

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 4368
ANSWERED ON 02/04/2026

SAGAR VANI

4368. SHRI NARHARI AMIN:
SHRI ASHOKRAO SHANKARRAO CHAVAN :
SMT. KIRAN CHOUDHRY:
SHRI NARAYANA KORAGAPPA:
SHRI JAGGESH:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the number of coastal districts and fishing communities currently covered under ocean information dissemination services such as the Sagar Vani system;
- (b) the number of fishermen receiving advisories relating to potential fishing zones, ocean State forecasts and disaster alerts through these services including Karnataka;
- (c) whether the Ministry has expanded the dissemination of such advisories through mobile applications, community radio or satellite-based communication systems and if so, the details thereof, and
- (d) the steps taken by the Ministry to improve last-mile delivery of ocean advisories to fishermen in remote coastal areas including Karnataka?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR
MINISTRY OF SCIENCE AND TECHNOLOGY
AND EARTH SCIENCES
(DR. JITENDRA SINGH)

- (a) The Indian National Centre for Ocean Information Services (INCOIS), under the Ministry of Earth Sciences (MoES), provides a comprehensive range of ocean-based early warning and advisory services. The services are available across all coastal States/UTs and districts of India. Approximately 8 lakh fishermen and other coastal stakeholders across all the coastal districts of India are receiving Potential Fishing Zone (PFZ) advisories and other INCOIS services.
- (b) Ocean information services are being delivered across all three coastal districts of Karnataka (Uttara Kannada, Udipi, and Dakshina Kannada) through 29 Fish Landing Centres (FLCs). These services support fishing communities in nearby villages in planning and initiating fishing activities, while facilitating access to ocean information for local stakeholders. About 22,755 users in Karnataka are directly reached by INCOIS through multiple communication channels, including WhatsApp, email, SMS, Telegram, SAMUDRA mobile application, etc. In addition to these direct communication channels, the same services are further disseminated through partner organizations such as NGOs, Reliance Foundation, M.S. Swaminathan Foundation, State Fisheries Departments, etc. thereby extending their reach to a wider user base.

- (c) Yes. INCOIS disseminates ocean-related alerts and advisories through a robust multi-channel communication framework, including SMS, mobile phones, email, website, mobile applications, community radio, social media platforms, satellite-based communication systems (GEMINI platform, VOIP phones), etc. Additionally, Potential Fishing Zone advisories and Ocean State Forecasts are provided in local languages to enhance accessibility and facilitate effective utilization by coastal communities and fishermen. INCOIS also issues alerts through the Common Alert Protocol (CAP)-based SACHET platform, enabling seamless transmission of ocean warnings and alerts to State and District authorities for further dissemination to the public.

INCOIS has developed the multilingual SAMUDRA (Smart Access to Marine Users for Ocean Data Resources and Advisories) mobile application as a one-stop platform for accessing its ocean information services. The app provides real-time alerts on ocean hazards such as tsunamis, storm surges, high waves, and swell surges, enabling users to take timely precautionary measures. It also delivers PFZ advisories to help fishermen identify probable fish aggregation areas, thereby improving catch efficiency and supporting livelihoods. In addition, SAMUDRA offers five-day Ocean State Forecasts to assist mariners, fishermen, and coastal communities in advance planning, risk reduction, and enhanced maritime safety. All these dissemination channels are being utilized in Karnataka.

- (d) To improve last-mile delivery of ocean advisories to fishermen in remote coastal areas, INCOIS undertakes sustained outreach and capacity-building initiatives across coastal States/UTs. These activities include awareness programmes, workshops, training sessions, tsunami mock drills, and the implementation of the Tsunami Ready programme, carried out in collaboration with State agencies, local authorities, educational institutions, and coastal stakeholders.

Additionally, INCOIS also conducts targeted outreach programmes for coastal communities and fishermen, including user interaction workshops and training sessions, to enhance preparedness, operational safety, situational awareness, and risk mitigation, particularly for those operating in distant and offshore waters. Such awareness programmes, beach cleanliness drives, and mock exercises have been conducted in Karnataka.
