CMFRI

WORKSHOP ON

MUSSEL FARMING

25 - 27 SEPTEMBER, 1980
MADRAS

CENTRE OF ADVANCED STUDIES IN MARICULTURE

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

P. B. No. 1912, COCHIN-682 018, INDIA

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE
COCHIN - 682 018
CENTRE OF ADVANCED STUDIES IN MARICULTURE
WORKSHOP ON MUSSEL FARMING
MADRAS 25-27 SEPTEMBER 1980

TECHNICAL SESSION IV PRODUCTION AND ECONOMICS	CMFRI-CAS/MF/80/ BP - 12

GREEN MUSSEL PRODUCTION AND ECONOMICS AT CALICUT

P.S. KURIAKOSE

Central Marine Fisheries Research Institute, Cochin-682018

In India a sizable commercial fishery for green mussels exists along the Malabar coast only. The green mussel beds extending from Calicut to Kasargode is roughly estimated to spread to an area of 2500 hectares. The beds are scattered from the intertidal region to an area of about 10 metres depth. In this area annual potential stock of about 8000 metric tonnes of mussels are available. From the important mussel landing centres in the Malabar region an annual average of about 2500 tonnes of mussels are collected.

The mussel fishery extend only for a period of 8 to 9 months from September to May. During June, July and August mussel picking is not possible due to the monsoon. The important fishing method is collection of mussel by diving. The divers go in a canoe or floating logs locally known as "mutti" to the submerged rocks away from the shorp. They dive and collect mussels by hand using share iron chisel for scraping the mussels from the rocks. About 800 people

...2

are engaged in mussel fishery from Kasargode to Challium near Calicut. Out of this about 400 are actual divers who collect mussels from the submerged rocks and the rest are engaged in marketting. The fishing is carried out in low tide, calm water and sunny days. The fishing duration varies depending upon the availability and market demand. Generally the fishing time is from 07.00 hours to 14.00 hours. Fisherman can collect on an average about 45 kg of mussels per day. He sells this to the merchants at the landing centre at a fixed rate of Rs. 0.50 per kg. The mussel fishing fisherman thus earns about Rs 22.50 per day. One kg of mussel in the market fetches a price of about Rs. 1.25.

MUSSEL PRODUCTION IN CULTURE SYSTEM

In the culture system a standard raft of the size 8 x 8 m can hold 100 mussel ropes each of an average length of about 6 metres. One metre length of this rope is seeded with about 750 gm of mussel seed. At this rate for seeding all the ropes in a raft about 450 kg of seed will be necessary. After five months one metre length of the seeded rope can produce about 12 kg of mussels and the production from one rope will be 72 kg of mussels. The whole raft can thus produce 7200 kg of mussels.

ECONOMICS OF MUSSEL CULTURE

The economics of mussel culture mainly depends on the market price of mussels. At present one kg of cultured mussel fetches price of about Rs. 1.25. On the basis of this the expenditure and income from a single mussel culture raft are given below:

... 3

CAPITAL COST OF ONE RAFT FOR 3 YEARS

1.	Teak poles 10 Nos (Rs. 25/- per pole)	250.00
2.	Bamboo poles 12 Nos (Rs.15/- "	180.00
3.	Anchors 100 kgs 2 nos	1000.00
4.	Anchor chain 100 kgs	1400.00
5.	Nylon ropes 6 kgs	170.00
6.	Shackles etc.	250.00
	Total	3250.00

RECURRING EXPENDITURE

1.	Oil drums 5 Nos Rs. 100/-	500.00
2.	Coir ropes 300 kgs	1500.00
3.	Knitted cotton cloth	400.00
4.	Seeding expenditure	200.00
5.	Expenditure for farm management	400.00
	Total	3000.00

ie., The total expenditure for 3 years
3250 + (3000 x 3) Rs. 12250.00

Salvage value of the raft after 3 years Rs 500.00

Depreciation of the raft after 3 years Rs 2250.00

One mussel culture raft can hold 100 mussel culture ropes and the average production per rope in one year is 50 kgs of mussels.

So the total yield from a raft per year =50x100=5000 kg of mussels

Average price for 1 kg mussels Rs. 1.25

The total return for 1 year = 5000 x 1.25= Rs. 6250.00

ie., the average return for 3 years =6250 x 3=Rs 18750.00

Total profit at the end of 3 years = Total revenue - (Total cost including depreciation - salvage value) =

18750.00 (12250 + 2250 - 500) = 18750-1400 = 4750.00

Therefore the profit for 3 years = Rs 4750.00

... 4

Till recently mussel was considered as a poor man's food, but of late it is becoming more and more popular. With the increasing demand, margin of profit from the system would be considerably enhanced.

...