GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 452
TO BE ANSWERED ON WEDNESDAY, 27TH NOVEMBER, 2024

WEATHER RADARS UNDER MISSION MAUSAM

452. SHRI MANOJ TIWARI:
SHRI BASAVARAJ BOMMAI:
SHRI SHANKAR LALWANI:
SHRI TEJASVI SURYA:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government has taken measures to increase the weather radars in the country for enhancing the accuracy of forecasting system under Mission Mausam; and if so, the details thereof;
(b) whether the current setup deploys the latest available technology in the world and if so, the details thereof; and
(c) whether the current setup of weather radars effectively predict high to very high rain in a specific area in order to warn and prevent natural disaster and if so, the details thereof along with the list of alerts sounded in the last one year?

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

(a) Yes. The newly launched Mission Mausam is intended to augment the Doppler Weather Radar (DWR) network across the country for complete radar coverage and to enhance the accuracy of the weather forecasting system. Supply order for 34 nos. DWRs have already been placed, and additionally, the Expenditure Finance Committee (EFC) has approved the procurement of 53 more DWRs.

(b) Yes. India Meteorological Department (IMD) has a high-end DWR network that utilizes well-proven world-class technologies like dual polarization, solid-state power amplifier (SSPA), etc.

(c) Yes. Surface-based observations and DWR networks monitor high to very high rainfall over a location. The DWR observations are available every ten minutes in the form of cloud images and the velocity of winds over the region under the radar range. It helps monitor and issue a nowcast of associated heavy rainfall activities at a very short duration of up to 1 hour. DWR networks will not provide a forecast or prediction of rain.

India Meteorological Department (IMD) issues various outlooks/forecasts/warnings for the Public and disaster management authorities to prepare for extreme weather events, including high to very high rainfall, using DWR, in-situ observations, and models. While issuing the alert, a suitable color code is used to highlight the impact of the severe weather expected and signal disaster management about the course of action to be taken regarding an impending disaster weather event. IMD issues the necessary warnings and advisories well in advance for preparedness, including high to very high rainfall throughout the year.

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