GOVERNMENT OF INDIA EARTH SCIENCES LOK SABHA

STARRED QUESTION NO:272 ANSWERED ON:29.08.2013 WEATHER FORECASTING SYSTEM Panda Shri Baijayant

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Doppler Weather Radars have been installed by India Meteorological Department (IMD) to improve the weather forecasting system;
- (b) if so, the details thereof indicating the locations where the same have been installed;
- (c) whether the Ministry of Home Affairs has raised security concerns with some of the locations;
- (d) if so, the details thereof; and
- (e) whether the IMD has started making five day weather forecasts with the help of such radars and if so, the details thereof?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI S. JAIPAL REDDY)

(a) to (e) A Statement is laid on the Table of the House.

STATEMENT LAID ON THE TABLE OF THE LOK SABHA IN REPLY (a) to (e) TO STARRED QUESTION NO. 272 REGARDING "WEATHER FORECASTING SYSTEM" TO BE ANSWERED ON THURSDAY, AUGUST 29, 2013

- (a) Yes Madam. Doppler Weather Radar (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). Further, data generated from all observing systems viz. surface and upper air observations, satellite observations, aircraft observations, DWRs etc. are 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.
- (b) As on today, 2 Nos. of polarimetric 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 other parts of the country. Eighteenth (18th) DWR is under commissioning currently at Bhopal.
- (c) (d) No Madam. 4-DWRs originally meant for Goa, Karaikal, Paradip and Mumbai could not be installed due to objection of the Ministry of Defence (MoD) in April 2010. Keeping the operational exigency and criticality of having DWR at Mumbai on priority then, commissioning of indigenous DWR that was meant for Kochi, had been taken up. Three Radars meant for Goa, Karaikal and Paradip are lying at respective locations in uninstalled condition.

Based on the clearance given now by the MoD on 15th April 2013 with the fulfillment of certain pre-conditions for proceeding with the installation of DWRs at civilian locations of Goa, Paradip and Karaikal, security audit will have to be carried out by independent agencies suggested by MoD at the respective sites.

(e) No Madam. However, as things stand today, DWR data is assimilated along with all available other observations as mentioned at (a) above, in to regional (27Km) and high-resolution meso- scale (9km) forecast models that generate 3-days forecasts of severe weather in advance and now-cast application tools that generate now-casts up to 6h in advance.