

**The Polem Sea Cage Fish Farming**  
**Co-operative Society**  
**(Open Sea Cage Culture)**



## **Introduction**

Goa situated at the west coast of India, is known the world over for its beautiful beaches and its cuisine. The 104 km coastline, although very small, has significantly helped the people living in the coastal areas in undertaking fishing activity as a source of livelihood. The six rivers Chapora, Mandovi, Zuari, Talpona, Galgibagh and Sal intricately traverse across the State bringing in the rich nutrients from the upper stretches to the lower estuarine region making it a rich nursery and feeding ground for the aquatic life benefiting the inland fishermen.

With the decreasing trend in the capture fisheries sector there is a need for more resource generation in the coastal waters. With the active involvement of fishermen community, it is required to augment the production of premium quality fishes. The sea condition of Goa are favorable to carry out Open Sea Cage Culture without affecting the fishing activities and thus the State can take full advantage of these technological advancements.



In order to create new resources to meet the protein requirement of the State and generate more employment opportunities in coastal areas, the Government has initiated Project on Open Sea Cage Culture under Rashtriya Krishi Vikas Yojana (RKVY) in the year 2013-14. Fishermen Self help Group from Polem of 12 members were nominated for conducting activities and management of Open Sea Cage Culture Project.

All the members in this group were traditional fishermen, with only 2-3 fishermen possessing canoes and rest were engaged in helping other fishermen in Gill net operations.

## **Open Sea Cage Culture Farming**

### **1. Training:**

The Fishermen were provided a hands-on training on open sea cage culture carried out at CMFRI, Karwar and two members were deputed to Rajiv Gandhi Centre for Aquaculture (RGCA), Trivendrum to have an exposure to the Cobia Hatchery and the Open sea cage farming practice. The training was provided on the activities like seed selection, feeding, cage management, stocking etc.



Training at CMFRI, Karwar

### **2. Cage culture activities:**

The group has worked in Cooperation with each other to install the cages, fix nets in the sea, stock the cages with fish seed, feeding the fish seed at regular intervals, cleaning and changing of the nets as and when required and daily monitoring of fish growth. After a grow out period of 6-7 months once the fish acquired marketable size, it is harvested by the group members.



Construction of cages





Installation of cages



Release of Fish seed



Harvested Fish



### 3. Visitors to the cages:

#### (a) Norwegian Delegation

A Norwegian Delegation visited the site to see the cage culture operations.



Visit to cages

#### (b) Ministers of the State of Goa



**(c) Scientists of Central Marine Fisheries Research Institute (CMFRI)**



**(d) Students from various Institutes of Goa & Tourist**

Institutes from Goa and Tourists also visited and gained knowledge on Open Sea Cage Culture.

**4. Achievements**

The group demonstrated that Open Sea Cage Culture of Cobia and Seabass is possible with a production of 1 ton of Cobia/Seabass per cage with a survival rate of 90% of Cobia and Seabass having a survival rate of 50%. Initially the project was started with 9 cages in the year 2013-14. Further, in the year 2014-15, 12 cages were installed and in the year 2015-16, a total of 22 cages were installed. In the current year 2016-17, the Group has installed 20 cages and is in the process of installing another 20 cages, making a total of 40 cages. The cages will be stocked with fish seed of Seabass, pompano and Cobia.

For the past three years the Fish harvested were sold all over the State thus fulfilling the requirement of quality fish at reasonable rate to the general public.

The Polem Open Sea Cage Culture Group has now been formed into society “The Polem Sea Cage Fish Farming” and is already linked to the bank. It also works towards the betterment of each members of their group by reaching out all the schemes of the Department. In the 2<sup>nd</sup> year besides conducting their cage culture they have also ventured into marketing of fish harvested from cages as well as the fish caught by their members through their traditional gears, thus getting a better price for their produce and improving the living standard of the group members.





Crowd for sale of fish

The fish was sold to remote areas of various Talukas through Mobile Fish Stall.

### **Outcome of the Project**

The project addressed the development of the traditional folks in the village of Pollem. It has changed the livelihood of the members of the group, thereby generating employment and resulting in the growth of fisheries sector. The success of the project depends on the efficient implementation and proper monitoring of the cages with direct monitoring by the Directorate of Fisheries, Government of Goa.

The implementation of the Open Sea Cage Culture Project in the State of Goa has led to generation of employment opportunities to the fisher youth thereby improving their economic status and standard of living.

The project has succeeded in achieving its goal.