

Signboards as an Aquaculture Extension Tool in Bangladesh

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Abstract

An assessment is made of the importance and effectiveness of signboards as an aquaculture extension tool for village demonstration ponds in Bangladesh. The following aspects are considered: pond location, design and message of the signboard, the demonstration farmer and the receiver of the message.

Introduction

A measure of the effectiveness of any extension program is the manner and speed with which the extension message travels to people outside the direct influence of the program. The degree with which this happens is vital for the future planning and implementation of the extension strategy used.

Most demonstration exercises on either plots of land or ponds in Bangladesh are advertised to the public using signboards. Many extension workers regard signboards as a crucial component of any extension strategy. People are believed to be stimulated to ask questions concerning the nature of the activity by an attractive signboard. Signboards are believed to play a key role in the development of people's awareness and motivation.

The Northwest Fisheries

Extension Project¹ (NFEP) has extended simple aquaculture technology to pond owners in northwest Bangladesh using demonstration ponds since 1991. Initially, this was done through the selection of poor individuals under the pond demonstration program (PDP). Later, all interested pond owners within a village were targeted under the model village programme. In both cases, signboards were provided for all ponds. In addition, under the model village programme, where all interested pond owners participated, a village signboard was also supplied. This study only looked at single demonstration pond signboards and was designed to identify what attributes determined the effectiveness of the signboards.

Methodology

The field study was conducted from October 1995 to January 1996

in seven *thanas* [upazilas or sub-districts] of Greater Dinajpur and Greater Rangpur Districts in northwest Bangladesh. Data were collected by observation and formal face-to-face interviews of pond owners, using semi-structured questionnaires. All pond owners within a village where a PDP farmer lived and all pond owners along an 8-km transect from the village were interviewed. A total of 208 pond owners were interviewed. Farmers were classified economically as poor, marginal or rich using the criteria summarized in Table 1.

Results and Discussion

While the majority (67%) of respondents felt the signboards size was adequate, the remainder said it should be larger. Seventy-four percent reported that the writing was clear. Of the remaining 26%, 16% (34) were illiterate.

¹ The Northwest Fisheries Extension Project is a collaborative project between the Department of Fisheries (DoF) of the Government of Bangladesh and the Department for International Development (DFID) of the British Government.

² US\$1 = Tk. 57.1 (May 2002)

Table 1. NFEP economic classification criteria and percentage of interviewees within each category (n = 208).

Classification	Criteria	% of interviewees
Poor	People who regularly or occasionally have a food deficit	18
Marginal	People who have no food deficit but little or no savings	37
Rich	People who can save as a precaution against a time of crisis	45

Unobserved signboards

Twenty-six percent of interviewees had not seen the project signboards and the reasons for this are summarized below:

1. *The location of the demonstration farmers pond.*

The location of the pond within the village is crucial. signboards placed at ponds located on the periphery of the village or off the main roads, tracks, paths and congregation points within the village, are much less likely to be seen.

2. *Position of the signboards at the pond side.*

Some signboards were erected on the side of the pond furthest away from the main footpath. Therefore, people (23.1% in this survey) were unable to read the writing on the board because of the distance.

3. *Signboard on a main thoroughfare.*

Most of the time villagers use only one or two pathways for their daily activities such as marketing, or visits to other villages or towns. If the signboard is not set up near important roads and footpaths the majority of people will not see it.

4. *Signboard at important places in the village.*

Some places such as schools, mosques and bazaars are important congregation points. If the signboard and its associated plot of land or pond is located in such a place then many people will see it.

Public response to observed signboards

Of the 154 (74%) interviewees who saw the signboards, 29 (19%) were motivated to visit the pond owner. Fifteen visited out of curiosity about the new technology, whilst 7 wanted training and information from the project and the demonstration farmer. Of those who visited the demonstration farmer, 10 (34% of those that visited and 5% of the total farmers interviewed) reported implementing the advice they had been given.

Why 132 (86%) people who saw the signboards did not visit and ask the farmer for information is a crucial question. Fifty-seven (37%) said that they had no need. The reasons for this were because traditional methods of fish cultivation satisfied their home consumption requirements or because of ownership, financial and/or theft problems. A further 20 (13%) intended to seek information but the farmer was absent when they passed by, while 48 (31%) were too busy with their own work to stop and inquire. Twenty (13%) did not understand the message on the signboard, possibly because of illiteracy and 9 (6%) were shy.

The social status and personality of demonstration farmers were important issues for potential contact farmers. Social regulation and stratification can deter both rich and poor people from approaching a demonstration farmer. In Bangladesh society, social status is measured by two standards, namely

capital wealth and education level. Class differentiation within groups and intra community contact appear to be crucial factors in aiding or limiting the spread of technology.

The majority (171 = 82%) of interviewees were rich or marginal (Table 1), indicating that a large number of ponds are under the tenure of the rich and marginal people. Nine (6%) pond owners who saw the signboard were poor and believed that they did not have sufficient capital to conduct modern fish culture and consequently contact the demonstration farmer. Conversely, nine (6%) rich people said that because of their status in the community they did not approach the poor demonstration farmer, despite their interest in improved aquaculture methods.

The relationship between demonstration and contact farmers is critical. If the farmer to farmer relationship is good, then there is a positive spread of information. Twelve (6%) interviewees said that their relationship with the demonstration farmer hindered contact. Good interpersonal skills are essential if demonstration farmers are to be effective extension agents. Respondents listed the following qualities as important: good communication; education level; age (generally the older the better); personality; proven success in aquaculture; and motivation.

Gender issues

Only two (1%) of those interviewed were women, indicating that ponds are predominantly owned by men. Since women do not generally leave their house, none was reported to have contacted demonstration farmers. In other NFEP surveys, it has been shown that women are generally

responsible for fertilizing the pond and feeding the fish.

Regional differences

There was a difference between urban and rural areas in the transfer of the extension message. In this study, 25 and 183 (12% and 88%) of those interviewed lived in urban and rural areas, respectively. Proportionately fewer urban people had seen the signboard and visited the demonstration farmer than in the countryside. The reason was mainly the economic standing of the urban people. The data showed that more urban dwellers were rich or marginal, had greater opportunities to do different types of work and were therefore less interested than rural people in aquaculture.

Conclusions

Because of social constraints placed on the movement of women in Bangladesh, signboards are almost totally ineffective as extension tool for reaching women. The correct positioning of signboards close to major pathways and congregation points within villages increases the number of people

Table 2. Recommendations for increasing the value of signboards as an extension tool for aquaculture.

	Action
Pond location	Chose ponds located at or near: Main roads and paths. Meeting places such as mosques, temples and bazaars.
Design and message of signboards	Illustrate signboards with a picture of a fish Include more fish culture information on the signboards.
The demonstration farmer	Select a good communicator. To reduce social barriers, select economically marginal pond owners whom both poor and rich people can approach. Encourage demonstration farmers to spend time with people attracted to their pond by the signboards. Give demonstration farmers training in delivery of extension messages promoted by signboards. Encourage farmers to keep a record of those farmers who contact them, so that extension staff can make followup visits.

receiving the extension message.

The social position and the personality of the farmers chosen for demonstration also strongly affect the number of people receiving and adopting extension messages. Enthusiastic and motivated farmers with good interpersonal communication skills can be effective as voluntary extension agents. The selection of economically marginal demonstration farmers reduces social barriers and encourages both poor and rich to follow up the extension messages seen on signboards.

This study shows that signboards motivate a proportion of people who see them to contact demonstration

farmers, to ask questions about new technologies and to follow the advice given. Signboards are an effective and cheap method of passively directing people toward sources of extension information. The principal recommendations from this study are summarized in Table 2.

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