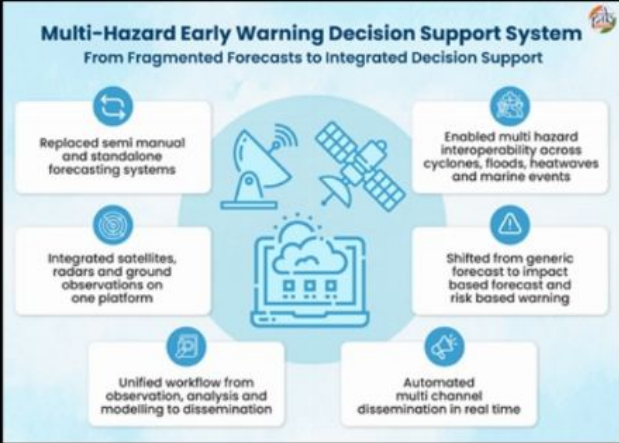


Multi-Hazard Early Warning Decision Support System

April 3, 2026 • vajiramandravi.com



VAJIRAM & RAVI
Institute for IAS Examination



Multi-Hazard Early Warning Decision Support System
From Fragmented Forecasts to Integrated Decision Support

- Replaced semi manual and standalone forecasting systems
- Enabled multi hazard interoperability across cyclones, floods, heatwaves and marine events
- Integrated satellites, radars and ground observations on one platform
- Shifted from generic forecast to impact based forecast and risk based warning
- Unified workflow from observation, analysis and modelling to dissemination
- Automated multi channel dissemination in real time

Multi-Hazard Early Warning Decision Support System

Multi-Hazard Early Warning Decision Support System Latest News

The Multi-Hazard Early Warning Decision Support System represents a decisive transformation in India's approach to weather forecasting and disaster risk reduction.

About Multi-Hazard Early Warning Decision Support System

- It is an **advanced digital forecasting platform** developed by **the Indian Meteorological Department (IMD)** using open-source technology and in-house expertise.
- It is a digital transformation **initiative under Mission Mausam**.
- It was officially **launched in January 2024**.
- It operates in **real time using tools such as Geographic Information System (GIS)** maps, enabling forecasters to quickly collect, analyse, and disseminate weather information in a clear and user-friendly manner.
- **Nodal Ministry:** Ministry of Earth Sciences (MoES)

Features of Multi-Hazard Early Warning Decision Support System

- **Automated Weather Data Processing:** Over 90% of weather data collection, quality checks, and integration are automated, enabling faster detection of weather systems and their possible impacts.
- **Better Use of Forecast Models:** More than 95% of numerical weather prediction model inputs are now used in forecasting, improving risk assessment for different weather hazards.
- **Re-engineered Forecasting System:** The entire forecasting and warning generation process has **been re-engineered, enabling real-time alerts and faster decision-making.**
- **Longer Forecast Lead Time:** Forecast lead time has increased from 5 days to 7 days, allowing authorities and communities to prepare in advance.
- **Faster Forecast Preparation:** The time required to prepare forecasts has reduced by about 3 hours from 6 hours, enabling quicker dissemination of warnings.

Source: PIB

Source: <https://vajiramandravi.com/current-affairs/multi-hazard-early-warning-decision-support-system/>

© Vajiram & Ravi. For personal use only.