

Advances and Priorities in Fisheries Technology

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Training Requirement in Seaweed Industry in Tamil Nadu

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Seaweed based industry in India is fast developing and 80% of this is in Tamil Nadu. This paper discusses the impact of training and manpower development on seaweed culture and its utilisation and also identifies the technological advancements required to be transferred to such industries.

Key words: Seaweed, agar, algin, training

Nearly 40 seaweed based industrial units are functioning in India of which 80% are located in Tamil Nadu; especially in Madurai and Ramanathapuram Districts. It is estimated that annually nearly 40,000 t of red and brown seaweed are processed by these units producing 130 t agar and 540 t algin, valued at Rs 45 and Rs 70.2 million respectively. Under the auspices of Trainers Training Centre (TTC) of Central Marine Fisheries Research Institute (CMFRI) a survey was conducted to collect feedback information on the effectiveness of training already imparted on seaweed culture and utilisation and also to identify the needs and modifications if any, on the curriculum of such training for the future (Sheela, 1995; 1997).

Materials and Methods

A total of 29 industrial units comprising 16 agar producing units and 13 sodium alginate or algin producing units situated in and around Madurai and Ramanathapuram were visited. The data were analysed from the responses collected through pre-tested interview schedules.

Results and Discussion

On a specific question about the assistance sought for or received from Research and Development Organisations like CMFRI, Central Salt and Marine Chemicals Research Institute (CSMCRI) or National Institute of Oceanography (NIO) at any stage of organisation of the Industry, 30% of the owners of the unit responded that they did not consult any of the R & D organisation at any stage. 60% of them informed that they had consulted CMFRI in the initial stages after setting up the production plant or during the trial run of the plant especially for identification of resources, availability, distribution, phycocolloid content, local names and possible suppliers as well as marketing possibilities. The remaining 10% didn't respond.

Out of the respondents, only 6% had received training on seaweed culture and utilisation at the TTC of CMFRI at Mandapam (Table 1). All the others became

experts in the seaweed industry through the acquaintances from M/s Cellulose India Ltd. (Mafatlal Group), Madurai.

Table 1. Number of persons trained in seaweed culture and utilisation

Period	Place	No. of trainees (State wise)							Total
		Andhra Pradesh	Gujarat	Maha-rashtra	Kerala	Laksha-dweep	Tamil Nadu	West Bengal	
May 1986	Mandapam	-	-	-	-	-	5	-	5
May 1989	Mandapam	-	-	-	-	-	4	-	4
Mar. 1991	Mandapam	1	1	-	1	-	3	-	6
Feb. 1992	Minicoy	-	-	-	-	19	-	-	19
Mar. 1992	Mandapam	1	-	-	-	1	7	-	9
Apr. 1992	Kavaratti	-	-	-	-	13	-	-	13
Jan. 1994	Mandapam	-	-	-	-	-	20	-	20
Mar. 1994	Mandapam	-	-	1	3	-	6	2	12
May 1995	Mandapam	-	-	-	-	-	10	-	10
Feb. 1997	Mandapam	-	-	-	1	-	9	-	10
May 1997	Mandapam	-	-	-	-	-	11	-	11
Total		2	1	1	5	33	75	2	119

On the course content and the technical areas of training, all the respondents were of the view that knowledge on the technology of processing, utilisation of the products, their grades and standards and marketing are the vital areas of interest and emphasised the need for training in such areas.

They also expressed their desire that the training should be of short duration, preferably for 10 days and the training should focus on the following aspects in the order of preference:

- Improving the quality of the product such as colour, gel strength, viscosity etc.
- Knowledge on quality control and testing of the product as per specifications.
- Knowledge on new and under-exploited resources, import of dry raw materials like Eucheuma.
- Hygienic and scientific methods of production of phycochemicals
- Utilisation for edible purposes.
- Waste disposal and utilisation of sludges as manure or feed for live stock
- Indoor drying of agar and algin instead of freezing and thawing for agar
- Mariculture and production of *Gelidiella acerosa*
- Agarose and Carrageenan production technology

All respondents urged the need to have a meeting or colloquium of all industrialists, suppliers, agents, end users, scientists and Wild Life Department officials to sort out the anomalies existing in the selling price, quality, period of harvest etc. They showed great enthusiasm to know export possibilities. All the units are running

in profit. The skilled technician employed in 75% of the industries is either the owner himself or one of the immediate relative of the owner so as to maintain the secrecy or the expertise developed in-house by them.

The seaweed processing industry is very much desirous of getting adequate training in the recent technical developments and advancement in the field of post-harvest technology. This should form an important component in the future training programmes in the field.

References

- Shecla, I. (1995) *Training Programme for Fisherwomen on the Preparation of Food from Seaweed- An Evaluation Study. Mar. Fish. Infor. Serv., T & E Ser., No. 137.11*
- Shecla, I. (1997) *J. Extension Education., 8(3), 1784*