

GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
**RAJYA SABHA**  
UNSTARRED QUESTION No. 3850  
TO BE ANSWERED ON THURSDAY, AUGUST 14, 2014

**NATIONAL MISSION TO IMPROVE THE ACCURACY OF MONSOON FORECASTS**

**3850. SHRI MOHD. ALI KHAN:**

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

- (a) whether Government has any proposal for a National Mission to try and improve the accuracy of monsoon forecasts; and
- (b) if so, the details thereof and the present status thereof?

**ANSWER**

MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND  
MINISTRY OF EARTH SCIENCES (Independent Charge)  
(DR. JITENDRA SINGH)

- (a)-(b) Under the National Monsoon Mission initiative institutions of Earth System Science Organisation (ESSO), the Indian Institute of Tropical Meteorology (ESSO-IITM), Pune, India Meteorological Department (ESSO-IMD), Indian National Centre for Ocean Information Services (ESSO-INCOIS), Hyderabad and National Centre for Medium Range Weather Forecasting (ESSO-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 Earth System Science Organisation- India Meteorological Department (ESSO-IMD).

One of the Implementation Agreements - Dynamical Seasonal Prediction of Indian Summer Monsoon Rainfall (Establishment of Monsoon desk) was signed during the visit of President Obama in November 2010 under which Indian and US scientists are working jointly on seasonal forecast. ESSO-NCMRWF is putting efforts to improve the adopted unified model in collaboration with UK for seamless prediction of monsoon rainfall forecasts in all temporal ranges (Short-up to 72 hours, Medium-3 to 10 days and extended beyond 10 days) including extreme weather phenomena.

The dynamical forecast for 2013 based on this model was 104 to 108 % of LPA and observed rainfall was 106 % of LPA. The forecast for 2014 was 96% of LPA. On the other hand ESSO-IMDs monsoon forecasts based on statistical tools are also found to be reasonably accurate .In addition, the extended range prediction of monsoon rainfall was initiated during monsoon 2014.

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