

CMFRI joins hands with ISRO to identify Potential Fishing Zone

In a major effort greatly beneficial to fisherfolk in the country, Central Marine Fisheries Research Institute has joined hands with ISRO to identify and forecast Potential Fishing Zone, where there is an abundance of fish. In the first phase, CMFRI and the Space Applications Centre of ISRO have jointly launched a research project to identify, forecast and monitor PFZ in coastal and offshore waters of Tamil Nadu, a CMFRI release said here today. The 'SAMUDRA' project is aimed at helping fishermen easily locate shoals of fish without wasting time and fuel, it said.

The collaborative research work focuses on developing and running a satellite-based ocean forecasting model to provide PFZ advisories. The project aims to develop a satellite-based numerical ocean model to forecast information about fishing locations by closely monitoring and analysing various physical changes in ocean owing to seasonal and climatic variations, high winds, rain and cyclonic conditions.

Presently only real time advisories exist, which are unable to predict and so mostly don't bring in an advantage. As part of the research work, physically collected data on fish catch, water quality and bio-physical parameters such as pigments, temperature, salinity, nutrients, productivity, will be validated with satellite derived data, the release said.

Dr A Gopalakrishnan, the CMFRI Director, called the collaborative research project a milestone in the history of capture of fishery of the country. "PFZ advisory will definitely help the fishermen reduce their fishing efforts and at the same time increase their fish catch without wasting much time and fuel," he said adding that the project assumes significance at a time when India's capture fishery sector is passing through a difficult phase.

Moreover, the technology would help India achieve substantial growth in marine fish production, he said. Noting that the seas surrounding the Indian subcontinent contribute to an average around 3.5 million tonnes of seafood, he said the potential yield is estimated to be around 4.41 million tonne from Indian exclusive economic zone. "In this scenario, identification, mapping and forecasting of PFZ is very essential", he added.

The second international SAFARI conference, to be held by CMFRI in Kochi in January 2018, will evaluate the progress of the development of the research project, Gopalakrishnan said.

Dr Shoba Joe Kizhakudan, Principal Scientist of CMFRI at its Chennai Research Centre is the Principal Investigator of SAMUDRA research project. As part of identifying potential fishing zones, behaviour of fish habitats controlled by many environmental parameters such as seawater temperature, salinity, currents and presence of plankton would be monitored, she said. "It is also essential to understand the relation among various ocean parameters in order to spot the fishing locations accurately", she added.