

CMFRI

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WORKSHOP ON

MUSSEL FARMING

25 - 27 SEPTEMBER, 1980

MADRAS



CENTRE OF ADVANCED STUDIES IN MARICULTURE

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

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TECHNICAL SESSION VIII	TRAINING AND EXTENSION	CMFRI-CAS/MF/ 80/BP-24
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TRAINING REQUIREMENTS FOR THE ACCELERATED
DEVELOPMENT OF MUSSEL FARMING

It is well recognised that the development and growth of any sector largely depend on the existence or availability of trained personnel. The technology of mussel culture practiced at present in countries like Spain, Netherlands, Italy and France has developed into a sophisticated one necessitating the knowledge of several aspects of its operation, surroundings, post-harvest processing and preservation and disposal. Advances in the knowledge of biology, physiology and ecology of mussels and the environment in which they live and grow have helped greatly to obtain enhanced production. New material and engineering skill put in have enabled to design and construct viable farms and culture bases. Investigations on environment management, diseases and their control have helped to achieve higher survival rate and quality products. These as well as other technological progress made in the recent years have thus developed mussel culture to an important and specialised branch of aquaculture.

The organisation of an extensive/intensive mussel culture enterprise depends to a large extent on the

efficiency with which the avocation is carried out and the personnel involved in it. The establishment of a mussel culture fisheries on modern lines requires trained personnel of different categories. Key categories of personnel required for effective development and stabilised growth of mussel culture industry are (1) Research and Technical personnel (2) Managerial personnel (3) Culture specialists (4) Coastal environmental specialists (5) Farm engineers (6) Processing technologists (7) Extension specialists and (8) Skilled operatives.

As indicated earlier, modern culture of mussels has developed into a multidisciplinary science involving the knowledge of biology, ecology, physiology, microbiology, nutrition, genetics, water chemistry, engineering and processing, pathology, economics, sociology etc. Research and technological personnel are required to undertake investigations in all these branches. Managerial and techno-administrative personnel having sound knowledge in the composite subject matters are needed to manage the farms and implement the schemes. The availability of species, culture site and its ecosystem, vary from place to place necessitating location-specific studies to evolve viable techniques of culture. This requires the services of competent culture specialists and environmental specialists. Open-sea farming of mussels warrants great engineering skill to construct and put up the culture platforms in the dynamic environment of the sea. Similarly the role of processing technologists in evolving consumer preferred quality products; extension specialists in the wide propagation of the system among the farmers and of the skilled operatives in the field of culture operation and fishing need not be emphasised.

The training needs of above categories of personnel are varied. There is at present no Institute or Centre in the country which offers training on regular and/or Institutional basis on mussel culture. This is perhaps due to the reason that the culture system is just emerging as a means of large-scale production of mussels and it is yet to be established on commercial scale in our country. However, the importance of training/education to meet the manpower requirements as well as to accelerate the process of development needs no emphasis.

In our country, the Central Institute of Fisheries Education, Bombay, College of Fisheries, Mangalore and Tuticorin and the Centre of Advanced Studies in Mariculture at Central Marine Fisheries Research Institute are the important Institutes imparting education/training on Fishery Science. Researches on mussel are carried out chiefly at Central Marine Fisheries Research Institute, National Institute of Oceanography and in certain coastal Universities. Among these research Institutes the Central Marine Fisheries Research Institute is the pioneer Institute and has developed the basic techniques of mussel culture in the open sea and has demonstrated its techno-economic feasibility. Recognising the dearth of trained research and technical personnel in the field and the urgent need for filling up this deficiency, the Institute under its training projects and the recently established Centre of Advanced Studies in mariculture is offering both long-term and short-term training courses.

With a view to transfer the technologies evolved and perfected in the research Institutes to the farmers/fishermen and to provide need-based training in different aspects of mariculture, a Farm Science Centre - Krishi Vigyan Kendra- was established at Narakkal under the

Central Marine Fisheries Research Institute and this centre offers at present training on various aspects of prawn culture. The Kendra proposes to impart training on mussel culture shortly.

In the light of the above background, the Workshop may like to consider:

1. The need and pattern of education/training required to produce a cadre of qualified research/technical personnel to develop the mussel culture industry of India.
2. In certain fields such as Farm engineering, coastal environments and genetics, the expertise available in the country is inadequate and the need for some arrangement for training of such identified subject matter specialists may be discussed.
3. In view of the great potentials for the development of mussel culture in India and considering the large number of fishermen/fish farmers required to be trained to carry out the culture operation effeciently and that too in their local language, it may not be possible to the KVK at Narakkal, the only centre of its kind on the subject in the country, to train all the farmers. Intensive training facilities will have to be developed by each of the states under suitably organised programmes, so that, skilled operatives are available when other developmental facilities are put in the field.