

Aquaculture without Frontiers

Alleviating Poverty through Aquaculture

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Focal Points at a Glance

There is proven evidence that poverty can be alleviated among sections of people needing this reform through bringing them under programmes of aquaculture promotion. Under an internationally conceived programme called Aquaculture without Frontiers (AWF) that has now been implemented in India, Nepal, Bangladesh and Africa with telling results.

The author tells us about the successes of this international effort.

Background

Aquaculture without Frontiers (AwF) has been established following the successful model of Medicines Sans Frontiers (Medicine without Boundaries), a professional organisation created by Doctors to serve the humanity suffering from distress conditions. MSF received the Nobel Award in 1997 for its yeoman service to humanity. Mr. Michael New from United Kingdom, who worked for a number of years in developing countries during his professional career recognised the need for establishing a similar organisation like MSF in the field of aquaculture. This is to create a platform for the professionals to serve the poor through aquaculture and he put forth the idea in the key note address that he presented to the World Aquaculture Society meeting held in Brazil in 2003. The idea received good response from aquaculture professionals for the formation of such an organisation in the World Aquaculture meeting held in Hawaii in 2004 and several of the aquaculture professionals present endorsed Mr. Michael New to proceed with the registration of the new organisation and plan activities for the organisation. Following this meeting, AwF was registered as a charity organisation in UK and simultaneously the registration of AwF in USA was also completed. As of now, AwF UK remains as resource generation unit in Europe and has supported few projects in developing countries from the income generated until now. Similarly AwF (USA) has been generating resources through its own activities and has supported few projects. Administratively AwF (USA) is expected to manage all the project programmes funded by both the organization at the ground level. It may be noted here that AwF Mexico and AwF Spain are also in the formation stage. All these organisations are expected to share common principles, but undertake resource generations in their area / country of location and facilitate the involvement of all interested in the activities of AwF. Formation of such country / area specific organisations is expected to provide a better platform for local people and provide good opportunity for resource generation and utilisation of local people interest to serve the society.

All the details related to AwF and implementation of various projects can be seen on the website www.aquaculturewithoutfrontiers.org. So far, the organisation has provided support for a good number of projects in South Asia as well as in Africa. These small projects have been given to the identified groups to help the community through aquaculture.

Projects under operation in India

Tripura State: AwF (UK) supported its first project in the North-Eastern part of

India through the St. Xavier's Vocational Training School, Bishrmaganj in Tripura. Initial project aimed at improving the capacity of farmers to undertake fish culture operation through the effective utility of resources. With the good progress of the first phase of the project, second phase of the project was provided to expand its activities in terms of providing support to a large number of people. In the third phase, the project was provided grant that had been utilised to complete the facilities for fish seed production and utilise the existing training centre to train people in fish seed



production, nursing and culture of fish following integrated farming approaches. Seed production activity is expected to provide some income to the vocational training school to sustain the activity beyond the project phase. The project has been able to work closely with a good number of farmers located around the vocational training school and improve their fish production by helping them with knowledge and skills necessary. Further, the vocational school attracts dropouts from all parts of Tripura State and train them in various vocational occupations with focus on agriculture. As part of this agricultural programme, fisheries have been included as one of the subjects. Since the Vocational Training Centre has commercial aquaculture activities, it provides an opportunity for the trainees to gain good understanding about the aquaculture practices. Small scale seed production facilities established helps in training of participants in seed production. This helps trainees to simulate similar facilities on their farm when they return home. Further, the facilities created have also been utilised by the students of the Fisheries College in Agartala to gain knowledge on practical aspects of aquaculture and interact with farmers who have been supported by the project.

The Vocational Training School has been able to undertake seed production of carps as well as of aquarium fish during the past three years. In addition, the school also practices fish culture as a regular income through fish sale. Part of the fish produced is also utilised for food purpose on the campus. The school has been facing problems of electrical power supply and this has been resolved with the provision of power supply line to the farm. As there is water shortage for early start of the breeding activity, efforts are made to resolve this problem. The project is now taking the help of entrepreneurs in the area to run the activity on a commercial basis.

West Bengal State: The second Indian project that has been funded by AwF (USA) is located in Sundarbans, West Bengal. Joygopalpur Grameen Vikas Kendra (JGVK) is located in Basanthi village in Sundarbans and has been actively involved in promoting the integrated rural development programmes including the provision of credit to needy farmers. The NGO has been able to organise farmers and help them undertake improved aquacultural production practices and improve their

skills in various areas of income generating activities, including agriculture. Fish being part of the basic diets of people, there is great preference for the culture of fish as there is decline of wild catches. This project has been supported by Toleo Foundation through AwF, USA. Besides, providing knowledge support to farmers to improve their culture practices, as part of the project, a hatchery complex has been built to produce quality seed and supply to farmers. The construction of this hatchery complex has been completed and seed production has been undertaken during the past two seasons. Production of seeds and supply of early stages of fish larvae for nursing by other farmers has been one of the important innovations made to avoid problems related to quality fish seed availability. In the past, farmers were buying seeds from outside which have been transported over a long distance without oxygen packing. As a result of this stress, farmers have been encountering large scale mortality. With the facilities created for the local production of fish seed and nursing of fish seed to bigger size by other farmers, the farmers have been helped to get good quality seeds around their locality. This has improved substantially survival and production of fish. During this year, the project has been able to employ an expert fish breeder who has been able to improve the activities of the centre considerably. With the connectivity and the linkages provided to the project through the network of AwF, JGVK has been able to showcase their activities and obtain good support from various organisations. The area having greater influence due to climate change, JGVK has initiated a number of programmes with the support of several others funded by Danish Government support. Mr. Sengupta, based in Denmark, has been able to help and link this organisation to various groups.

Nepal

In Nepal, AwF is focussing on developing aquaculture systems in the mid hill areas. While farmers living in the plain area have been able to get good fish production owing to better access to various resources, farmers in the mid hill areas are faced with several constraints and prominent among them is appropriate space for location of ponds due to limited land holdings and provision of various resources to undertake good aquaculture practices. However, the response to the project has been very impressive with people

building small ponds ranging in size from less than 50 m² to even up to 200 m² and beyond. Further, farmers are provided only partial support to build ponds and most of the pond construction is done using family labour. With good progress accomplished in the first phase of the project, second phase of the project has been supported. Participation of women in the aquaculture activities has been exemplary with good lot of fish produced being used for family consumption. Carps and tilapia are gaining acceptance and popularity and it is hoped that this initiative would serve as an example to help farmers located in higher altitudes to derive the benefit of aquaculture. Government of Nepal is also watching the results of this project and it is hoped that the good accomplishment made thus far will help to influence the Government policies favourably. This project is operated by Prof. Madhava Shresta of the Department of Aquaculture under the Institute of Agriculture and Animal Sciences, Chitwan, Nepal with the technical support from Dr. Ram Bhujel of the Aquatic Resources Division of the Asian Institute of Technology, Bangkok, Thailand.

Bangladesh

AwF supported a cage culture project through the NGO, VOSD (Volunteer Organization for Social Development) by using small cages, particularly by women. Culture of fish in small cages, particularly tilapia proved to be beneficial for women. Small cages of one cubic meter and above fixed in back yard ponds, helped women to grow fish by using various types of feed resources available and produce fish. Based on the management and quality of fish and seed used, production of 20-30 kg was shown a possibility. Currently in Bangladesh, cage culture of fishes has gained good popularity and several private entrepreneurs have entered in to the business with quality seed and feed becoming a reality.

The second small project is supported through CARITAS Bangladesh where the donation of a well wisher is used to provide interest-free loan to a small number of fish farmers. These farmers are given technical support by the ongoing project of CARITAS and those who need small money to buy resources are given this with a condition that they return the amount after harvest of fish. This revolving fund scheme was initiated with the purpose of exploring the

provision of necessary credit with minimal support. Rangapur Dinajpur Rural Service (RDRS) is another NGO that received support from AwF for a 4 year project that aimed at improving fish production by helping farmers to have necessary quality inputs besides capacity building of members through training programmes. This organisation has been able to organise farmers into groups and train them in improving fish production through better management practices. More than 200 families have derived benefits from this effort and farmers acknowledge the benefits of group learning in improving their productivity.

Africa

Worldfish Centre was given support to implement a project in Malawi for improving quality seed availability essentially required for the culture operation and build the capacity of farmers in aquaculture. Through forming farmer groups and helping them to learn on seed production techniques, project demonstrated the scope for increasing aquaculture production. Second ongoing project in Kenya is helping groups of women to culture fish in ponds and improve food availability for people.

Farmer to farmer exchange programme

Through an USAID funded project to University of Arizona with AwF as one of the partners, nearly twenty visits of American farmers and scientists was organised to various AwF funded project locations as well as other new locations. India has derived the benefit of visit of three experts under this programme and they have visited the on-going project locations as well as new areas like Tamil Nadu , Karnataka where the experts have conducted programmes related to fish farming. These visits have created new opportunities to establish long term partnership with US Institutions and Universities , thereby bring greater benefits to people.

ACIAR supported programmes in Thailand and Papa New Guinea

Through the Australian Centre for International Agricultural Research (ACIAR) funded project, AwF volunteers provided support to farmers in Thailand with World Vision acting as a local coordinating agency for the selection of needy farmers. The main objective was to help farmers produce

quality feed using the resources available and improve fish production. Similarly, in Papua New Guinea, farmers were trained to produce on-farm feeds and improve aquaculture productivity of tilapia.

AwF-Novus programme in Haiti

Novus has supported this project to build tilapia culture ponds and training facilities to address the problem of Malnutrition. The Marine Biological Laboratory at Woods Hole , M.A., USA has been providing technical support for the construction and operation of the facilities. Through this programme, it aims to build the capacity of local people in seed production and culture of tilapia and thereby enhance the availability of quality fish for consumption.

Support to farmers affected by tsunami in Indonesia

With the grant provided by YSI , Mercy Corps and CRSP programme, support has been provided to shrimp farmers. Shrimp farmers were given support to undertake seaweed farming to earn their livelihood. These farmers have also been assisted to initiate shrimp farming by following good aquaculture practices.

Advise to organisations and individuals through e-mail

In addition to above projects where monetary support with technical assistance by an AwF volunteer has been provided, a number of organisations have been assisted through e-mail advise by the AwF Board of Directors. In addition , wherever possible , necessary local links have been provided to help people derive the best benefits from the local expertise.

Challenges faced by AwF

1. AwF being voluntary , all the Board Directors work as volunteers and help in carrying out the activity based on time availability. As the work of the organisation is expanding, efforts are made to have at least part time staff to assist the organisation. However, as there is no definite source of income , except the small scale fund raising events being organised and donations received, support is needed to appoint at least few professional staff and cover their expenses. AwF has been approaching various donors , but the

effort is yet to yield results.

2. There are difficulties in getting good project proposals, particularly with focus on small farmers. There appear to be not many organisations in the field yet , with interest in development of aquaculture. AwF funding support for each project is limited generally to about 10,000 USD/-.
3. Identifying local volunteers who can provide support to projects locally in each country is another challenge.

Opportunities: 1). Aquaculture growth being rapid, AwF has good opportunities to bring this expansion benefit to small and marginal farmers. 2). AwF can provide platform for all groups of people with an interest to help the needy in aquaculture. 3). With the increasing evidence on the health benefits of fish not only to brain and heart , but for the body as whole , the demand for fish would go beyond all expectations. AwF has responsibility and good opportunity to bring this benefit to poor farmers and help them in improving their livelihood.

Conclusion

Indian economy is growing rapidly and with the improvement in income, the demand for healthy and quality food is expected to increase in India. AwF in India can undertake projects and programmes that can assist small farmers. Being a large economy with considerable amount of wealth within the country, it is proposed to explore the possibility of establishing AwF (India). This organisation can help in the development of healthy aquaculture systems that bring benefits to small and marginal farmers.

AwF has developed a strategic plan to help guide its programmes and projects are now supported following this strategic plan. It is hoped that this strategic plan would help in the organisation growth by being focussed on the planned programmes.

Prof. M.S. Swaminathan is helping AwF as its Patron along with Mr. Michael New who serves as Founder Patron.

In case any of the readers have queries or ideas on making AwF programmes more relevant to the poor, they may feel free to contact the author either via e-mail or through website. ☺☺☺

