GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 822
TO BE ANSWERED ON WEDNESDAY, DECEMBER 20, 2017

AVERAGE RAINFALL

822. DR. SANJAY JAISWAL:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) the strategies and means that the Government is using for measuring and predicting rain fall;
(b) whether the average rain fall is falling in the country; and
(c) if so, the details thereof and the action taken of the Government in this regard?

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

(a) India Meteorological Department (IMD) has established a large number of observatories which have been recording the daily rainfall for more than 100 years now. IMD has 706 Automatic Weather Stations (AWS) and 1350 Automatic Rain Gauge (ARG) where the rainfall is being measured every hour. In addition, IMD has about 6500 rain gauges maintained by state governments.

IMD issues three types of forecasts during the monsoon season i.e., seasonal forecast (for the whole season), extended range forecast (10-30 days), short-medium range forecast (0-10 days). These forecasts are issued based on dynamical and statistical models.

IMD issues the first stage operational long range forecasts for the southwest monsoon season (June-September) rainfall over the country as a whole in mid April. In addition to the update of its April assessment, forecasts for the monthly rainfall for July and August over the country as a whole and seasonal rainfall forecast for the 4 broad geographical regions of India (NW India, NE India, Central India and South Peninsula) are also prepared.

Under the 'National Monsoon Mission' (NMM) a state-of-the-art dynamical prediction 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) has been developed and is being used operationally by IMD.

An improved suite of prediction models has been implemented operationally at India Meteorological Department (IMD) for enhanced short range weather forecasting capability through assimilation of all available data.

(b-c) All India Summer Monsoon rainfall time series shows no statistically significant trend during the period 1871-2017 though it shows a slight decreasing tendency in the recent 3 decades.

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