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Mussel culture is increasingly getting popular in Padanna and Cheruvattur Panchayats in Hosdurg Taluk of Kasaragod district in Kerala, by virtue of the popularisation efforts made by the CMFR Institute. Initially this low cost technology of farming was transferred to five groups with 15 to 21 farmers at Cheruvattur and Valiyaparamba, mostly women groups. Financial assistance was provided by the North Malabar Gramin Bank and Cheruvattur Farmers Co-operative Bank. They provided a loan of Rs. 2,60,200/- for the implementation of the project with 50% subsidy. These groups adopting mussel farming technique developed by CMFRI, harvested 67.4 tonnes of mussels during May-June 1997. A portion of the harvested and shucked meat (2000-Kg) was sold to the Integrated Fisheries Project, Cochin at a rate Rs.45 per Kg. The remaining harvest was sold in the domestic market. The groups could realise Rs. 3,34,555/- from the harvest with a net profit of Rs.1,04,455/- within a period of 6 months. Later this programme was extended to other areas in subsequent years. During 1999-2000 the farmers of Cheruvattur and Padanna have harvested 250 tonnes of mussels and the production will increase in the coming years if proper financial and technical support is given to these groups of farmers.

At present the culture is done in the Padanna backwater systems of the Hosdurg Taluk. In this backwater system mussel farming is done at Cheruvattur and Padanna panchayats. The Cheruvattur panchayat has an area of 18.37 Sq.km with a population of 24,504. The number of families with fishing as the main occupation is 144 and about 300 families depend upon fishing as a source of subsidiary income. At Padanna panchayat, the population is 17,961 with an area of 13.08 Sp. km. The number of families for whom fishing is the main occupation is above 200 and

the number of families doing fishing as a source of subsidiary income is about 400. At Cheruvattur five groups were formed at Koyambram, Kavunchira, Kayuthakadu and Paranthamadu. At Padanna, three groups were at Badkekad, Ori and Thekkedadu. These areas are shown in Fig.1. At Padanna eleven individual farmers have also done mussel culture. At Koyambram and Paranthamadu, there are 13 members and at Kavunchira and Kayuthakadu there are 15 members in the groups. The mussel culture units of Koyambram and the seeding operations are shown in Fig. 2 and Fig. 3 respectively.

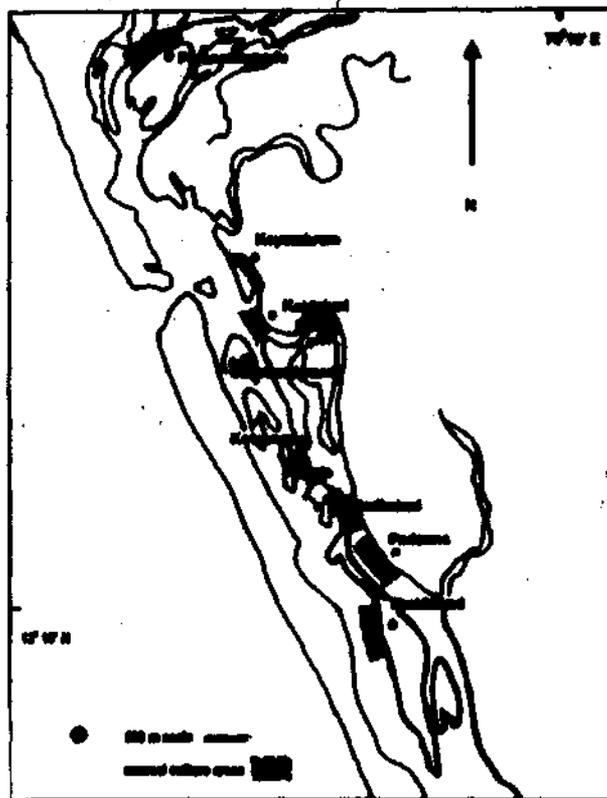


Fig.1 Mussel culture areas



Fig.2 Mussel culture unit at Kayambram



Fig. 3 Mussel seeds are sorted and seeding of rope in progress

The yields obtained by the farmer groups and the numbers of ropes suspended are given below:

Place	Total yield (tonnes)	No. of ropes	Yield/rope(Kg.)
Koyambram	22.75	700	32.5
Kayuthakadu	36.22	900	40.24
Kavunchira	25.2	900	28
Paranthamadu	12.75	300	42.5
Badkekad	18.75	625	30
Ori	13.5	482	28
Thekkekadu	22	760	29
Total	151.75	4667	32.89(Av.)

Thirteen persons started mussel culture as individual enterprise. The total production from these farms, which were maintained by the

individual farmer, produced a total of 97.5 tonnes and the total production from Kasaragod district is 249.25 tonnes.

The total green mussel production from Malabar area is 5416 tonnes during 1999. The total production from culture is 250 tonnes. This forms only 4.62% of the mussel production from Malabar. The mussel culture practice is expanding to other areas during 2000. Mussel culture is being taken up in Kadalundi estuary and Puthuponnai areas also.

Mussel culture was initiated by the DW CRA (Development of Women and Children in Rural Areas) in Kasaragod. Loan amount sanctioned was Rs.8800/- per member with a subsidy component of 50%. The amount is to be paid back in five years along with an interest at the rate of 12.5% per annum. A revolving fund of Rs. 5000/- without interest is also provided.

In all the groups, the net operating profit ranged from Rs. 7,646/- in Kayambram to Rs. 16,413/- at Badkekad. The average cost estimates of mussel culture at Padanna showed that the major cost was that of nylon rope (34%), bamboo (20%) and seed (20%). The other expenditures involved cloth (7%), construction cost (5%), harvesting (4%), seeding (4%) and coir rope (3%).

Some of the constraints faced by the mussel farmers are:

1. **Marketing:** The farmers have to harvest the fully-grown mussels in May itself and sell before the onset of monsoon to avoid mortality due to low salinity. At present only a few companies are purchasing mussel from the farmers and the bargaining from the farmers side is limited. Further processing and production of value-added products are required to get maximum return. Better marketing facilities are to be made available for obtaining better price. Mussel culture is a recent phenomenon in

Padanna and cheruvattur area. As mussel do not form the cuisine of this area, the expertise in meat shucking is low compared to their counterpart in Calicut area.

2. **Depuration and storage facility:** Depuration of mussel is required to maintain the quality of the product and in coming years this will become mandatory for internal and export market. The cold storage facility of the boiled and shucked mussel meat is lacking as the mussel culture harvesting is done in a limited period.
3. **Availability of seed:** Natural seed beds are not available locally and the seeds are presently brought from Tellicherry area incurring additional charges for transportation. In some localities, the local fishermen do not allow the removal of seeds

in huge quantities.

The future prospects are:

1. As the culture of mussel in estuaries yield good production within a short period, this should be promoted by giving subsidy and can be taken up in other areas.
2. Most of the seeds settled in the inter-tidal areas during post-monsoon period perish after some time due to exposure to sunlight and limited food supply. These seeds could be used by the mussel farmers.
3. Large areas are available for mussel culture for commercial farming in estuaries and near shore areas. With export markets developing, this can be expanded to many suitable areas.

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