

Review Article

Lively Hood Promotion through Fish Growers in Darbhanga District: A Study on Constraints

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ABSTRACT

The study analyzed the constraints as perceived by the fish growers in Darbhanga District of Bihar. Information relating to various problems faced by the fish growers was enlisted in a pre-tested interview schedule. Oral interview schedule was used to collect data from sixty (60) respondents who were randomly selected. The data were analyzed using statistical percentages and mean score analysis. Majority 85.00 per cent of the fish growers had strongly agree constraint in “Non availability of quality fish seeds”, followed by lack of government support (81.67 per cent) and 73.33 percent of the fish growers had strongly agree constraint in “High labour cost”. It is observed that, 68.33 per cent of the fish growers had strongly agree constraint in “Lack of marketing facility” followed by Flooding (65.00 per cent), Diseases of fish (60.00 per cent), Productivity of the soil of the pond (55.00 per cent) and Lack of extension service (51.67 per cent). It is observed that, 48.33 per cent of the fish growers had agree category of constraint in “Distance from the house” followed by Lack of natural feed in pond (46.67 per cent) and Poisoning (38.33 per cent) of fish growers had agree and disagree both categories. Also it is observed that, 53.33 per cent of the fish growers had disagree category of constraint in theft and pilferages.

Keywords

Fish growers,
Constraints, Lively
hood promotion

Introduction

Agriculture in India plays vital role in economic development. Besides crop production, fruit and vegetable production, animal production, fish production and other agricultural produce, plays great role in agricultural development for food production. Since, food is a basic need of the people; hence, man's basic drive is for food to satisfy his hunger. Agricultural produce, such as food grain like cereal and pulses, horticultural produce such as food and vegetables and reared animals for slaughter, milk, eggs and fish are common foods in India. Meat, poultry and fish constitute the

major portion of non vegetarian man's foods in India. Fish is found abundantly in all natural waters. It is valuable source of food and has been used by man from antiquity. With mounting population pressure most part of India are expanding their fish production power. Fish cultivation on a large scale is gaining measure significance in the area where pounds or dam are available. While discussing the present status of the fish cultivation in India as well as in Bihar it has to be mentioned here that the bulk of fish production is in the hands of numerous landless, marginal and small

farmers. To most of them, fishing is only a supplementary or complimentary enterprise. In this sense “next to the crops fish production programmes have got the largest employment and income generating potential for poor. Looking the importance of fish enterprise in Bihar the last two decades the fishing enterprise has witnessed significant developments with the improvement in construction of ponds; dam and reservoir for fish cultivation, fish production technology and modernization of equipment, which have enhanced the fishing capacity, improved the working conditions and reduced the drudgery of fishermen. The share of India’s production from aquaculture is 6.3% of the world. The total fish production during 2013-14 is at 9.51 million metric tones with a contribution of 6.14 million metric tones from inland sector and 3.44 million metric tones from marine sector respectively. India is also became a major supplier of fish in the world. Fish and fishery product exports from India has touched an all-time high of Rs 33,441.61 crore in the year 2014-15, recording a growth of 11 per cent over the previous year. In dollar terms the export value stood at \$5.51 billion, up by 10 per cent year-on-year. (Source - *Fisheries development of Bihar: An action plan*)

India is a large producer of inland fish, ranking next only to Japan. Out of the total inland fish production of over 6.14 million metric tons, more than 60% is contributed by fish culture in ponds and reservoirs. The average productivity from ponds on the national level is around 2,500 kg/ha/year, though in Andhra Pradesh and Haryana it is more than 5,000 kg/ha/year, while in some other states like Bihar and UP it is anywhere between 1,500 and 2,500 kg/ha/year. The annual fish production of Bihar state during 2014-15, both from aquaculture and capture fisheries, has been estimated at 4.79 lakh tons against a demand of approximately 5.86

lakh tons. Evidently, there exists a wide gap between demand and supply, to the tune of 18.30%, which is quite paradoxical in view of the vast fisheries resources in the State. The unmet demand is partly met from supply of fish from other States. Similarly, the annual demand of fish seed in the State is over 760 million, while the production is only about 481 million from the 121 government fish seed farms, 2 government hatcheries, and 83 private hatcheries. Therefore, the Govt. should be worked in these fields then production could be increases and some constraints solved. The production of fish is increasing in the Darbhanga district of Bihar state but productivity was low and mostly ponds are damaged by heavy infestation of insect, pest and diseases, poor management, non availability of quality fish seeds and some other constraints. Therefore, to increase the farm income, it is essential to identify the major constraints in production of fish crop. This paper examines the problems faced by farmers from their own point of view.

Materials and Methods

The study was conducted in Darbhanga district of Bihar. Darbhanga district was purposively selected for the studies because of the following reasons are:- a) The district is pre-dominantly fish growing. b) There are a lot of ponds, rivers and other reservoirs is source of fish production and many fishing community involved in production. c) The district needs a support of technological back stopping for increasing its productivity. There are 18 block in Darbhanga district. Out of 18 blocks, two blocks were selected on the basis of fish pond area figure. Jale and Keoti blocks were selected randomly for study purpose. 30 fish growers were taken from each of the selected blocks. Thus, a total number of 60 fish growers were constituted as the sample size for the present study. For collection of relevant data, a

personal interview schedule was specially structured and prepared in order to get the desired response of farmers in face to face situation. The constraints as perceived by respondents were scored on three point continuum i.e. 2, 1 and 0 (zero) on the basis of magnitude of the problem. The responses were recorded and converted into frequency, percentage, standard deviation, mean score and constraints were ranked accordingly.

Results and Discussion

The results of the present study as well as relevant discussions have been presented under following sub heads:

Constraints faced by fish growers in adoption of recommended practices in fish cultivation

An attempt was made to ascertain from the respondents, the constraints encountered by them in the adoption of recommended package of practices regarding production fish and also suggestions the strategies by which these constraints may be eliminated. During the interview, the respondents were asked to enumerate the constraints faced by them in the adoption of recommended package of practices of fish and to give their suggestions. The constraints expressed by the respondents were tabulated and presented in Table –1 with frequencies and percentages were assigned based on their magnitude.

The data from the table-1 indicates that, 85.00 per cent of the fish growers had strongly agree as the constraint in "Non availability of quality fish seeds". followed by lack of government support (81.67 per cent) and 73.33 percent of the fish growers had strongly agreed to spell out shown their constraint in "High labour cost". It is observed that, 68.33 per cent of the fish growers had strong agreement on the

constraint in "Lack of marketing facility" followed by Flooding (65.00 per cent), Disease of fish (60.00 per cent), Productivity of the soil of the pond (55.00 per cent) and Lack of extension service (51.67 per cent). It is observed that, 48.33 per cent of the fish growers had agreed on the constraint in "Distance from the house ". Followed by Lack of natural feed in pond (46.67 per cent) and Poisoning (38.33 per cent) of fish growers and they had agree and disagree both categories. Also it is observed that, 53.33 per cent of the fish growers had disagree category of constraint in theft and pilferages.

There are different twelve constraints as identified on the basis of classified into strongly agree, agree and disagree etc. scoring was done as 2, 1 and 0 respectively. Rank of constraints had decided on basis of mean score. The results are presented in Table-2.

On perusal of the table-2, it can be observed that the Non availability of quality fish seeds has got the first rank and top most constraint indicating its mean score of 1.83, while "Lack of natural feed in pond" got the second rank with its mean score of 1.77, followed by the area of "Lack of government support" which received the 3rd rank during the course of study having its mean score of 1.70. The "High labour cost" was observed as the 4th rank with its mean score of 1.68, "Flooding" (5th rank) with its mean score of 1.50 followed by disease of fish (6th rank) and its mean score of 1.45, lack of marketing facility (7th rank) and its score of 1.40, Lack of extension service (8th rank) and its mean score of 1.32, Productivity of the soil of the pond (9th rank) its mean score of 1.28. The other important constraints like distance from the house (10th rank), Poisoning (11th rank) and theft and pilferages (12th rank) were indicating its mean score 1.05, 0.85 and 0.73 respectively.

Table.1 Constraints faced by fish growers in adoption of recommended practices in fish cultivation

S. No	Constraints	Degree of agree (N = 60)					
		Strongly agree (2)		Agree (1)		Disagree (0)	
		f	%	F	%	f	%
1	Non availability of quality fish seeds	51	85.00	8	13.33	1	1.67
2	Productivity of the soil of the pond	33	55.00	11	18.33	16	26.67
3	Lack of natural feed in pond	19	31.67	28	46.67	13	21.67
4	Disease of fish	36	60.00	15	25.00	9	15.00
5	Poisoning	14	23.33	23	38.33	23	38.33
6	Lack of government support	49	81.67	11	18.33	0	0
7	Lack of extension service	31	51.67	17	28.33	12	20.00
8	High labour cost	44	73.33	13	21.67	3	5.00
9	Distance from the house	17	28.33	29	48.33	14	23.33
10	Flooding	39	65.00	14	23.33	7	11.67
11	Lack of marketing facility	41	68.33	14	23.33	5	8.33
12	Theft and pilferages	16	26.67	12	20.00	32	53.33

Table.2 Constraints (in rank-wise) faced by fish growers in fish cultivation

Sl. No	Statement	Total score	Mean score	Rank
1	Non availability of quality fish seeds	110	1.83	I
2	Productivity of the soil of the pond	77	1.28	IX
3	Lack of natural feed in pond	106	1.77	II
4	Disease of fish	87	1.45	VI
5	Poisoning	51	0.85	XI
6	Lack of government support	102	1.7	III
7	Lack of extension service	79	1.32	VIII
8	High labour cost	101	1.68	IV
9	Distance from the house	63	1.05	X
10	Flooding	90	1.5	V
11	Lack of marketing facility	84	1.4	VII
12	Theft and pilferages	44	0.73	XII

In conclusion, the study was revealed that the majority 85.00 per cent of the fish growers had strongly agree constraint in “Non availability of quality fish seeds”, followed by lack of government support

(81.67 per cent) and 73.33 percent of the fish growers had strongly agree constraint in “High labour cost”. It is observed that, 68.33 per cent of the fish growers had strongly agree constraint in “Lack of marketing

facility” followed by Flooding (65.00 per cent), Diseases of fish (60.00 per cent), Productivity of the soil of the pond (55.00 per cent) and Lack of extension service (51.67 per cent). And also it can be observed that the Non availability of quality fish seeds has got the first rank and top most constraint indicating its mean score of 1.83, while "Lack of natural feed in pond" got the second rank with its mean score of 1.77, followed by the area of "Lack of government support” which received the 3rd rank during the course of study having its mean score of 1.70. Government intervention in addressing the major problems mentioned previously with a view to increase the domestic production might have reduce over dependence on market middlemen and will be helpful in maintaining steady supply and thus the interest of both the producer and consumers will be preserved.

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