

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 3065
ANSWERED ON 27/03/2025

RADAR AND LANDSLIDE DETECTION SYSTEMS IN KERALA

3065. DR. JOHN BRITTAS:

Will the Minister of **EARTH SCIENCES** be pleased to state:

- (a) total number and details of permanent radar systems deployed for weather observation in Kerala, district wise;
- (b) the specifications and technical details of these radar systems;
- (c) instances, if any, where radar systems in Kerala were temporarily rendered non-operational due to technical malfunctions or maintenance;
- (d) if so, detailed information regarding the duration, cause, and impact of the outages; and
- (e) the total number and details of landslide detection systems currently operational in Kerala?

ANSWER

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

- (a) Currently, there are two operational Doppler Weather Radars (DWRs) in Kerala: one in Kochi (S-Band DWR) and the other in Thiruvananthapuram (C-Band DWR).
- (b) The S-Band DWR provides a radial coverage of 400 km, whereas the C-Band 250 km. The India Meteorological Department has a high-end DWR network that utilizes well-proven world-class technologies like dual polarization, solid-state power amplifier (SSPA), etc.
- (c)-(d) The DWR in Kochi has been temporarily non-operational for the last three months due to an upgrade. However, there was no impact on operational weather services due to this as Kerala generally experiences fair weather during the period.
- (e) The Geological Survey of India (GSI) has been providing regional landslide forecasting for rainfall-induced landslides in Kerala since 2021 and started sharing the experimental forecast bulletin for Wayanad District, Kerala, from 25.07.2024 with the State Disaster Management Authority (SDMA) and District Disaster Management Authority (DDMA) for ground testing, feedback and validation during monsoon period. The GSI has been providing experimental/operational bulletin to 16 Districts in 06 (six) States (Kerala, West Bengal, Tamil Nadu, Uttarakhand, Himachal Pradesh, and Sikkim) in collaboration with various stakeholders.
