## GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES **RAJYA SABHA** UNSTARRED QUESTION No. **651** TO BE ANSWERED ON MONDAY, AUGUST 12, 2013

### INSTALLATION OF DOPPLER WEATHER RADAR

### 651. SHRI RAJIV PRATAP RUDY:

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

- (a) whether the Doppler Weather Radars are set to be installed across the country;
- (b) the details on the Polarimetric Doppler Radar system installed and functional across various parts of the country including those which are at various stages of implementation;
- (c) whether Doppler Radar systems were installed at the places which were recently subjected to flash floods and landslides;
- (d) if so, the details thereof and if not, the reasons therefor: and
- (e) whether lack of Doppler Radars in the higher reaches to analyze tell-take signs of an extreme weather event prevented the India Meteorological Department from foreseeing Uttarakhand's calamitous cloudburst?

#### ANSWER

# MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI S. JAIPAL REDDY)

- (a) Yes Sir in a phased manner.
- (b) As on today, 2 Nos. of polarimetric Doppler Weather Radar (DWR) systems at Delhi-Lodi Road and Jaipur respectively are functional along with 15 Nos. non-polarimetric DWR systems, respectively at Chennai, Sriharikota, Machilipatnam, Visakhapatnam, Kolkata, Mumbai, Bhuj, Hyderabad, Nagpur, Patiala, Delhi Palam, Lucknow, Patna, Mohanbari, Agartala, in the country. It has been planned that all future DWR procurements are likely to be of polarimetric type.
- (c) No Sir.
- (d) Does not arise.
- (e) In a phased manner, the expansion of the DWR network to cover the whole country needs to be taken up as sustenance of such country wide networks demands augmentation of massive infrastructure (land/office/line of sight elevated tower), support service systems (power/cooling/water / spares & services / operating frequency clearance/security clearance, manpower availability/deployment to remote areas etc.) across various states/UTs. Accordingly, Earth System Science Organization (ESSO) India Meteorological Department (IMD) of the Ministry of Earth Sciences has formulated a plan of Himalayan Meteorology Program for its implementation during the XII plan to augment observing systems over the hill states by deploying Doppler Weather Radars, rain radars, Automatic Weather Stations (AWSs), Automatic Rain/Snow Gauges (ARGs/ASGs) etc. The new observations are to contribute for improved understanding of Himalayan weather in general and severe weather in particular. The assimilation of the above observational data will facilitate improvement in now-casting and forecasting over the hill states.