

From fishing to farming: A success story from Ramanathapuram district of Tamil Nadu

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Shri. V. Nagathass, 56 years old from Vedalai village in the Ramanathapuram district of Tamil Nadu had formal education up to 9th standard only. From the age of 12, he took to adventure by involving in fishing activities for his livelihood. Dwindling fish catches made him realise that there is an immediate need for a diversified livelihood option. At this juncture, the demonstration of lobster farming through Capture-Based Aquaculture in open sea cages by the Mandapam Regional Centre of ICAR-CMFRI in the year 2009 created awareness towards farming in the sea and gave him hope for the future. Through this demonstration, Shri. Nagathass learnt about lobster farming. After gaining more knowledge, he planned to undertake a trial by innovating his own design in erecting a pen (40 × 20 feet) covered by fish net on all sides supported by casuarina/iron poles on four sides with two compartments and introduced lobster seeds collected from the wild during 2010. After gaining confidence and experience, he narrowed down to one compartment (20 × 20 feet) in the subsequent year; however, there was a set-back in farming, since he could not get enough numbers of wild-collected lobster seeds and lost many grown lobsters as there were no hide-outs. With the technical support of ICAR-CMFRI, Mandapam, he could overcome many of these shortcomings and did a successful harvest. Providing hide-outs to prevent cannibalism and suggesting suitable feed, method and schedule of feeding were some major technical interventions provided by the institute to his farming. With the profit he accrued, he extended the farming with one more pen structure in the following year. At present, he is farming with two species of spiny lobsters namely *Panulirus ornatus* (locally called *mani singhi*) and *Panulirus homarus* (locally called *thaalai singhi*).



Shri V. Nagathass with his farmed lobsters

He is adopting two methods of pen structure in farming as mentioned below:

- **Box method (20 × 20 feet):** Pen covered by fish net on all four sides and also at the bottom and top. The advantage of this method is that the structure can be shifted to any place.
- **Compound method (20 × 20 feet):** Pen covered by fish net on all four sides and at the top, but excluding the bottom. This structure is permanent and cannot be shifted.



Introducing lobster seeds into the pen



Feeding the lobsters



Monitoring the lobsters in the cage farms

Table 1. Farming particulars

Stocking	600 numbers of 70g lobster seeds (@ 42 kg per pen of dimension 20 × 20 feet
Feeding	8% of body weight (fishes like Silverbellies, Sardine, Lesser sardine and Rabbit fish)
Culture period	8 months (June to January)
Average survival	92%
Harvestable size	200 g

Table 2. Economics of lobster farming in one pen structure of dimension 20 × 20 feet

Particulars	Amount (₹)
Fixed cost (A)	
30 kg fish nets;	25,000
4 PVC pipes of 20 ft each;	
8 iron pipes of 8ft height & 3" thickness	
Operational cost (B)	
Seeds (42 kg @ 1,100 per kg)	46,200
Feed	20,000
Labour	25,000
Total cost (A+B)	1,16,200
Income	
110 kg of lobsters @ ₹2,200 per kg (average)	2,42,000
Profit (Income – Total Cost)	1,25,800

Key to success

- During the initial days of his farming, he faced many setbacks, like crop loss, difficulty in getting the lobster seeds and feed, etc. In spite of his failure, he never gave up and continued the farming consistently and diligently.
- He developed contacts and rapport with fishers which ensured regular supply of wild collected lobster seeds.
- His meticulous planning in procuring the seeds (average 70 g), arranging feeds and farming operation schedules were very crucial in his success.
- As an illustration of his wisdom, the fact that he schedules his harvest for December and January because China and other South East Asian nations have high demand of lobsters during the Christmas eve and Lunar New Year (FAO, GLOBEFISH, Chinese Fish Price Report, Issue 1/2024).
- Daily visit to farm for feeding (morning 7 am) and maintenance such as removing the waste and damaged ones shows his hard work & dedication

and interest in adopting best farming practices.

- An average survival of 92% and an average growth increment of 183.4 g from the initial stocking size of 70 g could be achieved in eight months of culture period.
- He is also a very good financial manager. With his earnings, he could establish a fishing accessories shop in Vedalai
- He could motivate his relatives and as a result, five of them are doing lobster farming in 10 pen structures.

His journey is a true inspiration to all artisanal fishermen, starting from fishing to farming and farming to a fish based entrepreneurship. While his key qualities allowed him to succeed. He could also motivate his fellow friends to adopt lobster farming. He won the State Level Best Farmer Award for his achievement in lobster farming in the 'Kisan Samriddhi Mela/Farmer's fair for Prosperity' during 24-26 August 2018. He also intends to engage in sea cage farming for cobia/ lobster/seabass as well as pen farming for milkfish.

