

GEMINI: Disaster Warning Device to improve Livelihood of Veraval Fisherman

Commercial fishing is one of the most dangerous occupations in the world. Work at sea is unsafe particularly during bad weather conditions and accidents are bound to occur at sea leading to loss of life. Recently Fisherman in Veraval, Rajkot which is Indian's largest fish-producing coastal areas, to get information, including the disaster warnings when moving away from the coast beyond 10-12 km with the help of Enabled Mariner's Instrument for Navigation and Information (GEMINI) device.

Hyderabad- based Indian National Centre for Ocean Information Services (INCOIS), an autonomous body under the Ministry of Earth Sciences (MoES) joined hands with the Airports Authority of India (AAI) to utilize the GAGAN satellite system to developed low-cost GEMINI device. The satellite-based communication on disaster warning, Potential Fishing Zone and the Ocean States Forecast to Fisherman and system which uses to disseminate emergency information deal with the cyclone, high wave, and Tsunamis. The device receives and transfers the data received from GAGAN satellite/s to a mobile through Bluetooth communication. A mobile application developed by INCOIS decodes and displays the information in nine regional languages.

According to the Indian National Centre for Ocean Information Services, the Potential Fishing Zone advisories provide information on the probable locations on fish aggregation in the sea. Ocean States Forecasts provide the accurate state of the ocean include the forecasts on winds, waves, ocean currents, and the water temperature every six hours on daily basis for the next five days helping fishermen in maximizing their earnings, ensuring safety and in the planning of fishing activities.