GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 832
TO BE ANSWERED ON MONDAY, JULY 24, 2017

ACCURATE PREDICTION OF MONSOON RAINS

832.   SHRI ANUBHAV MOHANTY:

Will the Minister of EARTH SCIENCES be pleased to state:

(a)   whether it is a fact that the Meteorological Department had predicted normal or more than normal monsoon rains last year;
(b)   whether some of the States did not get good monsoon rains as predicted and suffered severe drought conditions; and
(c)   whether there are any special plans to ensure that the forecast of the weather is almost accurate so that the agriculturalists are able to plan accordingly?

ANSWER
MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)

(a)   Yes Sir. India Meteorological Department (IMD) had predicted a normal monsoon rainfall last year (2016). IMD's forecast for the 2016 monsoon season (June to September) rainfall over the country as a whole issued on 22nd April, 2016 was 106±5% of LPA and its update issued on 2nd June, 2016 was 106±4% of LPA.

(b)   IMD at present do not issue forecast for state rainfall. However, IMD had issued forecast for the seasonal rainfall over country as a whole as mentioned above and that for four geographical regions of the country (northwest India, central India, south Peninsula and northeast India). Among the four geographical regions, seasonal rainfall was normal over central India (94-106% of LPA) and northwest India (92-108% of LPA) and was below normal over northeast (<95% of LPA) and south Peninsula (<93% of LPA).

During the 2016 southwest monsoon seasonal rainfall was deficient in 9 subdivisions (Haryana, Punjab, Himachal Pradesh, Gujrat, Assam & Meghalya, Coastal Karnataka, Interior Karnataka, Kerala & Lakshadweep) with deficiency ranging from -21% (South Interior Karnataka) to -34% (Kerala). Seasonal rainfall over remaining 27 subdivisions was normal or above normal.

(c) IMD regularly reviews the operational long range forecasting system to improve it through in-house research and development activities & collaboration with various research institutions in the country and abroad. The operational statistical models are mainly improved by implementing the latest state of the art statistical forecasting techniques and by using better predictors.

Under the National Monsoon Mission initiative, other institutions of Ministry of Earth Sciences (MoES) , Indian Institute of Tropical Meteorology (IITM) Pune, Indian National Centre for Ocean Information Services (INCOIS), Hyderabad and National Centre for Medium Range Weather Forecasting (NCMRWF), NOIDA have embarked upon to build a state-of-the-art coupled ocean atmospheric climate model for a) improved prediction of monsoon rainfall on extended range to seasonal time scale (16 days to one season) and b) improved prediction of temperature, rainfall and extreme weather events on short to medium range time scale (up to 15 days) so that forecast skill gets quantitatively improved further for operational services of IMD.

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