

**GOVERNMENT OF INDIA  
EARTH SCIENCES  
LOK SABHA**

STARRED QUESTION NO:138  
ANSWERED ON:16.07.2014  
DOPPLER WEATHER RADARS  
Rudy Shri Rajiv Pratap

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

- (a) whether the Doppler Weather Radars/Polarimetric Doppler Radar System have been installed/proposed to be installed across the country;
- (b) if so, the details of Radar systems installed, functional and proposed to be installed in various parts of the country and the stage of their installation, location-wise;
- (c) whether the India Meteorological Department has been able to predict/identify the areas which are prone to heavy monsoons/flash floods and landslides;
- (d) if so, whether the above-mentioned Radar systems have been installed/are proposed to be installed at such places; and
- (e) if so, the details thereof and if not, the reasons therefor?

**Answer**

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (DR. JITENDRA SINGH)

a) - e) A statement is laid on the Table of the House

STATEMENT LAID ON THE TABLE OF THE LOK SABHA IN REPLY TO (a) to (e) OF STARRED QUESTION No. 138 REGARDING "DOPPLER WEATHER RADARS " ASKED BY SHRI RAJIV PRATAP RUDY FOR ANSWER ON WEDNESDAY, JULY 16, 2014

a) Yes Madam.

b) As on today, 2 Nos. of polarimetric Doppler Weather Radar (DWR) systems at Delhi-Lodi Road and Jaipur, respectively, are functional along with 16 Nos. non-polarimetric DWR systems, respectively at Chennai, Sriharikota, Machilipatnam, Visakhapatnam, Kolkata, Mumbai, Bhuj, Hyderabad, Nagpur, Patiala, Delhi Palam, Lucknow, Patna, Mohanbari, Agartala and Bhopal, in other parts of the country. Installation of 3 Nos. of non-polarimetric DWRs at Paradip, Goa and Karaikal is taken up now. Based on scientific assessment of the needs for further augmentation of observing system network, comprising Doppler Weather Radars, rain radars, Automatic Weather Stations (AWSs), Automatic Rain Gauges (ARGs), Snow Gauges etc. expansion has been formulated over the western Himalayan region.

c) Data generated from all observing systems viz. surface and upper air observations, satellite observations, aircraft observations, DWRs etc. are fully used by various forecast models to generate most representative initial state 3-D structure of the atmosphere and high resolution (9km grid scale) forecasts over India to predict heavy rainfall occurrences. Further, DWR network is primarily employed to improve the severe weather surveillance capability and for operating now-casting (very short range up to 6h in advance) service (operated for about 117 locations across India). ESSO-IMD is not involved with the predictions for flash floods and landslides.

d)-e) Yes Madam. The Earth System Science Organization – India Meteorological Department (ESSO-IMD) is endeavoring to expand the DWR network in a phased manner so as to cover the whole country.