

STRATEGIES FOR ADDRESSING GENDER ISSUES THROUGH AQUACULTURE PROGRAMS: APPROACHES BY CARE BANGLADESH

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Abstract

The Agriculture and Natural Resources (ANR) sector of CARE is exploring new ways to enhance women's participation and to empower them through aquaculture programs. Farmer field schools, participatory monitoring and evaluation, children's participation initiatives, family approaches and action research are some of the approaches that have been found to be effective in enhancing the role of women in aquaculture related activities. Aquaculture and related activities are helping women increase their mobility and gain better status. Women are acquiring new skills in breeding common carp or culturing fish in cages, ponds, and rice paddies. The ANR sector is also placing emphasis on strengthening staff knowledge of gender issues, with a primary focus on changing the attitudes of the staff. The sector is aiming to increase female staff strength to 35% by June 2000. Affirmative action policies aim to ensure more recruitment of women for senior positions in the sector. Though there are many challenges yet to be overcome, the steps taken so far to promote gender equity have brought rewarding results. There is recognition in the sector of the need to continually explore new ways to address gender issues which are highly complex in nature.

Introduction

Bangladesh, with a land area of 147,570 km², supports a population of over 124 million people. Approximately 90% of the population is reported to be Muslim with the remainder being Hindus, Christians, Buddhists, etc. (Mitra et al. 1999). The mobility of women is restricted throughout the country though variations can be seen between different regions as well as the different religions. The general situation of women living in Bangladesh is summarized below:

General situation of women in Bangladesh

- Gender discrimination is widespread in communities and institutions
- Women have less access to resources/economic activities and information
- Social and health security are poor
- Malnutrition is widespread with higher rates among girls and women
- The labour value of women is 50% that of men
- Women's contributions to the family and national economy are not fully recognized and valued

- Religious bindings and cultural norms prevent women from active participation in public meetings and reduce their mobility
- Dowry and sexual harassment cases are on the increase
- Women's contributions to the decision-making process in the family are limited

The Government of Bangladesh has initiated a number of programs to improve the position of women in society. Recently, the Department of Women's Affairs drew up strategy documents for addressing gender issues for the different sectors of the government. Many of the national and international NGOs working in the country have specifically targeted women. They have initiated different types of interventions covering a wide spectrum of welfare needs such as health and family planning provisions, microcredit, training for income generating activities and other initiatives that seek to empower women.

Though agriculture is the major occupation of the population, the country is yet to attain food security. More than half the population is reported to subsist below the food-based poverty line of 2,122 kcal per capita per day, with child and maternal malnutrition being widespread. Much of the food energy is derived from rice. As a result, protein-energy malnutrition is widespread among children under the age of five. Floods and droughts have had negative impacts on food production since 1993. However, during the period 1980-1993 rice production increased at an average 2.66% per annum. As fish are the most common sources of protein for the population, the government has been seeking to increase fish production through various interventions in fisheries and aquaculture systems. Currently aquaculture is reported to contribute about 34.5% of the total fish production of 1,373,000t. Per capita availability of fish is reported to be 27g per day and this is estimated to contribute nearly 60% of the animal protein intake (Islam, 1999). The Government of Bangladesh intends to increase fish consumption levels to 34.43 g per day by the end of the fifth five year plan (1997-2002), and aims to double the present contribution from aquaculture.

CARE International has been working in this region for over 50 years. In recent years the ANR sector of CARE Bangladesh has focused on increasing resources in agriculture in order to provide sustainable solutions to food security issues. The ANR projects have tried to specifically focus on women since:

- Women are often responsible for managing homestead vegetable gardens and livestock;
- The nutritional needs of women and children are often not met in lean seasons and times of hardship;

A special emphasis on increasing the participation of women in agriculture can empower women through increased knowledge and income, which in turn can lead to increased status inside and outside the home.

Among the various options available, aquaculture is recognized as a potential system to assist in meeting the protein requirements and fish consumption needs of the population. If successful, aquaculture can contribute significantly to the livelihood security of rural households and the economic status of the family.

CARE has five projects in Bangladesh with aquaculture as a major component. New Options for Pest Management (NOPEST) and Integrated Rice and Fish (INTERFISH) promote rice-fish as part of a range of interventions centred on improving rice field management. Cage Aquaculture for Greater Economic Security (CAGES) deals specifically with small-scale cage aquaculture. Greater Opportunities for Local Development through Aquaculture (GOLDA) addresses issues related to freshwater prawn and fish cultivation in rice field systems called gher. Locally Intensified Farming Enterprises (LIFE) uses a systems approach to empower farmers to solve various problems related to fish culture and aquatic resource management through farmer-participatory research.

Challenges faced in extension programs

Extension agencies promoting development and improvement of small-scale aquaculture systems in Bangladesh face challenges to overcome traditional approaches that historically ignored gender as an issue to be addressed in successfully promoting aquaculture as an appropriate livelihood strategy.

Although all the systems rely on several of the household members supporting the management of the aquaculture system, the need for a household approach is often overlooked as an explicit strategy. Training sessions often target only one member of the household, either the husband or the wife. In the management of ponds, rice-fish or cage systems roles are separated along gender lines. This means that there is a reliance on the trained participant to pass along all that s/he has learnt to the other family members. However, there is a significant loss or transformation of the information as it passes from one person to another.

In addition, the majority of extension workers, both in CARE and the other NGOs that CARE works with, are men. This has implications for the training. For example, during training sessions, the men often dominate the discussion. In this situation women's views or needs can be dismissed or ignored, as the staff are also men. Therefore, there is a real danger that the training needs of the women involved will not be met as there is less appreciation of, and empathy for their specific requirements. Hence it has been recognized that the extension workers should carefully design training and follow-up to take account of not only the information needs of the women, but also their learning styles. The women's lack of familiarity with formal learning environments and their lower level of literacy can result in their particular learning needs and requirements being overlooked.

From experience gained in addressing gender issues through aquaculture projects, ANR recognises the importance of tackling gender issues in its programs. Based on this experience, the organization is tackling gender issues through a three-tiered approach by:

- Having specific goals for the participation of women stated in projects' logical frameworks;
- Using extension approaches and promoting interventions that facilitate increased benefits for women in agriculture and aquaculture systems; and
- Promoting changes and staff development activities that result in a more gender-sensitive organization.

The factors that support the ability of women to become and continue to be involved in aquaculture include, geographic location, local traditions and outlook, the historical mobility of women, family support and interest, community/peer group support, the age of the women, and the effectiveness of the NGO support.

In a study carried out by NOPEST, it was noted that the differences in the number of women involved in project interventions was linked to the level of conservativeness (Zaman, 1998). Clear differences in the perceptions of the men in both the conservative and non-conservative areas of the different working districts have been identified (Table 1). Staff working in the field indicate that female groups are more difficult to form in conservative areas. Even though women want to work, in-laws and husbands are not always supportive of women's ideas. There is a need to focus on raising community awareness and to provide longer-term support to the female groups in conservative areas to ensure their ability to enter into aquaculture activities.

Table 1. Perceptions about women working in conservative and less conservative areas.

Men's and women's perceptions in conservative areas
Comilla-Choddogram, Debidwar, Mymensingh-Trishal, Fulbaria, Sherpur-Shaudar
Men's perception
<ul style="list-style-type: none"> • Women should not work outside the homestead for social and religious reasons • It is superstitiously believed that having women working in the fields would result in a poor harvest • Women have no time to work outside the home • Women are unable to do all kinds of work • Women should stay within the homestead as that is the way it has always been
Women's perception
<ul style="list-style-type: none"> • Women sometimes want to work outside the home but there are no opportunities • Women cannot get permission from their husbands to work outside • Women are unable to work outside • Women do not have time to work outside • Women do not want to work outside
Men's and women's perceptions in less conservative areas
Comilla-Barura, Mymensingh-Muktagacha, sherpur-Nakla, Sarisarbari
Men's perceptions
<ul style="list-style-type: none"> • Women learn from working outside • It is all right for women to work outside the home • Men value women's work and skills • Both men and women are needed to manage a household • Men appreciate women's work
Women's perceptions
<ul style="list-style-type: none"> • Women want to work outside the home • Husbands are supportive • Husbands appreciate women's work • Women can work near the home with the men • Women want to improve family welfare

Cage culture is a non-traditional activity overlapping the boundaries of the capture and culture fisheries. Traditional bindings and gender roles affect those who conduct cage management activities in a household. As most cages are located close to the homestead areas for security, they are within the acceptable boundaries for the movement of women (Ireland, 1997). Cage construction and the sewing of nets are generally male dominated activities. So also is the purchasing of seed for stocking as it can take participants some distance from their village when sourcing seed. After fingerlings are stocked, the women and children often take care of the cage, feeding the fish as well as providing security for the cage. Fish selling is usually undertaken by the men. It is interesting to note that the proportion of the fish retained by the women for family consumption is higher than that released for sale (Kemp and Gregory, 1996).

Involvement in non-traditional activities: extent of participation

CARE activities in aquaculture and agriculture are built on traditional systems and seek to promote improvements. Involvement in rice field aquaculture is a new activity for all the women targeted. Rice cultivation is normally a male-dominated activity in Bangladesh and according to common cultural norms, women are not allowed to work in rice production. In the projects associated with improving rice field production, rice cultivation and IPM are generally carried out by men, while women are actively engaged in dike cropping and rice-fish. Fish and prawns are grown in rice fields in both amon (rain-fed) and boro (irrigated) paddy. Table size fish are produced in the amon season using different species of both Indian and Chinese carps. During the boro season, common carp fingerling production is generally undertaken.

Depending on the conservativeness of the community and the geographical feasibility, 10-25% of the female participants in NOPEST and INTERFISH projects are involved in rice-fish and/or fish seed production. This is a similar proportion to that of the male participants. Women are often helped in raising dikes and preparing the fields for stocking with fish by the children and men in their family. Women release fish seed in the rice fields and allow them to grow on the natural food available in the fields. However, production is generally less than 300 kg per ha. As there are few costs other than those associated with stocking, the income derived from fish cultivation is attractive to the farmers. On average, families have been found to earn around Tk.1,000, while those who expend more effort have been found to make up to Tk.5,000 from the activity.

Common carp seed production is usually undertaken within the premises of the house. Fish are induced to breed in the ponds or ditches by placing water hyacinth as an inducing agent. Mature fish lay eggs on the roots of the hyacinth and these roots, with eggs attached, are collected and kept for hatching in cement tubs, cloth hapas or ditches. The breeding and hatching of eggs requires care, and women have been found to be more efficient than men in undertaking this activity.

Increasing benefits for women through new extension strategies

The CARE ANC project uses a range of extension approaches and processes that seek to empower participants. These approaches are often implemented in combination with each other. The precise mix used depends upon the individual project philosophy, the skills of the staff and the needs of the target group.

Farmer field schools

Several of the ANR projects use the Farmer Field School (FFS) approach. This works on the principal of enhancing the decision-making capacity of the farmers by helping them to understand the ecological system in which they are working. The decision-making capacity of farmers is increased through process-centred programs. This involves creation of a FFS for each group of 25-30 males and 10-12 females. With these farmers, learning sessions are planned and developed. This process ensures farmers become more responsible for their own learning. The impact of the learning, the sustainability of the learning process and the activities in this type of approach have been found to be good. Staff play the role of catalysts of the learning process rather than as givers of knowledge. They also learn to value and give priority to the farmers' needs as well as recognising the abilities of the participating farmers. The FFS provides the opportunity for the group to discuss and understand gender issues. Projects have devised gender and social awareness activities to initiate discussion by using role-playing techniques or through the use of pictures. This has resulted in an improved environment that is supportive of the involvement of women in aquaculture.

Another strategy that supports the FFS is the Farmer Leader Approach (INTERFISH-NOPEST, 1999). The identification and development of progressive and active women and men from among the FFS participants further supports the development of each FFS and helps to sustain activity by the farmers beyond the project phase.

Participatory monitoring, evaluation and planning

Through Participatory Monitoring, Evaluation and Planning (PMEP) farmers develop the process of analysing their progress and thus are able to make realistic plans to improve current production strategies. Most importantly, since the analysis is made by the farmers themselves and the results are immediately available, there is a good sense of ownership that then ensures the active participation of all farmers. The technique also serves as an excellent extension mechanism as there is open and frank discussion on various issues. The use of tactile tools helps even the illiterate farmers to actively take part in the PMEP process. As the farmers set realistic goals for themselves based on the resources available, the commitment to accomplish these is very high. PMEP has been more effective with women's groups where there are higher rates of illiteracy. The spread of rice-fish activity increased in the NOPEST project areas with the introduction of PMEP.

Children's participation initiative

Apart from targeting the current generation of farmers, NOPEST seeks to encourage the next generation to be involved in rice-fish through the Children's Participation Initiative (CPI). In this initiative, children are taught about rice field ecology. Children have been able to influence their family's attitudes towards pesticide usage, rice production practices and aquaculture. Children seem to enjoy the sessions. This has been reflected in the increased attendance on the days sessions are held in local schools and in the adoption of new farming practices at home (Daly, 1999). More importantly, CPI creates awareness among families and particularly women, who have little or no access to information outside their homes. Furthermore, CPI encourages communication and the sharing of ideas between family members so that they are better able to manage their farms and households (Zaman, 1999).

Family approach

Given the barriers to the involvement of women that are seen in some areas of the country, using a "family approach" is another initiative that can support the involvement of more women in project activities. With this approach, both husband and wife from the same family are enrolled as members of the male and female FFS, instead of having only either the husband or the wife. This approach has been found to largely benefit women as they will have fewer hurdles to overcome in initiating new activities, and the FFS will discuss how husband and wife will support each other to reach their own goals. The higher percentage of female farmers taking up fish culture in NOPEST project areas was partly attributed to the family approach adopted by the people (Zaman, 1998).

The family approach was successfully used in a GOLDA project too, where both husband and wife were enrolled as members of the learning sessions (Akhter, 1999). The participation of women in learning sessions has contributed to the increase in family income. In Hindu families, women are very active in farming activities. However, women's participation in farming is still low in conservative Muslim families. As a result of the women's participation in the project activities, family income has increased by 20% over that generated by traditional practices, largely through changing management practices and increasing dike crops to enhance income (MacKay and Muir, 1999).

Benefits: income, food, knowledge and status

A study undertaken by INTERFISH found that women were very happy with the new skills they had acquired. Female participants perceived an improvement in their status within the family. Income earned from the sale of fish seed or fish was used to meet family needs. One of the primary uses for the extra money earned is children's education. In some areas, it has been found that now women have a greater influence regarding decisions about the children's education as they are now able to contribute in cash towards school fees and education accessories.

A large proportion of cultured fish is often used to meet family consumption needs. Women are found to prefer fish culture activities to other interventions promoted by the project. Many women feel that having a rice-fish plot, cage or pond makes it easier to fulfil social obligations when entertaining guests, especially sons-in-law or the in-laws of their daughters.

A study of Farmer Leaders has revealed that the approach has had a significant effect on the farmers, especially the women (INTERFISH - NOPEST, 1999). They are seen as local resource persons as the community values the extra training they have received. Many feel their social status and the status of their family has changed dramatically, therefore increasing self-esteem. They receive recognition, and their efforts are appreciated by their neighbours and family members.

In LIFE, the participation of women in the learning sessions and research has been found to be higher than that of men (LIFE, 1999). Adaptive research carried out by the women on common carp breeding and the nursing of hatchlings was acknowledged by the Fisheries Department as a potential strategy for solving the fish seed shortages in rural areas. With the knowledge gained from the learning sessions on stocking density of fish in composite culture,

the women have influenced the families to reduce the stocking density of fish and to sell out the excess fish stocked. Some of the women effectively used the lessons learned for pond management to improve fish production. Most importantly, the participation of women in thana and district level science seminars, where they have made presentations of research findings with clarity and confidence, has once again reinforced the belief that given the opportunity and encouragement, women can excel like men in all the project activities.

Staff development: creating a more enabling environment

The approaches described above cannot happen unless the organization supporting them has appropriate attitudes and systems that support the development of people. For CARE Bangladesh, investing in all staff and especially women, is seen as a core strategy for improving the way the organization operates. Currently CARE ANR aquaculture related projects have around 28% female staff (Table 2). Efforts are being made to increase the number of female staff at both the management and the field implementation levels. The goal of the sector is to increase the proportion of women staff to at least 50% by June 2000.

Table 2. Gender composition of staff in ANR projects with aquaculture components.

Project	Male	Female	% of women
INTERFISH	135	53	28
NOPEST	93	44	32
CAGES	23	4	14
GOLDA	88	69	43
LIFE	52	14	21
Total	391	184	28

Initially, efforts were made to establish gender equity within the organization and enhance the gender awareness of the staff. In the second step, through gender-sensitised staff, efforts were made to influence change in society. The following steps have been/are being adopted to improve the position of women within the organization:

- Ensure improved working conditions for female staff by creating a working environment that is free from discrimination and harassment, enabling women to meet their special gender needs;
- Achieve a more equal gender balance by increasing the number of female staff, especially in senior positions;
- Enable colleagues to assist each other to challenge gender roles and to overcome gender barriers by providing training and counselling services for all staff;
- Provide advice and assistance for gender sensitive project planning and implementation as well as support for monitoring this process; and
- Bring forward new ideas about gender equality from within and without CARE.

Although the above efforts have been made to improve the working situation for women, there has been a low retention rate for female staff across the organization, especially in senior positions. A preliminary study conducted by the ANR sector revealed the following (Shirin, personal comment)

Key positions are mostly occupied by men

- Female staff feel ignored and left out by their male supervisors;
- Support sections do not provide the same quality of service to female managers as they do to male ones;

Affirmative action that supports the development of women is disliked by men;

- Male colleagues dominate the work place;
- Male peers and supervisors often see female staff as a threat;
- Women are unable to cope with unfounded rumours and misinterpretation of their actions;
- Recognition for good performance is unsatisfactory; and
- Good job opportunities exist outside CARE which provide better benefits.

Although the above findings do not apply to all women working for CARE, they do represent significant trends. The sector is using these findings to support the development of strategies to provide an enabling environment for women and to attract more women to the senior positions. A recent initiative is to reserve some senior positions in this sector for women only. It has been observed that when such positions are advertised the number of women applicants increased, as did the quality of the applicants. Some of the women have commented that when the position is reserved for women, they feel more confident in applying.

Conclusion

The experiences gained so far in different CARE Bangladesh projects indicate that processes associated with aquaculture development projects can be effectively used to improve the position of women in the family. The additional skills and knowledge gained by women help them to play a stronger role in the family decision making process.

In Bangladesh, not all people have the ability to buy fish for family consumption nor do they own a pond where they can culture fish. Therefore, having the opportunity to grow fish in a rice plot or a cage is appreciated by rural women. It is something they enjoy doing. Involving women in fish culture activities can make a difference to family nutrition, especially for children, as it provides a secure and regular source of fish supply for the family.

However, when creating gender awareness among family members, it is important to give women a comfortable environment in which to start a new activity. Changing the attitudes of people takes a long time, and hence projects should last for at least two years with each group. CARE has found that it needs to adopt affirmative action policies that seek to increase the number of women in the organization. This is seen as vital if the projects are to continue to focus on the empowerment of the women targeted in the aquaculture components.

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