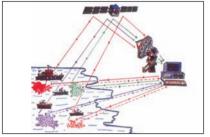
## Mumbai RC takes up m-Krishi® Fisheries Service

onsidering the significance of the emerging challenge of climate change for livelihoods security, the NAIP Component 3 project "Strategies to enhance adaptive capacity to climate change in vulnerable regions" funded by World Bank GEF Grant has been envisaged in different states of India. Under the project,



Diagramatic representation of PFZ advisory generation, processing and display

Mumbai RC of CMFRI is currently operating in 13 villages of Raigad district of Maharashtra. Mumbai RC was selected to lead this World Bank pilot project undertaken jointly by ICAR, INCOIS, Hyderabad and a private service provider in Mumbai. The project has suggested few technological interventions in selected villages. One of that is 'm-KRISHI®-Fisheries mobile service' developed by Mumbai RC of CMFRI in partnership with TATA Consultancy Services, Innovation Lab by following the perfect Public Private Partnership (PPP) model to disseminate Potential Fishing Zone (PFZ) and wind advisories to fishers in local language.

m-KRISHI® Fisheries Service integrates technologies such as Wireless Sensors, Camera phone and script technology;

ensures economic benefits to the stakeholders by enabling them to find Potential Fishing Zone areas directly. Images, Text, Voice, Query, Feedback & other services are integrated in the facility and it is available in local Marathi and English languages. Early Warning System (EWS) is also coupled with the mobile service and has been updated to generate advisories 5 days in advance. Oceanic wind speed and direction advisories generated from INCOIS website are displayed four times daily. The service also provides regional wind speed and direction advisories generated from IMD website daily



m-KRISHI®-Fisheries mobile service

## Current services available on the prototype:

- a. Potential Fishing Zone (PFZ) Advisories generated from INCOIS website regularly.
- b. Oceanic wind speed and direction advisories generated from INCOIS website four times daily.
- c. Also improvised early warning advisories of wind speed and direction for a period of 5 days in advance.
- d. Regional wind speed and direction advisories generated from IMD website daily
- e. Early Warning System (Weather Alerts / Storm Warnings)

## Long term services:

- a. Data collection registration of fishers, their fishing boats, their catch etc.
- b. Fisheries Institute person in the dock can update the amount of catch and fish prices (fish type wise)
- c. Fishers can see the dock fish prices
- d. Display a graph of fish prices trend (by fish variety)
- e. Fisherman Indicators Observation of the climatic changes such as congregation of birds, color and smell of sea water
- f. Input to research Trend analysis, feedback collection

Satellite data on thermal and wind speed as well as algal movement received from ISRO and INCOIS was utilized to provide exact location of PFZ areas to reduce excessive fuel consumption in search of fish. It is estimated that after following the advisories provided through 'm-KRISHI®-Fisheries mobile service' and fishing accordingly in PFZ areas will save approximately 50% of this diesel (i.e. 100 lakh liters of diesel per year).

Beneficiaries were identified from selected fisheries clusters and sensitized about the 'm-KRISHI® Fisheries Service' by undertaking field tours.

Launch workshop cum training program of 'm-KRISHI® Fisheries Service for fisheries clusters were held at Alibaug respectively. There were thirteen immediate beneficiaries who received training from experts for using the services. Release of CDs, Training

manuals and presentations were part of the workshop. Response of the participants was encouraging.

Sensitization of fishers in neighboring district regarding availability and use of 'm-KRISHI® Fisheries Service as climate change mitigation measure was done at villages in neighboring district for popularization of technology.



Dr. V. V. Singh's presentation during Launch of 'm-KRISHI® Fisheries Service' at Alibaug



Release of CD & Training Manual of 'm-KRISHI® Fisheries Service'

(Veerendra Veer Singh, Principal Scientist, Mumbai Research Centre)