## 104 Impact of Improved Fish Culture Technology Transfer Training Course
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### a) Researcher's Identity

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### b) Objectives

The main objective of this study was to assess the impact of improved fish culture technology transfer training course in the field. The specific objectives were to:

i. assess the extent of dissemination of technologies transferred through this course;

ii. find out the accuracy of application of knowledge and skill acquired from this training course;

iii. explore the impact of the course in terms of fish production, income and employment generation;

iv. find out the problems faced by the participants in dissemination of training knowledge; and

v. suggest recommendations for further improvement of the course on the basis of the findings of the study.

### c) Executive summary

Fisheries play a vital role in the national economy of Bangladesh. There are numerous water bodies in the country in the form of ponds and tanks. Fish production in these water bodies is very low due to non-adoption of modern fish culture technologies. A good number of modern technologies have been developed by the Fisheries Research Institute during the last few years. To disseminate these technologies to the pond owners, training of pond owners on these technologies can play a vital role.

Rural Development Academy, Bogra, provides some skill development training courses to the unemployed rural youths and women. Improved fish culture technology transfer training course is one of them. This course was started in 1993 with the main objective of disseminating fish culture technologies to the pond owners. To assess the impact of this course in the field, the present study was conducted. The findings of the study will be helpful for redesigning the training course with practical and concrete ideas. The findings will also be useful for the researchers, planners and policy makers for working in the field of fisheries.

Bogra Sadar and Sherpur Thanas were selected as the study area because most of the participants were concentrated in these two Thanas. Three Unions from each of these two Thanas were selected on the basis of the concentration of the participants. All the participants of the selected Unions were interviewed through a structured questionnaire. Further, one participant from each Union was selected for case studies.

Out of 77 respondents 56 (72.73%) of them were found to be involved in dissemination of their training knowledge. Among these 56 participants, 37 (66.07%) were simultaneously involved in fish culture in own ponds and motivational work and providing technical assistance to other pond owners; 7 of them (12.50%) were involved only in fish culture in their own ponds; and the rest 12 (21.43%) were involved only in motivational work and providing technical assistance to other pond owners. Participants with the characteristics of 21 and above in age group; educational level of class eight to graduation and above; principal occupation in agriculture, services and house wife; and family land size of 0.51 acre and above were found to be more involved in dissemination of their training knowledge.
The participants of lower age group and who were continuing their studies were found to be less involved in dissemination of training knowledge. Most of the participants were applying their training knowledge accurately. However, some of them were not able to do the same according to their training knowledge due to some existing problems like, ownership conflicts of ponds and lack of fund.

Before training, maximum fish production was 201-300 kg harvested by only 14.29% participants whereas after training maximum fish production of 401-500 kg was harvested by 54.55% participants. Similarly, before training maximum net income of Tk. 4001-5000 was obtained by 14.29% participants whereas, after training maximum net income of Tk. 8001-9000 was obtained by 22.79% participants. Maximum of 126-150 man days were created for one bigha of pond during one year by 45.45% participants.

Some problems concerning the application of training knowledge were identified by the participants. Among these; lack of funds, ownership conflicts, non-availability of fingerlings of desirable size, non-availability of medicine and complex leasing system of public ponds were the acute problems. For further improvement of the training course, the participants suggested to increase course duration, practical sessions, field visits, hatchery management sessions and daily allowance for the participants. They also suggested selecting participants who have their own ponds.

To increase the usefulness of the course, those participants should be selected from those who have completed or permanently discontinued their studies and directly involved in earning for their families. Their age should be above 20 years and they must have their own ponds. The students whose studies are still going on should not be selected for the course. If the participants are selected properly and their problems in the field are solved, they will be involved in fish culture to a greater extent and fish production, net income and employment opportunities will be increased significantly.

**d) Conclusion and Recommendations**

Impact of the improved fish culture technology transfer training course conducted by Rural Development Academy, Bogra, was found to be very effective in the field. Majority of the participants were found to be involved in dissemination of their training knowledge in their own ponds and surrounding areas. They were found to be involved in doing motivational work and providing technical assistance to their surrounding pond owners along with their involvement in fish culture in their own ponds. Almost all of the participants were applying their training knowledge accurately. As a result, fish production in their ponds had increased. Besides, income and employment of the participants had also been increased considerably.

Age, principal occupation and land size of the participants' family were found important factors affecting on the extent of involvements of the participants in dissemination of their training knowledge. Participants were within 20 years of age, full time students and whose families owned up to 0.50 acres of land were found to be less involved in dissemination of their training knowledge. Some of the participants failed to utilize their training knowledge in any way due to some constraints like, involvement in studies, lack of funds, involvement in other occupations and conflicts in ownership of ponds. Besides, the participants who were involved in dissemination of their training knowledge encountered some problems concerning dissemination of

improved fish culture technology like, lack of funds, ownership conflicts, non-availability of fingerlings of desirable size, non-availability of medicine, complex leasing system of public ponds and stealing and poisoning of fish. The respondents suggested increasing course duration, practical sessions, field visits and sessions on hatchery management. However, here are further scope for increasing the acceptability and use fullness of this training course.

If the selection of participants could be done properly and the participants are actively participated in the training, they will be skilled enough on improved fish culture technologies. During implementation of these technologies in the field if the trainees get necessary support services from the government and non-government organizations, they will be able to apply their training knowledge to a greater extent and thus many ponds will come under improved fish cultivation practices. As a result, fish production will be increased significantly, with an additional income to rural people and employment to unemployed youth and women.