

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
LOK SABHA  
UNSTARRED QUESTION No. 3302  
TO BE ANSWERED ON FRIDAY, JULY 12, 2019**

**EXTREME WEATHER PHENOMENA**

**3302. SHRI SYED IMTIAZ JALEEL:  
SHRI ASADUDDIN OWAISI:**

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

- (a) whether at present India's capacity to predict extreme weather phenomena is restricted to the district level which elude the benefit to farmers and citizens, if so, the details thereof;**
- (b) whether Indian Meteorological Department (IMD) is going to extent its high tech forecast facilities down to block and village level by extending its SMS alert system to 21 million farmers, if so, the details thereof;**
- (c) whether the Government proposes to commission Mihir a high performance computer for weather forecast, if so, the details thereof;**
- (d) the time by which its benefits are likely to be derived to give boost to farmers and citizens; and**
- (e) the other steps taken/being taken by the Government for accurate weather forecast?**

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

- (a)-(d) India Meteorological Department (IMD) is planning to introduce experimental block level forecasts in some districts and their dissemination of advisories to farmers through SMS. Efforts for Pilot mode initiative for sub-district scale (block level) forecast generation and evaluation are underway.**

**Under Gramin Krishi Mausam Sewa (GKMS) scheme, District AgroMet Units (DAMUs) are being established at Krishi Vigyan Kendras (KVKs) in collaboration with Indian Council of Agricultural Research (ICAR) to implement block level Agromet Advisory Services (AAS). Experimental block level forecast and advisories in 50 blocks of the country are already made functional. The GKMS of IMD has been successful in providing the crop specific advisories to the farmers through different print/visual/Radio/ IT based media including short message service (SMS) and Interactive Voice Response Service (IVRS) facilitating for appropriate field level actions.**

**Block level weather forecast and AgroMet Advisories will aid the farmers in taking decision on day-to-day agricultural operations, based on the crop pattern at block level. AAS rendered by IMD is a step towards weather-based crop and livestock management strategies and operations dedicated to enhancing crop production. It is also expected to reduce crop damage and loss due to extreme weather events.**

**At present, 42 million farmers in the country receive the Agromet Advisories through SMS directly.**

**Mihir and Pratyush High Performance Computer clusters, have already been commissioned for initiating experimental block level advisories for farmers.**

- (e) Under the National Monsoon Mission, Ministry of Earth Sciences (MoES) has implemented two state of the art dynamical prediction systems for short, medium & extended range forecasts and seasonal forecasts. All these initiatives have helped to improve the accuracy of forecast. An improved suite of prediction models has already been implemented operationally at IMD for enhanced short range forecast through assimilation of all available Indian and global satellite data in real time.**

**Since December 2016, IMD used Global Forecast System (GFS) operationally to generate forecast at 12 Km horizontal resolution in short to medium range upto 10 days. GFS assimilates conventional data as well data from satellite & weather radars for better predictions.**

**Additionally a 12 Km grid scale state of the art Global Ensemble Predictions system was commissioned on 1<sup>st</sup> June 2018 for generating operational forecast for 10 days. This system is in the process of further improvement for better accuracy of forecast.**

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