Prawn Farming

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The Central Marine Fisheries Research Institute (CMFRI) has developed technology for culture of marine prawn *Penaeus indicus* which is being transferred to the fish farmers through the Institute's training and extension programmes. The present study aims at examining the awareness of the prawn farmers in Cochin about the technology and assess their attitude towards it. Attitude has direct bearing on the adoption behaviour and it is hoped that the study would serve as a good feed-back to the technology generation and transfer systems.

METHODOLOGY

A total of 150 prawn farmers who were engaged in traditional prawn filtration drawn from different areas, consisting of five villages in the northern region and three villages in the southern region in Cochin based on random sampling, were selected for the study. This included 23 fish farmers who had taken seed from the Government Hatchery, Azhikode and the Marine Prawn Hatcher Laboratory (CMFRI) and 12 farmers who were trained at the Krishi Vigyan Kendra (CMFRI), Narakkal. An interview schedule, incorporating an attitude scale developed following Thurston's equal appearing interval technique (Edward, 1959) was administered to the fish farmers through personal interview.

RESULTS

Awareness and sources of communication

Of the 150 fish farmers considered for the study, about 80 per cent were aware of the scientific prawn culture practice. Among the sources of communication radio and newspaper ranked first followed by government agencies and fellow farmers. To examine whether personal variables like age, education and size of holding have relation with awareness, Chi-square test was carried out and the results indicated that in both the regions, these variables have no relationship with awareness.

The fish farmers in the northern and central belt had better attitude than those in the southern belt. Those who took seed

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from the hatcheries and those who were trained in the technology scored higher. Owner farmers showed better attitude than leasy farmers.

Factors affecting the attitude

Age, education, extent of holding, experience in prawn farming and possession of other land holdings were considered as some possible factors affecting the attitude. From stepwise regression analysis it was found that in all the regions covered under study, only extent of holding and experience in prawn farming were found to be better predictors of attitude than age and education. Hence, only the former variables were considered to formulate a functional relationship. The regionwise details of average attitude scores, extent of holding and experience in prawn farming are given in Table 1.

Table 1. The Average Attitude Score, Extent of Holding and Experience in Prawn Filteration

Category	Attitude score	Extent of holding (acres)*	Experience in prawn farming (years)
Northern region (Five villages)	3.61	3.47	12.58
Southern region (Three villages)	2.29	3.28	14.50
Those who took seeds from the hatcheries	4.11	2.90	6.53
Trained Farmers	4.54	—	—

* Includes leased in holdings also.

Table 2. Constraints Involved in the Adoption

Constraint	Number of farmers		
	Northern region (Five villages) N=66	Southern region (Three villages) N=54	Total farmers (Percentage) N=120
Lack of detailed knowledge about the practice	47	24	67.5
Paucity of seed	53	21	61.6
Inability to draw periodical income	43	19	51.6
Risk involved due to leased holding	45	17	51.6
Lack of knowledge about credit	30	14	34.1
Difficulty in approaching the authority	11	14	20.8

Constraints involved in adoption of the technology

Lack of detailed knowledge about the technology, non-availability of seed, inability to draw periodical income from the enterprise, lack of knowledge about the availability of credit for aquaculture and difficulty in approaching the authority (source of technology and training centres) were the constraints involved in non-adoption of the improved practices (Table 2).

Adoption of the technology

Eleven out of 23 persons who bought seed had tried the technology following the practices of supplementary stocking of selected species and eradication of predators and showed interest in continuing the same. The attitude of the fish farmers under study was highly favourable to the practice of selective stocking. Only one prawn farmer belonging to Maradu had adopted the technology following most of the practices.

CONCLUSION

Prawn farmers subjected to this study tended to have favourable attitude towards scientific prawn farming practices. Experience in prawn filtration and extent of holding of the prawn farmers had favourable influence on the attitude. The farmers who had taken seed, those who had training in scientific prawn farming and owner farmers had better attitude. Radio and newspapers were the primary sources of information to the fish farmers followed by government agencies and fellow farmers. Lack of detailed knowledge about the technology, paucity of seed, inability to draw periodical income, low risk-taking capacity of the leasy farmers and difficulty in utilizing credit were the constraints identified. Prawn farmers showed highly favourable attitude towards selective stocking of prawn larvae.

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