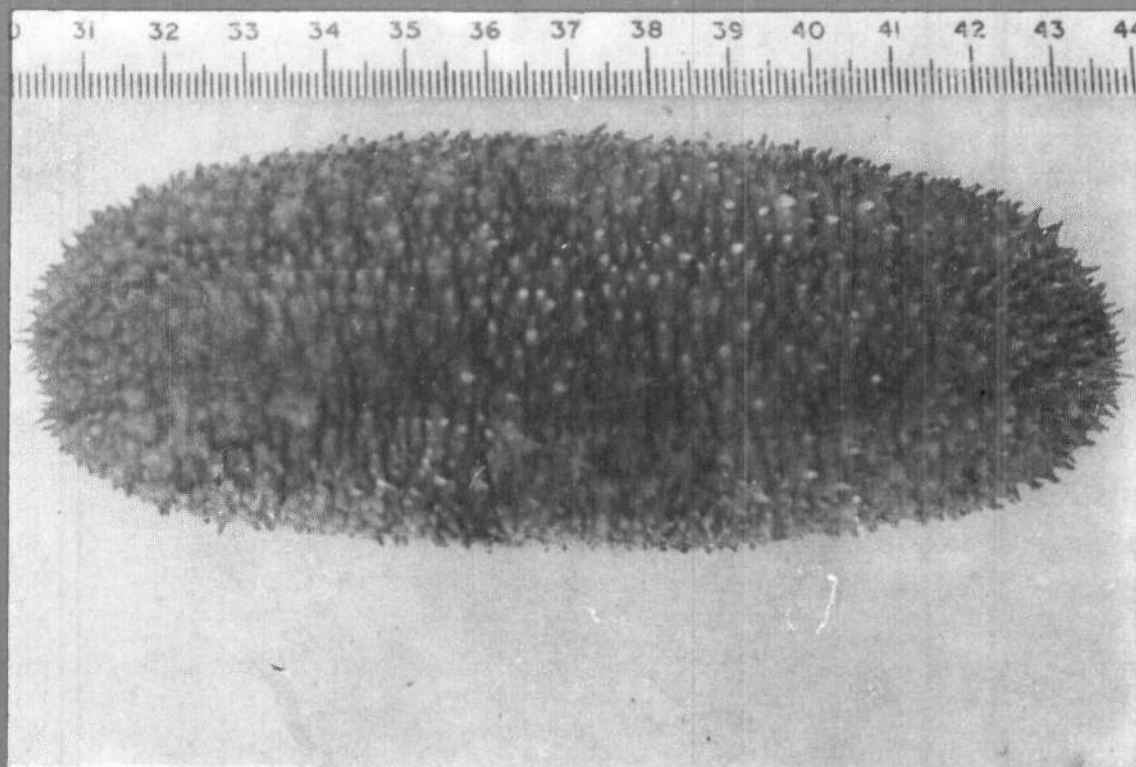




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# **PERCEPTION OF FARMERS ABOUT GROUP ACTION IN PRAWN CULTURE AND AN ACTION PLAN FOR GROUP FARMING**

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Prawn farming in rural sector has immense scope for improvement in terms of the practices followed and utilisation of water bodies. Studies conducted by the Central Marine Fisheries Re-

search Institute in Ernakulam District in Kerala have revealed that there are many technological and socio-economic problems faced by farmers engaged in prawn production. These include lack

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of technical know - how, uncertainties in yield, labour problems, poaching of prawns in the fields, inter sectoral conflicts and exploitation by middlemen in marketing. With the objective of enabling farmers to learn the practices involved in scientific prawn culture and solve the constraints faced by them in the management of the enterprise, it was proposed to demonstrate the concept of group action in different farming operations among selected prawn farmers in Ernakulam District. This formed a part of the Research Project on evaluation of extension methods for fisheries development under the Socio-Economic Evaluation and Technology Transfer Division of the Institute.

The practice of group farming is of widespread existence in many enterprises in Asian countries. The concept of group management was first tried in agricultural sector. According to the reports of ESCAP and FAO Regional Planning Commission, the developing countries have shown increasing interest in popularising group farming practices. In Kerala, group farming trials conducted by FACT Ltd. in Trivandrum District and the group farming programme of paddy cultivation by the Department of Agriculture are successful examples (Heli. R. Group Farming for Rice Development in Kerala. Dept. of Agriculture, Kerala, 1989). These attempts have helped in solving complex socio-economic issues in agricultural sector.

Group farming in the present context refers to the farm management approach in which the prawn farmers of a contiguous area are organised to pool their land and resources. In this approach it is important that the individual farmer retains the right of ownership over the land, investment and the returns from his holdings. All the farming operations such as procurement of inputs, water management, eradication of pests, stocking of seed etc., are done simultaneously by the participating farmers. The technical advice can also be collectively availed. Thus management serves as a critical input and collective management forms the essence of group farming approach. In group farming, problems faced by individual farmers are eased out and solved through collective efforts.

Before launching a comprehensive programme on group farming, it is indispensable to study the reflections and opinions of the clients about the strategy which is new to them. The success of convincing the farmers on the benefits of group management and institutionalising the approach, to a great extent depends on the degree to which the clients favour such approach. In order to understand

the perceptions of prawn farmers in a selected locality regarding the introduction of group farming practices and the constraints in institutionalising the approach, a study was conducted in Chellanam fishing village in Ernakulam District adopted by the Central Marine Fisheries Research Institute under its extension programmes. The prawn farmers belonging to the *padasekharams* (group of paddy fields registered as a society under the directions of the Department of Agriculture) practicing paddy-cum-prawn culture in Chellanam revenue village under Chellanam Panchayat were considered for the pilot study and a sample of sixty farmers was selected. Data on the socio-economic profile, farming practices followed, perceived benefits of group farming and the constraints anticipated, were collected using a questionnaire followed by group interviews.

### **Profile of the respondents**

The profile of the selected respondents is as follows: Twenty five per cent of the respondents belonged to the age group of 22-30 years, 33.3 per cent belonged to the age group of 30 to 50 years and 41.7 per cent belonged to the age group of 50 years and above. Regarding education 40 per cent had primary, 38 per cent had high school and 22 per cent had higher level with technical training.

### **Size of holdings**

Forty seven per cent of the farmers possessed 1-3 acres of holding suitable for prawn farming. Twenty two per cent of them practised prawn farming in their own holdings as well as in leased in fields. Twenty three per cent possessed holding sizes between three and five acres and the rest had above six with the maximum of 14 acres.

### **Knowledge and use of improved prawn farming**

Thirty eight per cent of the farmers had received knowledge about improved prawn farming mainly through the training programmes conducted in the village by the Central Marine Fisheries Research Institute under its extension programmes. Ten per cent had attended the training programmes of MPEDA or BFFDA. On the use of prawn farming practices, 35 per cent of the farmers practised traditional filtration method and 60 per cent adopted supplementary stocking and feeding. Three farmers attempted selective stocking and supplementary feeding.

### **Perceptions of farmers about group farming approach**

The perception of different aspects of group approach in prawn farming was collected from the

farmers on a three-point scale. It was observed that 64.6 per cent of the farmers had most favourable perception regarding group approach. About 23 per cent perceived the group management strategy as favourable. Only 13 per cent were having unfavourable attitude towards the proposed strategy. The perceived benefits included efficient use of resources, better contact with R & D agencies, increase in production, efficient marketing including price fixation and social benefits such as development of leadership qualities, co-operation and team spirit.

In a discussion following the collection of data the farmers subscribed to the view that collective action will be highly useful in reducing the cost of pumping water, eradication of pests and procurement of other inputs. The produce is at present marketed individually in small quantities which often forced them to sell through middlemen. Through collective action in marketing they would be in a position to demand a better price, they opined. They believed that such an approach will improve their problem solving abilities. This perception is backed by their encouraging experience from the cooperative movements such as Matsyafed and the service co-operative society in the village. The efforts put in by the Central Marine Fisheries Research Institute in organising women into *Matsyamahilavedi* and *Matsyamahila Industries* for self employment and empowerment and the prawn farmers into a forum for imparting technical know-how in prawn culture have received appreciation from the villagers. However, the farmers also anticipated the following constraints in the implementation of group management approach in the village.

1. Intra-group conflicts due to lack of mutual trust.
2. Difficulty in evoking equal participation by all members of the group.
3. Lack of support for group ventures in prawn farming.
4. Lack of conviction of farmers on the practicability of group action.
5. Practice of leasing out the holdings without following legal procedures which poses difficulty in availing credit and subsidy from the Government.

The pilot study on farmer's perception of group farming approach indicated that the positive perceptions of the farmers outweighed the constraints. Taking clues from the experiences in agriculture in the country and abroad it would be worthwhile to test and evaluate the proposed strategy among prawn farmers of a selected area and educate them on its usefulness following the principle of 'seeing

is believing and learning by doing'. Group approach will also be a useful and more economic method for technology disseminating agencies in view of the resource constraints generally faced by them.

TABLE 1. *Perceived economic and social benefits of group farming*

Perceived benefit	Percentage of farmers responding in favour
Gain in knowledge through interaction with members	88.3
Efficient use of resources	86.6
Co-ordination and contact with development agencies	83.3
Better access to credit and other inputs	80.0
Better price for the produce	82.0
Procurement of technical help for implementing better farming practices	78.9
Reduction in farming cost	71.2
Leadership development	90.0
Better co-operation and team spirit	90.0

### **An action plan for group farming of prawn**

The concept of group farming is not new. But its application in prawn farming has not yet been demonstrated. The principles underlying the concept are:

1. The farmer holds his independent right of ownership on his holdings and the produce from them.
2. For the easy implementation of the group farming activities farmers are organised into a group which will be responsible for implementing the farming decisions made by the group in consultation with the technologists and development agencies.
3. The farmers procure the farming inputs collectively and carry out each farming operation simultaneously.

Following the above principles, a plan of action for the implementation of group action in prawn farming was prepared and discussed with the farmers which is given below.

### **Plan of work**

1. Selection of a group of prawn fields lying contiguously in a geographical area and preparation of a field map.
2. Organising the farmers of the selected area into a functional group and convening a meeting in which objectives of the group farming will be explained.

3. Constitution of programme implementation committee consisting of president, secretary, treasurer and five to seven members representing different categories of farmers in the group through election or consensus. This committee will make decisions regarding implementation of farming operations.
4. First meeting of the programme implementation committee and making decision regarding the species intended for farming, the procedure of procuring the inputs such as eradication materials, feed, seed etc. Farmers may prefer to use the same type of feed and seed in view of synchronising the operations and bulk purchase and transport of the inputs and procurement of credit. It is desirable that the decisions are made in consultation with the technical experts. The practices to be followed may be identified and a calendar of farming operations may be prepared.
5. An assessment of the input requirements and the eligibility for institutional credit of each farmer may be assessed and list may be prepared by the group secretary.
6. Second meeting of the programme implementation committee to decide on procurement of inputs, the money to be collected from each farmer and meeting of concerned agencies for credit.
7. Training of the farmers in the farming practices to be followed with the help of a government agency. The farmers may be explained the details of farming operations and their sequences and the calendar of activities may be distributed to them. The training programme may be of one week duration with field visits and demonstration on different aspects of the technology. The programme should also help in clearing the doubts and anxiety of each farmer regarding his farm.
8. Commencement of farming operations by strengthening the bund and taking up other farm improvement measures.
9. Weekly meeting of the programme implementation committee to review the programme and identify constraints.
10. Fortnightly meeting of the participating farmers and the technical experts to discuss and suggest solutions to the problems faced by the farmers. The services for soil and water quality testing and monitoring of growth may be made available to the group with the help of the technical experts.
11. The treasurer will collect and maintain the day-to-day expenses incurred for implementation of the programme.
12. At the end of the programme, the president may convene a meeting of the participating farmers and the technical experts to discuss the experience of each farmer and evaluate the gains.

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