

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:5964
ANSWERED ON:29.04.2015
DOPPLER RADARS
Tharoor Dr. Shashi

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the total number of Doppler Weather Radars, Automatic Weather Stations (AWS) and other observing systems, deployed by the Government under its Himalayan Meteorology programme to strengthen the country's weather forecasting system;
- (b) whether the Government has any plan to augment weather stations in all States, forecast extreme weather conditions and external weather services to the block level and if so, the details thereof including the funds likely to be invested for the purpose;
- (c) whether forecasting in many States has been adversely affected due to reported non-functional Doppler Weather Radars;
- (d) if so, the details thereof; and
- (e) the measures adopted by the Government to ensure proper functioning of weather observing systems for accurate forecasts?

Answer

MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (Shri Y. S. Chowdary)

(a) The Government has approved the Integrated Himalayan Meteorology programme in August 2014 with an allocation of Rs. 117crores. Currently efforts are on for launching procurement of all envisaged observing systems, subject to the availability of funds.

(b) Based on scientific assessment of the need for further augmentation of observing system network expansion has been formulated. The upgradation/augmentation of the observing system, high performance computing, communication, forecast/warning systems, product dissemination systems etc. are part of a continuous process by which state-of-the-art science and technology tools are made accessible to the scientists engaged in weather research and forecasting towards enhancing the service quality. Research efforts are initiated by Earth System Science Organization- India Meteorological Department (ESSO-IMD) to explore possibility of generating sub-district scale Agro-meteorological forecast with acceptable level of verification skill in a pilot mode.

An overall allocation of Rs. 700crore is made for the sustenance of Doppler Weather Radars, Automatic Weather Stations (AWS) and other observing systems for the 12th Five Year Plan.

(c-e) Yes Madam. Doppler Weather Radars (DWR) network is primarily employed to operate 24X7 severe weather surveillance to provide now-casting (very short range up to 6 hours in advance) service (operated currently for about 145 locations across India).

At times radars remain non-functional due to failure of support systems/critical spares/parts. As and when non-functionality scenario develops, the said 24X7 severe weather surveillance is carried out through half-hourly updates of geostationary satellites (like INSAT-3D) and other polar orbital satellites covering India and its neighborhood. Although, endeavors are always made to ensure the uninterrupted functionality of various observing systems including DWRs over land and ocean, systems become dysfunctional at times. Prioritized action will always be launched so as to make the system functional with minimum break-downs to the extent possible.