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Department of Fisheries to Drive Ambitious Artificial Reef Initiative for Sustainable Fishing across India

The Central Marine Fisheries Research Institute (CMFRI) is participating in a pioneering project led by the Union Department of Fisheries. The project's objective is to deploy artificial reefs (AR) in a total of 3,477 fishing villages across the country to promote sustainable fisheries and livelihoods.

An artificial reef is a human-constructed structure placed on the seabed to replicate natural habitats. Designed scientifically, it functions as a self-sustaining production system beneath the waves.

This ambitious nationwide initiative, conducted in partnership with state governments and with the technical support of CMFRI, commenced in Kerala, where the placement of ARs is proposed in 220 villages.

The first phase of the project's implementation featured five pre-stakeholder workshops from Tuesday to Friday, targeting 42 villages in the Thiruvananthapuram district. These workshops aimed to educate and involve local fishermen leaders in understanding the potential of AR to revolutionize marine fishing.

Funded by the Prime Minister's Matsya Sampada Yojana (PMMSY) scheme, the project receives 60% of its funding from the Centre and 40% from state governments.

CMFRI reported a notable 17 to 30% increase in fishery output in areas where reefs were already deployed. This technology has been implemented in 132 locations spanning a total area of 3.7 lakh square metres nationwide, including Kerala under CMFRI's guidance.

CMFRI has been successfully experimenting with artificial reef installations in the coastal waters of Tamil Nadu, Andhra Pradesh, Gujarat, and Kerala for several years under the leadership of Principal Scientist Dr Joe K. Kizhakudan.

The success of the project, particularly in augmenting fish availability to small-scale fishers at reduced operation costs, prompted the Central government to expand its application nationwide.

CMFRI Director Dr A. Gopalakrishnan highlighted the institute's protocols for site selection, design, fabrication, deployment, and impact assessment of this innovative technology. He explained that ARs aid in marine environment restoration and the growth of coastal fish production. They discourage bottom trawling near the shore, supporting marine environment regeneration and improving catches for small-scale fishers.

According to CMFRI, over 300 species coexist within a settled AR habitat. Commercial varieties attracted to ARs include breams, groupers, snappers, perches, cobia, sea bass, rabbit fishes, silver biddies, seer fish, barracuda, mackerel, trevallies, and queen fishes.

Promoting this technology empowers small and artisanal fishers, enhancing their income and livelihoods. Further stakeholder workshops will be concluded in all maritime states by the end of this month, as stated by Kizhakudan.