



A sample of the prawns, *P. indicus*, of 45 days growth caught for monitoring

Entrepreneur gains success in scientific prawn and crab culture

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This entrepreneur makes lucrative earning from prawn seed collection too. A scientifically trained prawn-culture farmer may supply up to 0.1 million prawn seeds/day/season.

THE Central Marine Fisheries Research Institute, Cochin, through its Krishi Vigyan Kendra has moulded the life of a hardworking youth into a successful entrepreneur, paying creative and innovative response to his environment.

The training makes an unemployed youth aware of that unutilized water canals in coconut groves can also be utilized for scientific prawn culture.

The KVK personnel advise to unemployed youth time to time help. Within a few years unemployed youth become a model to all such farmers by successfully showing how a water can be used gainfully to exploit the full potential. He may culture

prawns, fishes and mud crabs and earns enough for a decent of living.

The unemployed youth requires 121.5 m of water area in a coconut grove in his neighbourhood, for prawn culture. It may be an lease too. A lease amount of Rs 4 500 is paid in a year for 12 150 m of farm. The Indian white prawn, *P. indicus* is grown in 4 050 m of canal where sluice gate is fixed for having good circulation of water. The other 8 100 m of water, where circulation of water is comparatively less, is utilized for traditional culture of crab, fish and prawn.

PRAWN CULTURE

For scientific prawn culture the pond was completely cleaned, bunds

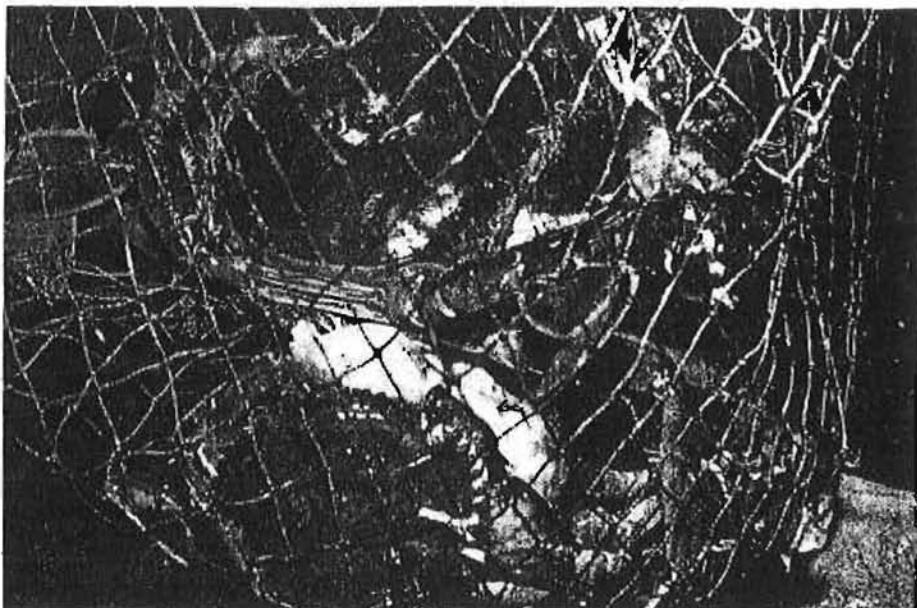
were strengthened and sluice gate was installed. Before stocking, all the predators were eradicated using

Table 1. Input-output of prawn culture in 4 050 m of coconut grove

| | | |
|---|--|------------------|
| A. Scientific practice | | post |
| Lease amount | | Rs 1 500 |
| Cost of eradication of predators with <i>mahua</i> oil-cake | | 1 000 |
| Hire charge of pumpset | | 200 |
| Pond cleaning | | 200 |
| Cost of 15 000 seed stocked | | 500 |
| Sluice repair and installation charge | | 800 |
| Total (A) | | 4 200 |
| B. Prawn yield | | 144 kg |
| Price/kg of prawn | | Rs 100 |
| Total income (B) | | Rs 14 400 |
| C. Net income from 3 months (B-A) | | Rs 10 200 |

Table 2. Income generation from culture of crab, fish and prawn in 8100 m farm (Traditional farms)

| A. COST | |
|--|----------|
| Lease amount for 8100 m | Rs 3 000 |
| Number of crab seeds stocked | Nos. 25 |
| Cost of crab seeds | Rs 300 |
| Cost fish seeds | Nil |
| Total expenditure | Rs 3 300 |
| B. INCOME | |
| Selling price of crab/kg | 180 |
| Quantity of crab harvest | 10 kg |
| Gross Income from crab sale | 1 800 |
| Selling price of fish | 40 |
| Recovery of fish | 50 kg |
| Income from fish sale | 2 000 |
| Income from sale of 60 kg of <i>M. dobsoni</i> @ Rs 50/kg | 3 000 |
| Income from sale of 50 kgs of <i>M. monocerus</i> @ Rs 50/kg | 2 500 |
| Income from sale of 35 kgs <i>P indicus</i> @ Rs 100/kg | 3 500 |
| Total income from 8 100 m | 9 000 |
| Total Income from 2 acres | 12 800 |
| Total expenditure | 3 300 |
| Net Income | 9 500 |



A close up view of the harvested crabs

were stocked in this water canal. Seeds were collected by trained youth from sea and back waters. The training thus imparted by the Central Marine Fisheries Research Institute, Cochin, helped him in identification and collection of prawn seeds. Feed is another component that escalates the production cost of prawns. The best way to encounter this constraint is to prepare feed at home. The home prepared feed by this young

entrepreneur proved to be very effective and gave good results. The growth of prawns is monitored and the required feed is provided accordingly. A diary is maintained for prompt recording of growth measurements of species and input and output details of the farm. After a growth of 90 days a harvest of 144 kgs of white prawn did fetch a revenue of Rs 14 400 for the farmer. The overall expenditure for this culture was Rs 4 200 bringing a net profit of Rs 10 200 from 4 050 m water canal which otherwise would have been left unutilized and uncared.

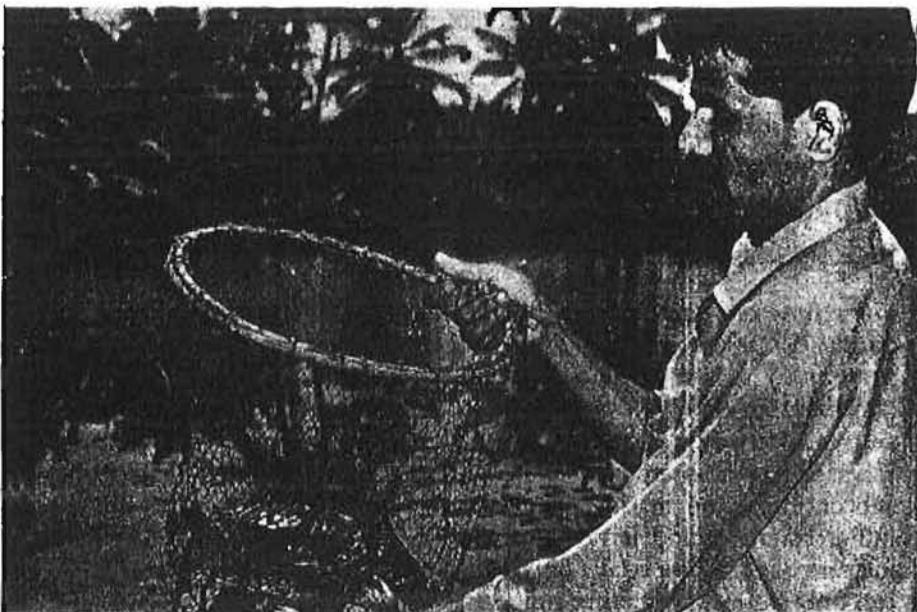
The other 8 100 m² of canal where water circulation is less could not be utilized for scientific prawn farming. It was utilized for traditional farming, where there was no control over the stocking and management fishes like mullet, *Chanos chanos*, *Mugil cephalus*; prawns *P. indicus*, *M. dobsoni*, *M. monocerus* and mud crab were reared.

CRAB CULTURE

There is a high demand for live crabs. Crab farming is perceived as a good source of supplementary income and also a less risky enterprise. As a trial, the farmer

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mahua oil cake. After about 2 weeks, pH of the water was measured and lime was added accordingly to control the mud characteristics and reduce the acidity. Besides, lime also acts as a germicide which helps to eradicate the disease causing germs in the pond. After lime treatment cowdung was applied. About 15 000 prawn seeds



Live mud crabs being harvested

stocked 25 young crabs costing around Rs 300. There was a harvest of 10 kg of crabs in 3 months which realised a price of Rs 1 800.

Fish seeds, collected from the seed collection source, were also stocked in this 8 100 m of water spread along with the crab. After 1 year an yield of 50 kg of fish was sold @ Rs 40 giving a gross return of Rs 2 000. The 3 types of prawns that were stocked by natural trapping got a weight of 145 kg and earned an income of Rs 9 000 to the farmer. The watch and ward of the entire area was managed by the farmer and his family members.

Thus, this traditional farming could help him earn a net income of Rs 9 500/- as a reward of his management and return to his family labour. Even though this 8 100 m of water area was to be converted into scientific farming by making provisions for more water circulation, it could not be done due to financial constraints. Once it is done the income generation would be doubled.

This entrepreneur makes handsome earning from prawn seed collection too. Now this trained youth gets order for prawn seeds from Government agencies as well as local prawn farmers. He could supply up to

0.1 million prawn seeds/day/ season. If demand is there, he is hopeful to supply up to 1 million prawn seeds/day/season. The selling price of 0.1 millions, prawns amounts to Rs 4 000 out of which about Rs 2 000 is incurred as expenditure for collection of seeds on wages for workers. As the collection sites are often too distant some expenditure is incurred on hiring the vehicle for transportation.

This youth has utilized whatever facilities were available to him and has proved that prawn farming and related enterprises can certainly earn for a comfortable decent living for a small family, if one has the will to work hard.