

Cage farming of fish- A success story of SHGs

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Cage fish farming technology facilitates utilization of public water bodies for the livelihood enhancement of coastal fisherfolk. The open water resources of our country have been widely utilized for fish production by establishing location-specific cage culture systems and ICAR-Central Marine Fisheries Research Institute (CMFRI), has played a vital role in disseminating the cage fish culture technology throughout the coastal belt of the country. The present work was carried out as a part of the project entitled "Empowerment of Scheduled Caste fisherfolk through Entrepreneurial Capacity Building of Self Help Groups in marine sector" funded by Department of Science & Technology, New Delhi.

Under Scheduled Caste Sub Plan (SCSP) programme, successful cage culture ventures were undertaken in

Edavanakkad and Manjanakkad villages of Ernakulam district of Kerala state by mobilizing 3 SHGs. Cage fish culture was done in Veerampuzha backwater at Edavanakkad, Vypin Island, Ernakulam (10.0929° N, 76.2045° E) and Manjanakkad (10.0467° N, 76.2321° E). The technical assistance was provided through Krishi Vigyan Kendra (KVK) of ICAR-CMFRI and several training programmes including the theoretical aspects and practical demonstration on cage fabrication and management were arranged. A ready reckoner cage culture pamphlet in vernacular was distributed to the SHG members. A floating cage made using Galvanized Iron (GI) frame of 4m x 4 m x 2m was stocked with 800 Asian seabass fingerlings of 10 cm size in Edavanakkad. Similarly in Manjanakkad, two floating cages were fabricated and 400 seeds of Asian Seabass (10 cm size) and 500 Pearl



Seabass cage culture seeding in Edavanakkad



Fish harvested from the cages



Seeding in Manjanakkad cage



Harvest of seabass in Manjanakkad

spot seeds of (7 cm size) were stocked in each of these cages. The grading process as per the size was done systematically after 1-2 weeks and until fish reached marketable size. The linkage established gave the benefits of the provision of a deep freezer from ICAR–CMFRI under the National Innovations in Climatic Resilient Agriculture (NICRA) project along with seed and solar spot lights in the cages to the identified beneficiaries.

The gender analysis, performance level of SHG, Empowerment Index and economic feasibility analysis were assessed with socio-economic surveys undertaken in the selected localities. The male and female counterparts of the families were separately interviewed regarding the gender mainstreaming aspects in terms of equity and equality to access to resources, participation profile, decision making aspects, gender need analysis etc. Though

males were favoured in most of the activities, the female counterparts of the households also had a definite role in decision making, feed preparation, management, harvesting, sales and marketing etc.

The fish harvest on 22nd December, 2020 in Edavanakkad yielded a bumper output of 600 kg sea-bass having an approximate weight of 1 to 1.5 kg each. The harvest was undertaken as per the demand from consumers and Support through social media like Facebook, Whatsapp etc. played an important role in achieving good sales for the farmers. The social and economic empowerment dimensions and capacity building aspects achieved highest score in Empowerment Index. The economic feasibility analysis gave an average Benefit Cost ratio for cage culture as 2.5: 1 in the first year.