## Gender mainstreaming through coastal cage farming- a success story from Andhra Pradesh

J. Charles Jeeva<sup>1\*</sup>, Sekar Megarajan<sup>1</sup>, V.P. Vipin Kumar<sup>2</sup>, S.S. Raju<sup>1</sup>, P. Nagaraju<sup>1</sup> and Shubhadeep Ghosh<sup>1</sup>

<sup>1</sup>Visakhapatnam Regional Centre of ICAR-Central Marine Fisheries Research Institute, Visakhapatnam-530 003, Andhra

Pradesh

<sup>2</sup>ICAR-Central Marine Fisheries Research Institute, Kochi-682 018, Kerala

The results of gender researches reveal that despite the important role women play in agricultural production, they remain disadvantaged in numerous aspects. Women mostly have limited access to agricultural inputs including seeds and fertilizers, technological resources, equipment, land often also lack the capacity needed to deploy these resources. Today, cage culture of marine fish is receiving more attention as increasing consumption of fish coupled with declining stocks of wild fishes has increased interest in fish production in cages. Suitable locations along the long coastline including brackish water areas available in coastal states and other underutilized water bodies can be better utilized by adopting cage culture which can play a significant role in increasing the overall fish production and household incomes of fishermen.

In this context, a case study was taken up at Lakshmipuram village in Kruthivennu mandal of Krishna district in Andhra Pradesh, to assess the gender roles in cage farming, and



Role performance of women in artisanal fishing

their contribution to family income. The respondents consist of the joint family of Shri Gandham Nagaraju, Shri. G. Nagamalleswara Rao, Smt. G. Kanthamma and Smt. G. Peddhintiamma belonging to the *Enathi* community, which is recognized as scheduled tribe. Their primary occupation was artisanal fishing in coastal backwaters, from which they were earning an annual gross income of about ₹1.20 lakh but faced problems like declining catches and non-consistent income.

Later on, with technological interventions by ICAR-Central Marine Fisheries Research Institute (ICAR-CMFRI), they ventured into coastal cage farming of Asian Seabass. Gender mainstreaming initiatives such as, involving both men and women in training and demonstrations, equitable distribution of resources and inputs, and gender sensitization of the communities were done in every stage of the livelihood and income generating activities, women were involved viz., in fishing in backwaters, seeding and feeding the cages and also played a major role in marketing the catches. The women of this joint family spend about 8 hours in a day, from 6 to 9 am and 5 to 10 pm, fishing with their husbands in the backwaters using cast nets. On an average, the women were also spending about 4 hours per day in cage culture activities, mainly in feeding and marketing. The major species caught were Mugil cephalus, Lates calcarifer and Scylla serrata. The daily income realized from the catches of Mugil cephalus and Scylla serrata was ranging from the minimum of about ₹200 to the occasional maximum of about ₹1500, which were mostly utilized for the day-to-day household expenses, especially food. The catches of small size Lates calcarifer were used for feeding the fishes grown in the cages.

<sup>\*</sup> E-mail: jcjeeva@gmail.com



Women feeding fish cultured in the cages



Marketing the fish harvested from the cages

When the coastal cage farming of Asian Seabass started with two cages in November 2020, they were getting a fish production of 10 quintals, fetching a price of ₹300/- per kg, which generated a gross income of ₹3 lakhs. After deducting the operational expenses of ₹2.00 lakhs, the net income realized was about ₹1.00 lakh. From the income analysis from the base line period of 2016-17 till 2020-21, the net income of the family has doubled through coastal cage farming, in addition to their artisanal fishing activities. The cash in hand among women increased by 40 per cent.

Earlier, the daily earnings from artisanal fishing in backwaters supported only daily food requirements and there were hardly any savings. But the cash-savings through cage culture improved their standard of living, and help in



Fish harvested from the cages



The two-wheeler purchased out of the income from cages

purchasing household articles including a two-wheeler for self and bi-cycle for daughter. With the goals to double the income of every Indian farm household by 2022 being set, this success story of beneficiaries doubling their income through cage culture can motivate others also.

## **References**

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