



# Pond 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

Technology on Pond grow out culture of cobia was developed for the first time in India by Fisheries College and Research Institute, Thoothukudi.

The total area of the polythene lined pond used for the study was 400 sq.m and a depth of 1.5 m. Seawater was directly pumped into the pond. Cobia seeds reared up to 150-200 g size in concrete tanks were transferred to pond at the stocking density of 0.25 fish/m<sup>2</sup>(1fish/4 m<sup>2</sup>). Aeration was given and water exchange was done at the rate of 30% once in two days. Formulated feed with 44-46% protein was used as feed. No disease has been reported in the culture period. The total harvest of 412 kg cobia with an average

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&

## 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.

## Scalability

Shrimp farming is the only commercial coastal aquaculture industry in India. Pond culture of cobia has scope for industry expansion like shrimp farming with expected production of 10 tonnes per hectare

## 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



Dr.N.Felix  
:nathanfelix@yahoo.com  
09443688174

## Financials

Economics of pond culture of cobia for a pond area of 400 sq.m –

100% survival		
Recurring cost Cobia Seeds(100 nos.)	-	Rs. 3000.00
Manpower		-
		Rs. 2000.00
Formulated Feed for cobia fishes	-	Rs.60796.00
Electricity charges and maintenance	-	Rs. 5000.00
Total	-	Rs.70796.00
Income Harvesting 412 kg fish (sold @Rs.250/-per kg)	-	Rs.103000.00
Profit	-	Rs. 32204.00

## 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. § Standard of living of fisherfolk could be improved.

## 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 farmers should be encouraged to involve in this farming by implementing subsidy