

**GOVERNMENT OF INDIA  
SCIENCE AND TECHNOLOGY  
LOK SABHA**

STARRED QUESTION NO:325  
ANSWERED ON:18.08.2004  
FAILURE OF METEOROLOGICAL DEPARTMENT  
Badiga Shri Ramakrishna;Manjhi Shri Rajesh Kumar

**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

- (a) whether the Meteorological Department has failed to predict movement of Monsoon and other factors responsible for Natural calamities;
- (b) if so, the facts thereof for the last three years;
- (c) whether the Government proposes to better equip this department in order to enable it to make timely and accurate predictions;
- (d) if so, the plans worked out therefor; and
- (e) if not, the steps taken to save people from nature's fury;

**Answer**

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT (SHRI KAPIL SIBAL)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT AS REFERRED IN REPLY TO THE PARTS (a) to (e) OF LOK SABHA STARRED QUESTION No. 325 FOR 18.8.2004 REGARDING "FAILURE OF METEOROLOGICAL DEPARTMENT"

(a) No Sir.

India Meteorological Department (IMD) issued a Long Range Forecast (LRF) for the South West Monsoon seasonal rainfall (total during June to September) for the country as a whole on April 2004. As per the IMD's prediction, year 2004 is expected to be a normal year with actual rainfall being 100% (with a model error of  $\pm 4\%$ ) of the Long Period Average (LPA). As on 11th August 2004, the actual rainfall recorded over the country on the whole is about 93%. The accuracy of this forecast can be ascertained only at the end of the season.

IMD had also predicted the date of onset of the monsoon over the Kerala coast this year on 18th May 2004. In addition IMD has been monitoring the advance of the monsoon across the country and advising the government on its progress. IMD also issues short range (2-3 days) region-wise forecasts to assist the farmers to plan their activities.

With the present day observational infrastructure in the country and technology the world over, it is not possible to predict the micro-characteristics like the spatial distribution and gap periods. In case of cyclones IMD has been predicting the intensity and direction and issuing appropriate warnings fairly correctly.

(b) The performance of the Department in predicting monsoons during the last three years is given in the table below:

Year Forecast (% of Long Period Average) Realised Rainfall (% of Long Period average)

2001	98	91	Using 16 parameter model.
2002	101	81	
2003	96	102	Using modified 8-10 parameter models.

2002 was an unusual year and there were no indicators of onset of drought conditions in the month of July.

(c) and (d) : Upgradation of models and equipments is a continuous and evolving process. The Government is committed to augment the existing observational network, upgrading the communication facilities and improvement of weather forecast models. Work on

developing a dynamical climate prediction system for extended range forecasts has already been initiated jointly by the Ministry of Agriculture, India Meteorological Department, National Centre for Medium Range weather forecasting, Space Application Centre and Indian Institute of Technology.

(e) Does not arise.