

# Marine scientists bat for artificial reefs



Kochi, Feb 15 India's marine fisheries is on the verge of a transformation, with marine scientists proposing artificial reefs to increase fish production and promote fishermen's livelihood. The scientists opened up on this topic at a brainstorming session held on the sideline of the ongoing symposium on innovations being held here. Scientists from the ICAR-Central

Marine Fisheries Research Institute (CMFRI) said the deployment of artificial reefs (AR) on the sea bed would enhance the growth of marine fauna and flora, and stimulate natural settings for fish production.

Artificial reef is a sheltered human-built structure, submerged on the sea bed as a substitute for natural habitats. Having a fixed scientific design, it functions as a self-sustaining production system on the sea bed. According to a report presented by the CMFRI during the session, a total of 280 AR sites have been deployed in India's coastal waters, including 243 in Tamil Nadu and 28 in Kerala. "The artificial reefs could offer opportunities for a substantial increase in fish catch, especially for small-scale fishers using hook and line. It will help save costs besides offering a lot more environmental benefits such as enhancement of biodiversity, reduction of the carbon footprint of the fishing operation, reduction of wave energy and thereby coastal erosion, and stabilisation of islands," said the CMFRI report prepared by its Director A. Gopalakrishnan, V.V.R. Suresh and Joe K. Kizhakudan. However, the CMFRI maintained that only designated sites after studies by competent authority could be used for the deployment.

Kizhakudan said over 300 species coexist in a settled AR habitat. "The commercial varieties being attracted to the AR include breams, groupers, snappers, perches, cobia, sea bass, rabbit fishes, silver biddies, seer fish, barracuda, mackerel, trevallies, queen fish etc.," said Kizhakudan, adding that he is receiving overwhelming response for the artificial reefs from the fishermen community. CMFRI has developed protocols for site selection, design, fabrication, deployment and impact assessment of this innovative technology.

Scientists are of the view that promoting this technology will empower small and artisanal fishers by improving their income and livelihood. Union Fisheries Secretary Jatindra Nath Swain said the artificial reefs and sea ranching present a solution to the crisis prevalent in the sector. "Sufficient fish availability could be ensured in the near-shore waters with these technologies," said Swain.