

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 52
TO BE ANSWERED ON WEDNESDAY, JULY 18, 2018**

DISTRICT AND BLOCK LEVEL FORECAST FACILITY

52. SHRI RAM CHARITRA NISHAD:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the India Meteorological Department is considering to expand its high tech forecast facilities down to block level and extend its direct SMS alert system by adding 21 million farmers to the network and if so, the details thereof;**
- (b) whether at present only one lakh farmers in a district get such alert system and the IMD plans to expand the facilities to 6500 blocks across the country by the end of this year and if so, the details thereof;**
- (c) whether it is also true that though India's record in predicting cyclones is among the best in the world, the High Performance Computer system would further refine it for more accuracy and lead time; and**
- (d) if so, the details thereof and the action taken by the Government in this regard?**

ANSWER

**MINISTER OF MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)**

- (a) Yes Madam. IMD has already covered 637 districts in the country for providing Agromet Advisories and is now venturing into implementation of block level weather forecast and Agromet Advisories in collaboration with Krishi Vigyan Kendras (KVKs) under ICAR network. From Monsoon 2018, IMD with AMFUs has started to prepare and disseminate the experimental block level advisory. A total 50 Agro-Met Field Units (AMFUs) representing 24 states have started the block level advisory on pilot basis in district of its location. As on date, these 50 units cover ~200 blocks. At present 39 million farmers registered with MKisan Portal are receiving the Agromet Advisories directly through SMS.**

(b) IMD, Ministry of Earth Sciences (MoES) under the scheme “Gramin Krishi Mausam Seva (GKMS)” issues district level weather forecast covering all the districts in the country. Based on the weather forecast, Agromet Advisories are prepared in collaboration with 130 Agromet Field Units (AMFUs) located at State Agricultural Universities, ICAR institutes and IIT on every Tuesday and Friday. Detailed information is provided under ‘Supplementary Information’. Most of the farmers in a district have been registered under the MKisan portal, Ministry of Agriculture and Farmers Welfare and the number of farmers in a district receiving the SMS Agromet advisories ranges from thousands to lakhs.

IMD is planning to establish District Agromet Units (DAMUs) at Krishi Vigyan Kendras (KVKs) to generate Agromet Advisories for each block of respective districts and reach out to the farmers to save the crops from weather aberration and ultimately increase the productivity of the crops.

(c)-(d) Yes. The forecast accuracy of IMD is comparable or better than the leading centres of the world. The accurate forecast of the tropical cyclones PHAILIN, HUDHUD, VARDHA etc are the examples of best forecasts issued by IMD in recent years.

The recent up gradation of the High Power Computing System has helped in the implementation of the following modelling systems which would further refine cyclone forecasting:

- Global Ensemble Forecasting System (GEFS) at a very high a resolution of 12 km to provide forecast upto 7 days from 1st June, 2018.**
- The Unified Model (UM) and Unified Model Ensemble Prediction System (UMEPS) have been adapted from UK Meteorological Office (UKMO), UK to provide forecast upto 7 days with 12 km resolution from 1st June, 2018.**
- IMD also runs cyclone specific Hurricane Weather Research & Forecast (HWRF) Model adapted from NCEP, NOAA, USA with a resolution of 18 km, 6 km and 2 km for cyclone track and intensity prediction. A project has been undertaken to implement high resolution Ocean Atmospheric Coupled HWRF Model at IMD for cyclone forecasting.**
