

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 1118
TO BE ANSWERED ON TUESDAY, JULY 02, 2019**

ACCURACY IN RAINFALL PREDICTION

1118. DR. ASHOK BAJPAI:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether our rainfall prediction is accurate enough to the tune where this information can be made public for benefit of agriculture sector to plan their cropping system and management accordingly;**
- (b) if so, the details of the level of accuracy; and**
- (c) if not, the reasons therefor?**

ANSWER

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

- (a) & (b) Yes Sir, Under National Monsoon Mission, Ministry of Earth Sciences (MoES) has implemented two state of the art dynamical prediction system 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 India Meteorological Department (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 1st June 2018 for generating operational forecast for 10 days. This system is in the process of further improvement for better accuracy of forecast.

The forecast issued by IMD are available to the public through website as well as through social media.

IMD, under “Gramin Krishi Mausam Sewa (GKMS)” scheme, issues district level weather forecast for the next five days covering all the districts in the country. Based on the weather forecast, Agromet Advisories are prepared in collaboration with 130 Agro Met Field Units (AMFUs) and communicated to the farming community through multichannel dissemination systems including SMS using mobile phones. Information technology changes the face of the awareness among the farmers for the use of weather forecast and the Agromet Advisories generated by IMD through these modern means of communication to help them in taking decision to undertake day-to-day operations. Such inputs help farmers to save their crops under adverse weather situations as well as to take the benefit of benevolent weather condition to undertake appropriate farm operations to increase yield, ultimately.

Agromet Advisories are also issued to the farmers through SMS during extreme weather events like hailstorm, cyclone, unusual rainfall etc. so as to minimize the crop damages due to inclement weather, by taking preventive action.

Based on the Extended Range Forecast (ERF), Indian Council of Agricultural Research (ICAR) in collaboration with IMD issues weekly National Agro Advisory Bulletins (AAS) bulletin for the planners at central and State levels, farmers and other organizations for preparedness to cope up with ensuing weather conditions for better crop management.

(c) Does not arise
