

Tamil Nadu state's artificial reef model goes pan-India

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Chennai: To promote sustainable fishing and improve the livelihood of fishermen, the union government has decided to replicate Tamil Nadu's successful model of setting up artificial reefs in 3,477 villages along coastlines across the country. Artificial reefs deployed in 131 places along the state's coast, with the assistance of the Central Marine Fisheries Research Institute (CMFRI), have led to a four-

to-sevenfold jump in fish production, sources said. The primary beneficiaries of the initiative are small and traditional fishermen. CMFRI scientist Joe K Kizhakudan, who deployed the reefs, told TNIE that the union government's department of fisheries has chosen the Tamil Nadu model after multiple rounds of talks and performance analysis.

"Based on fishermen's testimonies and under-water monitoring of artificial reef sites, about Rs, 25 lakh worth of fish were found in each of these sites and in some places, record catches worth more than a crore per annum have been recorded. Traditional fishers are saving a lot of input costs in fuel and there is reduced wind sailing, scouting time, and improved live bait collections. Also, a 10-fold increase in fish biomass and a 25-fold jump in pelagic and midwater fishes have been recorded," Kizhakudan said.

Considering the success of the project, the union has planned to implement "Promotion of sustainable fisheries and livelihoods through Artificial Reefs and/or Sea Ranching" as a sub-activity under the Integrated Modern Coastal Fishing Villages of the Centrally Sponsored Scheme component of Pradhan Mantri Matsya Sampada Yojana (PMMSY).

An official memorandum was issued by the union ministry of fisheries. F Mahendrakumar Dhirajlal, assistant commissioner (fisheries), said, "At least one reef set in each of the 3,477 coastal villages in India is proposed to be installed over a period of three years starting 2022-23." Installation of artificial reefs will require the consent and cooperation of fishermen. States and UTs are requested to organise meetings of fishers and fisher organisations such as cooperatives and co-opt them into the process.

"Cost of one artificial reef set will vary depending on the number of reef units used. In the model developed by TN, with aid from CMFRI, the cost of a typical reef set consisting of 250 reef units including deployment expenditure stands at Rs 31 lakh. One artificial reef set is expected to support 25 to 30 non-mechanised boats," the official said. As a preliminary step, a three-day training programme titled "The Fundamentals of Artificial Reefs for Improving Marine Fisheries" will be organised at CMFRI's office in Chennai from January 30 to February 1. The training programme will be attended by representatives from all the coastal states and union territories.

Venkatesh, who runs Ocean Delight Scuba School in Kovalam, said artificial reefs, besides supporting fishermen, are also creating a parallel recreation industry. "Around 200-300 scuba divers come here annually and the peak season is between January and May when the waters are clear and visibility is up to 20 metres. Snappers, scads, perches, seerfish, seabass, croakers, trevallies and other perches have been seen. I even once spotted a whale shark. We carry out regular cleaning and keep the reef healthy."