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### Training needs of fish growers in Darbhanga district of Bihar

**Nirala Kumar, Satya Prakash and Raju Kumar**

#### Abstract

The present study was undertaken in Darbhanga district of Bihar. The study revealed that majority of (58.33%) respondents had come under medium needed training category, whereas the 26.67 per cent respondents was felled in high needed category whereas remaining 15.83 per cent respondent had low need of training in fish cultivation. The findings indicated that majority of fish growers needed high level of training on disease management as their first and top most required need for the training indicating its mean score of 2.83 followed by the area of 'selection of quality seed and species & stocking density' which received the 2nd rank during the course of study having its mean score 2.78. The 'feed and fertilizer management' was observed as the third rank (2.7) area related with the training needs among the fish growers, followed by 'construction of pond' indicating its mean value 2.52. The other important area like pond preparation and harvesting and marketing of fish were also recognized as important area of training needs by fish growers of this area but their relative rank were found at 5th and 6th indicating its mean score of 2.45 and 1.88 respectively.

**Keywords:** Training need, disease management, pond construction, fertilizer management

#### Introduction

Fisheries occupy a prominent place in the economy of the world as the fish is one of foods of vast majority of people. Fish not only provides proteins but also contains fat, inorganic substances and vitamins. Fish protein is easily digestible and it contains considerable proportion of soluble proteins. It is more valuable for human especially for a population whose staple food is rice. Besides, fisheries help in generating employment and revenue and raising nutritional level. Fish is found abundantly in all natural waters. It is valuable source of food and has been used by man from antiquity.

India stands second rank in global fish production. India registered an increase of 92.8% aquaculture and 15.1% in marine catches during 2011-12. The present share of India's production from aquaculture is 6.3% of the world and contributes to 1.1% of the national GDP and 5.15% of the agricultural GDP. Total fish production during 2015-16 were 10.07 million metric tonnes. Fish and fish products have presently emerged as the largest group in agricultural exports of India, with 10.51 lakh tonnes in terms of quantity and Rs.33,442 crores in value during 2015-16. This accounts for around 10% of the total exports of the country and nearly 20% of the agricultural exports. The annual fish production of Bihar 4.79 lakh tonnes during 2014-15 but annual demand is 5.88 lakh tonnes. 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 nursery, two government fish hatcheries, and 83 private hatcheries.

The training of farmers is a critical input for the rapid transfer of agricultural technologies. The present productivity of fish could be increased considerably if the available technology is effectively transferred to the farmers. Our training programmes need to focus more on transferring of new technology from the confines of laboratories and research institute to the farmers and make them result oriented. Its profitability needs to be enhanced further, but still profitability of fish growing is based with many constraints faced by fish growers due to production and marketing. So, therefore, the fish growers need to be properly trained in the latest improved cultivation practices for realizing more productivity and production of fish. Keeping all these aspects in view, the present study was undertaken to ascertain the training needs of fish growers in the main areas of training with respect to improved fish cultivation and to know the training needs of fish growers in the sub-areas of disease management.

**Research Methodology**

Darbhanga district of Bihar state has been identified as a locale of present research enterprise in view of its importance in terms of area and total production of fish crop in the state. There are 18 block in Darbhanga district. Out of 18 blocks, two blocks, Keoti and Jale, were purposively selected with 30 respondents from each block. Thus, total number of respondents was 60 constitute a sample size for the study purpose. Thus a total number of 60 fish growers was constitute as the sample for the present study. For collection of relevant data, a personal interview schedule was specially structured and prepared in order to get the desire response of farmers in face to face situation. The data were analysed using various statistical tools such as frequency, percentage, mean score, standard deviation and ranking.

**Findings and Discussions**

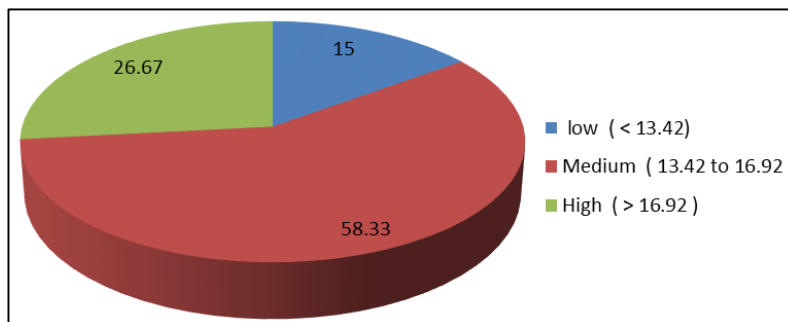
The results of the present study as well as relevant discussions have been presented under following sub heads:

**Training needs of fish growers in overall components of training**

**Table 1:** Distribution of frequency and percentage of the respondents on the basis of their training need

S. No	Categories	f	%
1	low (< 13.42)	9	15.00
2	Medium ( 13.42 to 16.92 )	35	58.33
3	High (> 16.92 )	16	26.67
	Total	60	100

Mean = 15.17, S.D = 1.75



**Fig 1:** Percentage distribution of respondents on the basis of their training need

The information related to training needs of fish growers was collected, tabulated and analysed. The details of results are presented in table-1

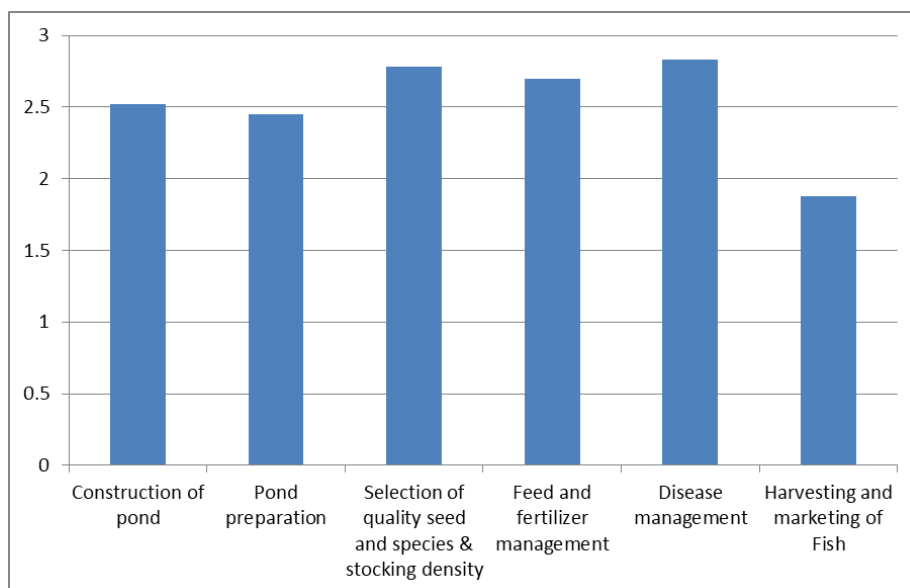
Table-1 revealed that a majority of (58.33%) respondents had fell under medium needed training category, whereas the 26.67 per cent respondents was considered in high needed

category whereas remaining 15.83 per cent respondents were found to have low need of training in fish cultivation.

Further, the information pertaining to the main areas training needs of fish growers were again collected, tabulated and analysed results are presented in table-2.

**Table 2:** Main areas of training needs of the fish growers

S. No	Main areas of training	Mean score	Rank
1	Construction of pond	2.52	IV
2	Pond preparation	2.45	V
3	Selection of quality seed and species & stocking density	2.78	II
4	Feed and fertilizer management	2.7	III
5	Disease management	2.83	I
6	Harvesting and marketing of Fish	1.88	VI



**Fig 2:** Training need of fish growers in the main areas of training.

The data presented in table-2 revealed that, a majority of fish growers were found to had the need of high level of training in main area like, disease management as their first and top most required need for the training indicating its mean score of 2.83 followed by the area of ' selection of quality seed and species & stocking density' which received the 2nd rank during the course of study having its mean score 2.78. The 'feed and fertilizer management' was observed as the third rank (2.7) area related with the training needs among the fish growers, followed by 'construction of pond' indicating its mean value 2.52. The other important area like pond preparation and harvesting and marketing of fish were also recognized as important area of training needs by the selected fish growers but their relative rank were found at 5th and 6th indicating its mean score of 2.45 and 1.88 respectively.

These areas were considered as least needed areas among the fish growers. In fact fish production is often affected by certain disease management. So, it was the obviously reason to perceived the first priority of the area of fish protection. Selection of quality seed and species & stocking density was considered as the next important area in which farmer were having little scope to know therefore they have found to recognize it as an important area of training needs.

Similar was the situation in the other areas of their relative needs for training in which papaya growers given their preferences in order of their ranking.

#### **Training need of fish growers in the sub-areas of disease management**

The result related with relative need for training in the sub-areas of disease management of fish are given in Table-3.

**Table 3:** Training need of fish growers in the sub-areas of disease management.

S. No	Disease management	Mean score	Rank
1	Identification of diseases	2.85	II
2	Ways of diseases control	2.87	I

The perusal of table -3 indicates that the selected fish growers shown their most needed sub areas related with ways of disease control they were needed much more training in this area indicating its mean score of 2.87. In the sub-areas identification of diseases expressed their training requirement as the least needed having its mean score of 2.85. Highest training need for the farmers in general disease management had also been reported by Kumar (1985). Among different aspect of identification of disease, control of disease has always possessed a major challenge before the fish growers. Once the disease appears on the fish the yield was drastically reduced. It is therefore, natural that fish growers in respect of their size of holding felt the need for training in this area to control the disease.

#### **References**

1. Awal MA, Ali MA, Mia MGF. Training Needs on Integrated Fish Farming. Bangladesh Jr. of Training and Development. 2001; 14(1-2):183-190.
2. Brown D, Brooks A. Training Needs of the Farmers on Duck-Fish Integrated Culture. FAO-Fisheries-Technical-Paper, 2002; (406):85-93.
3. Pourouchottamane R, Venkatasubramanian V, Singha AK, Mishra A, Pankaj PK. Training needs analysis of livestock farmers and rural youths of north eastern India. Veterinary Practitioner, 2012; 13(2).
4. Verma SL, Ansari MN. Training needs of potato growers in Nalanda district of Bihar. Agric. Update, 2013; 8(3):412-414.
5. Olaoye OJ, Dejo SSA, Adekoya EO. Small Holder fish farmers information and training need in Ogun state of Nigeria. Global journal of science frontier Research: Department of Agriculture and Veterinary. 2014; 14(3). version 1.0
6. Sharma N. Training needs of marigold farmers on production technologies in Kathua District. Jr. of Hill Agric. 2016; 7(1):149-151.