

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 1288
TO BE ANSWERED ON THURSDAY, May 05, 2016**

FORECAST FOR ABOVE NORMAL MONSOON RAINFALL

1288. SHRI A.K. SELVARAJ:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether it is a fact that many private weather forecasters in India predicted that India's monsoon rainfall is expected to be above normal;**
- (b) whether it is also a fact that several agencies from around the world have hinted that the monsoon could be better than the previous year; and**
- (c) whether it is also a fact that the monsoon would set in on time all over the country as had happened in the past, if so, the details thereof?**

ANSWER

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

- (a) Yes Sir. During the current year (2016), normal/ above normal rainfall has been predicted by many forecasting agencies including India Meteorological Department (IMD).**

IMD's Operational Long Range Forecast (LRF) for the 2016 Southwest monsoon rainfall is as follows:

Quantitatively, the monsoon seasonal rainfall is likely to be 106% of the Long Period Average (LPA) with a model error of $\pm 5\%$. The LPA of the seasonal rainfall over the country as a whole for the period 1951-2000 is 89 cm.

- (b) The details of Monsoon rainfall (2016) predicted, agency-wise is presented in Annexure-I. These forecasts suggest normal to above normal rainfall during 2016 monsoon season.**

- (c) **Normal onset date of Monsoon over Kerala (southern tip of mainland India) is 01 June. The forecast for monsoon onset will be issued on 15th May, 2016. In India Met Department monsoon covers the whole country by 15th July climatologically.**

Annexure-I

Forecasts for 2016 southwest monsoon season rainfall over the country as a whole received from some of the private forecasting agencies and several foreign agencies.

S.No	Institutes		Forecast
1	Skymet		105% (with an error margin of $\pm 4\%$)
2	Weather Management Services	Risk	Roughly more than 104% in most parts of the country, except the northeast and with well-distributed rainfall over the country
3	Onkari Prasad (Retired IMD)		100%
4	Center for Disaster Mitigation Jain University, Bangalore		98.2% \pm 5.52%
5	ECMWF, UK	Coupled Model	Above Normal rainfall is most likely over some parts of Northwest India and some parts of southeastern Peninsular India. Normal rainfall is most likely over most of the remaining parts of the country.
		EUROSIP Multi Model Ensemble (MME): 3 Coupled Models	Normal rainfall over most parts of the country
6	International research Institute for climate and Society, USA		Climatological probabilities for most parts of the country except northern parts of the country where below normal is most likely.
7	Japan Agency for		Negative rainfall anomalies over

	Marine-Earth Science and Technology (JAMSTEC)	northern parts of the country, central India and most parts of west coast. Positive rainfall anomalies are predicted over remaining areas with highest magnitudes over northeast India.
8	APEC Climate Center	Normal rainfall is most likely over east and northeast India. Above normal is most likely over remaining parts of the country.
9	Met Office, UK	Above normal rainfall is most likely over most parts of the country.