



AQUACULTURE FIELD SCHOOLS

Aquaculture Field School (AFS) is a school without walls for improving decision making capacity of fish farming community. It is a participatory approach whereby fish farmers are given opportunity to make choice in the method of aquaculture production system through discovery based approach. AFS is composed of a group of farmers who regularly have a gathering for problem solving interaction. Typical group strength should have 20-25 aqua-farmers. The principle of AFS falls in the line of Farmers Field School (FFS) implemented in agriculture. Here the entrepreneurs/ aqua-farmers after being trained by a research institute in turn train other small farmers in that area about the scientific practices of the aquaculture. The major objective of AFS is to build farmers capacity to analyze their production systems, identify problems, test possible solution and eventually adopt the practices appropriate to their systems.

Five basic tenets of AFS - fish farmers are experts, their fish farm is a learning place, aquaculture extension worker serves as facilitator but not as teacher, scientists/subject matter specialist work with rather than lecture them and learning materials are learner centered.

ICAR-CIFA pilots Aquaculture Field Schools (AFS) to promote farmer to farmer extension

ICAR-Central Institute of Freshwater Aquaculture (CIFA) has established three field schools. One field school is established at Maharatha's Aquavariant Estate, Bhatpadagarh, Banpur, Khordha district, Odisha in the farm of Shri Manabendra Maharatha. He owns a farm of 10 ha water body spread over 27 fishponds of different size. He has been in this commercial carp seed business since 2003. Mr. Maharatha who is technically supported by CIFA now produces around 10-15 crores carp spawn, 1-2 crores carp fry, 8-10 lakh fingerlings and 3-5 tones yearlings per year.

The second field school is established at Sarakana, Khordha, district, Odisha in the farm of Shri Batakrushna Sahoo and Dr. Hrushikesh Panda. They own a fish farm of 6 ha with 23 ponds. They have 2 commercial carp hatcheries and one freshwater prawn hatchery. Besides, they also have one ornamental fish breeding unit. Shri Sahoo and Dr. Panda are engaged in fish seed production business since 1986.

The third field school was established in the farm of Sri Surendra Belchandan, owner of Poonam Fisheries, Durg, Chattisgarh in 2014. Sri Belchandan is a progressive fish farmer engaged in integrated farming system that other than fishery, includes enterprise like crops, dairy, vermi-compost and horticultural plants. In addition to breeding Indian Major Carps, he also produces seeds of monosex tilapia, magur etc.

Characteristics of the facilitators

- Developing successful aquaculture entrepreneur requires long term association and guidance of experts. These facilitator farmers have been mentored by experts of ICAR-CIFA, Bhubaneswar.
- The facilitators are constantly trying new thing- e.g. breeding of new spp., establishing new aquaculture venture etc. Higher educational attainment might have contributed to their being innovative.
- The facilitators by virtue of their social status enjoy respect of others. The fish farmers of the village as well as neighbouring villages also regard them as guide/mentor.
- The facilitators are honoured with many awards and recognition (state level as well as national level) as a mark of their contribution to aquaculture.
- In addition to imparting training to farmers in the school the facilitators provide guidance in establishing fish farm/hatchery in distant villages.

The steps followed in these aquaculture field schools

(a) Identification of the entrepreneur farmers through which expert can reach thousands of farmers, (b) Collection of the basic aquaculture status in that area like leasing period of community ponds, aquaculture management practices, production, marketing etc., (c) Experts from CIFA train the entrepreneur farmers, (d) Assistance in creating basic educational facilities at the AFS, (e) Operationalization of AFS on freshwater aquaculture, (f) Prepare farmer centered literature, (g) Technical backstopping of trained farmers throughout the culture period and (h) Follow up visit to the farms of trained farmers to reinstate new learning.

Activities organized at the AFS

Training: Several training programme have been organized at the field schools. Neighboring farmers have been trained in selection of brood fish, hormone injection, hatchery operation, pond management, seed rearing, feeding and also various steps of carp poly culture operations.

Field days' / Exposure visits: These are being organized regularly in the AFS in order to create awareness about various aquaculture related ventures. Large number of farmers and farmwomen from Chattisgarh, Tamil Nadu, Orissa, Andhra Pradesh, Manipur and Nagaland participated in the field days/exposure programme.

Workshops: Several workshops were held in these field schools where experts from research institute, line department officials, facilitators, farmers and farmwomen took part.

Aquaculture field Schools have become very popular among the farming community. ICAR-CIFA intends to establish more AFS in coming years for horizontal transfer of aquaculture technologies in a quick and cost effective manner and thereby strengthen aquaculture extension system.