

**ESTABLISHMENT OF CAGE**  
**CULTURE UNIT IN CHAPOLI**  
**RESERVOIR**



**BY**  
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## **INTRODUCTION**

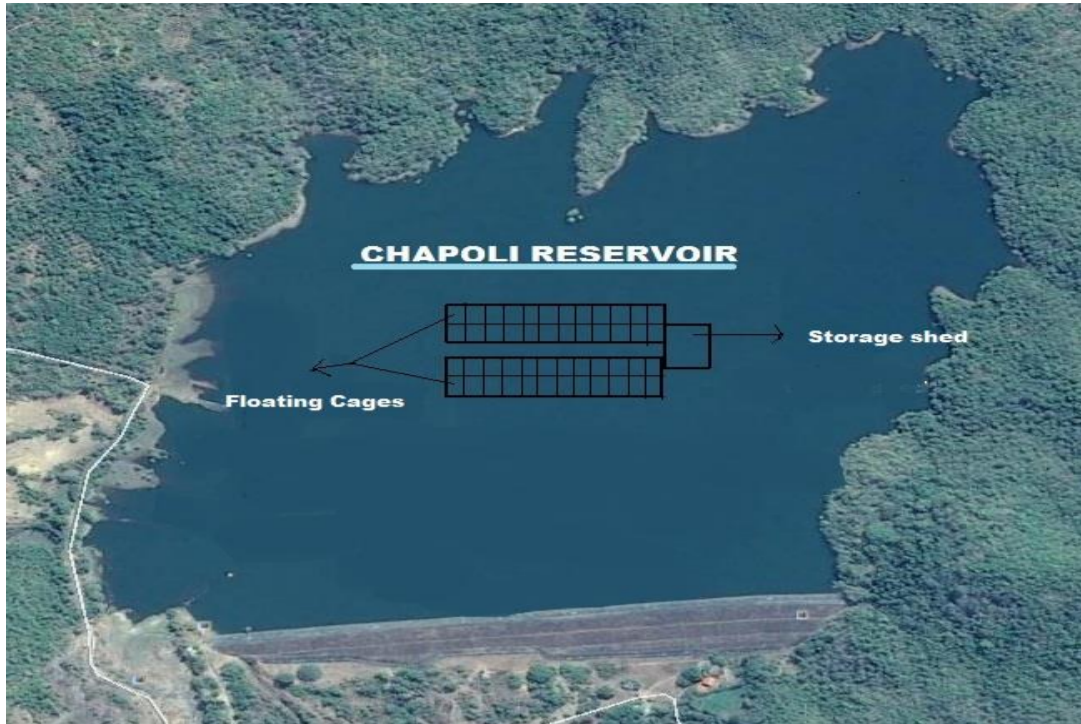
Fisheries Sector had witnessed tremendous development in tapping new resources and production technologies world over. In India too research and development had changed the face of fisheries over the last few years. With the capture fishery resources declining it is the need of the hour to introduce new aquaculture technologies which are faster so that new resources can be created to meet the protein requirement of the country and generate more employment opportunities in the coastal areas.

Culture fisheries sector offer immense potential to attain growth in excess of 10%, if a concerted and dedicated effort is made. In the freshwater sector reservoir cage culture can increase the fish production ten times than that of the conventional methods with less investment. Reservoir cage culture with proper care within the carrying capacity is the way forward. Recently in India popularity of *Pangasius sutchi* culture has increased and became most popular species for reservoir cage culture.

Goa State has around 3300 ha water spread area of freshwater bodies. Day by day demand for fish is increasing and catch of fish from sea is stagnant or decreasing due to over exploitation. The only solution left to meet increasing demand is aquaculture. Farming of fresh water fin fishes and shell fishes assumes significance for production of more fish to meet the growing protein requirement as well as employment generation in the interior areas. With the decreasing trend in the capture fisheries sector the need for more resource generation in the fresh waters.

Due to limited land of State, reservoir cage culture can be the best alternative. The reservoirs of Goa are favourable to initiate cage culture without affecting the irrigation activities and it is high time that the State take full advantage of the technological advancements.

The Chapoli Reservoir was proposed site for pilot cage culture project. 4 lakh nos. of *Pangasius sutchi* seeds were stocked in 48 cages which were installed in the month of November, 2016 which produced total of 115 tonnes of *Pangasius sutchi* which were made available to local public at reasonable rates. The success of this project has opened new vistas for the development of the reservoirs of the State using the scientific advancements.



This project is prepared in tune with the requirements of Rashtriya Krishi Vikas Yojana (RKVY).

### **OBJECTIVES**

- To increase the fresh water fish production of the State by utilizing available fresh water resources.
- To increase per capita fish protein availability in the State.
- To provide employment to a large number of local community along the State.
- To increase the income and livelihood security of the local community involved in the project.
- To ensure the growth of aquaculture in the State.

## CAGE CULTURE ACTIVITY

A Group of 21 members were formed comprising the youth from Sanguem, Canacona and Quepem Taluka. The Group worked in corporation with each other to install the cages, fixing of net to the cages in the reservoir, stocking 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 the fish growth. After a grow out period of 7 to 8 months partial harvest of marketable size of fish were conducted by the group member at regular interval from the month of December, 2017 onwards.



Assembling and Installation of cages in the Chapoli Reservoir



Installation of cages



Tying of nets



Couting of fish seed



Releasing of Fish seed into Cage



Feeding of fis



Feeding of fish



Harvesting



Harvesting

## **VISITORS TO THE CAGES**

Knowledge related to reservoir cage culture operation was imparted to various schools, college and representatives from Central Institutes which visited the site during the culture period.

## **ACHIVEMENTS**

The cages stocked with *Pangasius sutchi* commonly known as striped catfish (iridescent shark) which is one of the most suitable species for reservoir cage culture because of its fast growth, white flesh, and adaptability to the cage environment and also fetches high price in markets. *Pangasius sutchi* was cultured in the cages with the stocking density of 500 to 700 nos./m<sup>3</sup>. The harvested fish was sold all over the State thus fulfilling the requirements of quality fish at reasonable rate to the general public, thus getting a better price for their produce and improving the living standard of the group members.

The members of Sanguem Farmers Club, Sanguem have been already linked to the bank towards the betterment of each members of their group by reaching out all the schemes of the Department.

## **OUTCOME OF THE PROJECT**

The project addressed the development of the employment among the local youth of Sanguem, Canacona and Quepem. It has changed the livelihood of the members of the group there by generating employment and resulting in the growth of Fisheries Sector. The success of the project owes to the efficient implementation and proper monitoring of the cages with direct monitoring by the Directorate of Fisheries, Government of Goa.

The implementation of the reservoir cage culture in the State of Goa has led to generation of employment, opportunity to the fisher youth thereby improving their economic status and standard of living.

This project has succeeded in achieving its goal