GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES LOK SABHA UNSTARRED QUESTION No. 545 TO BE ANSWERED ON WEDNESDAY, JULY 20, 2016

ACCURACY OF FORECAST

545. SHRI VIJAY KUMAR HANSDAK:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether any study has so far been undertaken to find out the veracity of the rain forecasts made at the micro level or district/village level and if so, the details thereof;
- (b) whether there is a huge mismatch between the predictions and the actual rainfall occurred;
- (c) if so, the details thereof; and
- (d) the efforts taken to make predictions more accurate?

ANSWER

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

(a) At present, district level weather forecast is generated for the next five days by India Meteorological Department (IMD) and based on that Agromet Advisories are prepared and communicated to the farming community. Research efforts are initiated to explore possibility of generating sub-district scale Agrometeorological forecast with acceptable level of verification skill in a pilot mode.

As a part of on-going process, performance of district level weather forecast issued for different districts in the country is verified against observed weather for last 12 months. It has been observed that the forecast accuracy is very good in East and Central regions and modest in Northwest, West and South India. The forecast is not up to the desired expectation for Northeast region for hilly regions as well as for high rainfall events.

The accuracy of the weather forecast is more than 80% qualitatively and 65-70 quantitatively for various regions in the country.

- (b) No Madam.
- (c) Does not arise.
- (d) Despite the above, operational implementation of improved forecast suite of models after the commissioning of the new High Performance Computing (HPC) systems is continued for implementing new variants of the forecast models so as to improve the forecast skills further.

Further, under the National Monsoon Mission initiative, other institutions of ESSO, the 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.