Sea Cage Culture of Cobia Fishes

Cobia grows to 5-6 kg per year and one kg fish can be sold at Rs.250-400/-

Technology Description

HDPE and wooden sea cages were installed in the sea at a depth of 4-5 m. Both inner and outer PE nets were used according to the size of the fish stocked.When the size of fish increases the net size was also increased for facilitating better water exchange. Cobia seeds reared up to 40 g size in concrete tanks were transferred to cages at the stocking density of 4 fish/m3. Formulated feed with 44-46% protein was used as feed. No disease has been reported in the culture period.The production of 8 kg per m3was attained with an average weight of 4.5 kg in a period of ten months.

Name of institute:
Fisheries College and Research Institute,Thoothukudi
Stage of development:
Ready for commercialization
Patent status: No

Scientific Experts:
Dr.N.Felix

Background

30.03.2009	Cobia Launch Workshop
26.03.2010& 30.03.2010	Workshops on Value addition of cobia fish and Advanced Packaging technologies
11.01.2011& 12.01.2011	Workshop on Marine finfish farming and cobia to improve the livelihood of fishers
11.04.2011	Workshop on cobia and other marine finfish farming
01.03.2013& 02.03.2013	Workshop on cobia culture

Benefits / Utility

A new alternative finfish species to shrimp will provide more job opportunities to coastal fisherfolk. Mariculture entrepreneurship will be developed thereby marine fish aquaculture production in India will be increased.

Country Context

In India, marine finfish aquaculture is in low profile. In Coastal aquaculture, shrimp aquaculture alone is flourishing and recently the Seabass came to picture. Before this project, Cobia farming was nowhere in India and now it is picking up.

Scalability

Shrimp farming is the only commercial coastal aquaculture industry in India. culture of cobia in sea cages has scope for industry expansion like shrimp farming with expected production of 8-10 kg per cu.m.

Business and Commercial Potential

Domestic and export demand for cobia Sashimi grade cobia has good market in South East Asian Countries Fast growing – Grows to 5-6 kg in a year Good meat quality - White flesh High Omega 3

Potential investors to this technical innovation

Farmers Fishermen Entrepreneurs Feed companies Hatchery operators Multinational companies

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Financials

Economics of cobiaculture in wooden sea cage 36 cu.m(4x4x2.25) - 100% survival

Recurring cost Cobia Seeds(90 nos.)	-	Rs. 2700.00
Manpower	-	Rs. 12000.00
Formulated Feed for cobia fishes	-	Rs.57713.00
Fuel for boat		
Total	-	Rs.72413.00
Income Harvesting 405 kg fish (sold @Rs.250/-per kg)	-	Rs.101250.00
Profit	-	Rs. 28817.00

Note: Since the wooden cage along with cage nets already installed in

Target Market / Customer

Domestic fish consumers Sea food Exporters Local fish merchants Sashimi restaurant markets "White Table cloth" restaurant market

Limiting factors for large scale commercialization

Assured adequate supply of cobia seeds is the bottleneck. Cobia hatchery units at farmers' level need to be started. Since cobia is a new candidate species for aquaculture in India, farmers are reluctant to take up farming. Shrimp aquaculture is short term crop while cobia is long term crop(almost twofold increase in culture period) Channelized cobia export market need to be identified. Formulated feeds to be produced at reasonable price since the Food Conversion ratio(FCR) is

Social impact of the technology

Fishermen could earn income during fishing holidays and non fishing seasons Self employment for rural poor and fisherfolk. Jobs could be created for unemployed rural youth so that rural entrepreneurship will be developed. Effective utilization of near shore waters for cobia farming in floating cages will support the fishermen as an alternative

Any other relevant information

The cobia seed production and availability should be ensured since the seeds are important input for farming of cobia. Since the cobia aquaculture is new to Indian context, the fisherfolk should be encouraged to involve in this cage farming by implementing subsidy