



Research Note

Differential Training Needs of Fishery Demonstrators in the State of Assam, India

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Training of in-service personnel to impart knowledge and skills on the latest technological developments in various fields is one of the most important factors in ensuring better performance in their respective jobs. Training is an important mechanism for transfer of technology and human resource development (Dana et al., 1999). In general, knowledge can rapidly become obsolete because of changing information and technology advancements. Training helps to reduce the obsolescence among in-service personnel in the scenario of continuous technological innovations. It is therefore, necessary that in-service personnel are to be kept abreast with the latest developments in the field of fishery as it is the sunrise sector among different subsectors of agriculture and it has the highest share in agricultural Gross Domestic Product (GDP). Moreover, trained manpower helps in improving nation's growth and productivity. Training ensures greater organizational effectiveness by means of knowledge and skills development of extension personnel (Sharma & Gupta, 1994).

Fishery Demonstrators (F.Ds) are extension workers who assist farmers for development of fisheries in Assam and in the transfer of technologies at field level. To meet the needs of fish farmers, the grass-root extension workers are to be trained through need based training programmes. It is imperative to assess the training needs of Fishery Demonstrators in the state of Assam, India. The present study was conducted to determine the relationship between the socio-personal and psychological charac-

teristics and training needs of respondents and identifying the preferences of respondents with respect to duration, location, method, types and other relevant aspects pertaining to training.

The primary respondents were 60 Fishery Demonstrators from four districts of Assam viz., Kamrup (16 F.Ds), Nagaon (20 F.Ds), Jorhat (16 F.Ds) and Golaghat (8 F.Ds). These districts were selected based on their higher concentration of fish farmers and fisheries developmental activities. Primary data on preferred training needs were collected with the help of pre-tested and structured interview schedule.

For assessing the training needs, preferential scores have been enumerated in a three point continuum scale with the points of 'Most Needed', 'Needed' and 'Least Needed'. Students-t test was performed to know whether there is any significant difference between Training Need Quotient between F.Ds from rural and urban areas. Chi-square test was done to test whether there is any significant difference between the items of major subject areas in respect of degree of felt needs of training. In the present study, the individual needs were measured by a ratio scale i.e. Training Need Quotient (TNQ), as developed by Sidhu (1973) and Nongtdu et al., (2012).

The formula for calculating the Training Needs Quotient is:

$$TNQ = \{OT_i g / MTS\} \times 100$$

where,

$OT_i g$ = Sum of the observed training scores of the items of the i^{th} respondent.

MTS = Sum of maximum scores attributed to the items rated by the i^{th} respondent.

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The majority of F. Ds (53%) were middle aged (41 to 49 years) and 63% of them were having an average experience of 21 years (Table 1). The results indicated that 90% of the F.Ds were hailing from rural background, and 43% had undergone one in-service training programme. Most of them (79%) belonged to 'medium' monthly family income group, where the income ranges from ₹ 11,000 to 20,000, with the average monthly family income of ₹ 12, 472 (S.D=1443). Majority of them were posted nearer to district headquarter (82%) and resided in rented house (58%).

Majority of the F.Ds received fewer opportunities for in-service training but they desired to attend training programmes which would help them to gain confidence in handling their day-to-day works. The similar result was also reported by Manjunath et al. (1997).

Table 2 shows that the 'most needed' areas of training as perceived by the Fishery Demonstrators were water and soil quality management (2.43), followed by disease management (2.39). Similar findings were reported by Prasad & Govind (2001) and Singh & Singh (1996).

Result of 't' test ($t=2.383$) showed that there was no significant differences with regard to Training Need Quotient (TNQ) between F.Ds from rural areas and F.Ds from urban areas. It was observed that there was a significant negative correlation coefficient value found between TNQ of culture aspects and service experience at 1% level of significance. Whereas age and total monthly family income were negatively correlated at 5% level of significance. It was evident from the study that TNQ of marketing aspects was positively correlated with in-service training programme undergone which indicates that

Table 1. Socio-economic profile of Fishery Demonstrators

Variables	Mean	Standard Deviation (S.D. $\pm$)
Average age (in years)	48	6.47
Duration of service (in years)	22	6.79
In-service training programme undergone (Nos.)	0.87	0.95*
Distance between place of posting to district headquarters (in km)	36	27.80

* Due to lesser number of population

Table 2. Ranks of training needs in major subject areas with Average TNQ and Chi-square values

Major subject area	Average TNQ	Mean score	Chi-square values	Rank
Water and soil quality	80.84	2.43	0.101 ^{NS}	i
Disease	79.72	2.39	2.066 ^{**}	ii
Fish seed	78.52	2.35	5.205 ^{**}	iii
Breeding	76.67	2.30	22.421 ^{**}	iv
Extension	63.37	2.21	28.405 ^{**}	v
Feeding	72.59	2.18	13.043 ^{**}	vi
Resource management	72.36	2.17	2.018 ^{**}	vii
Culture	70.32	2.11	54.591 ^{**}	viii
Marketing	69.63	2.09	5.371 ^{**}	ix
Administrative aspects	68.75	2.07	18.17 ^{**}	x
Capture	62.78	1.88	5.335 ^{**}	xi

in-service training programmes provide additional knowledge regarding marketing aspects to the F.Ds.

Table 2 also indicates the values of Chi-square test which showed significant differences between major subject areas, in respect of degree of felt needs of training. However, in nutshell, this study indicated that all the items under water and soil quality aspect did not differ significantly. These findings derive support from the findings of Kaul et al. (1987).

Maximum number of respondents preferred October-December or January-March as preferential choice of training season followed by April-June and July-September. This could be due to the minimal piscicultural activities during this season, which are in consonance with the findings of Choukidar & Sharma (1974). Majority of the F.Ds preferred training duration of two weeks, which is in agreement with the findings of Bhairamkar et al. (1997). The preferred place of training by majority of F.Ds were places outside Assam followed by College of Fisheries, Raha; Directorate of Fisheries and District H.Q. The majority of respondents were of the opinion that equal emphasis should be given to theory and practical aspects during training programme. It was also evident from the study that majority of the respondents (83%) were satisfied with their present place of posting, whereas 73% of F.Ds were not satisfied with their present salary.

Training has been playing a pivotal role in organizational and human resource development. Personnel in the Dept. of Fisheries should be imparted with in-service training on different technological and scientific aspects of fisheries, otherwise, they will soon be working far below to their potential capacity. Moreover, the findings in this regards will enable them for improving the organizational productivity and more efficient mode of technology transfer to the fish farmers. In-service training programmes on different aspects of inland fish farming should be conducted in a regular and phased manner so as to facilitate the continuous updating of knowledge and ultimately improve the fish production with state. Unbiased selection of trainees as per the organizational, professional requirements and socio-personal suitability should be followed for the selection of the candidates.

Moreover, training programmes should be promoted through pilot projects and assistance may be provided in building necessary infrastructure, resource generation, product development and marketing.

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