

GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 2175
TO BE ANSWERED ON 15th APRIL, 2010

ADVANCED SATELLITE DATA TO PREDICT MONSOON

2175. SHRI B. S. GNANADESIKAN:
SHRI N. R. GOVINDARAJAR:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether climate change has made weather forecast difficult for the India Meteorological Department and unpredictable monsoon and drought can cause heavy losses to our country;
- (b) if so, the details thereof;
- (c) whether it is a fact that the United States is likely to provide India with advanced satellite data to predict and track the monsoon with a greater degree of certainty and reducing chances of economic dislocation and loss of lives as a result of drought and floods;
- (d) if so, the details thereof;
- (e) whether the Indian scientists at present predict the monsoon only one or two days in advance and the new system would allow the scientists to predict rainfall fifteen days in advance; and
- (f) if so, the details thereof?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE)
MINISTRY OF SCIENCE AND TECHNOLOGY, MINISTRY OF EARTH SCIENCES,
MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE, MINISTER OF STATE IN
THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND MINISTER
OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS
(SHRI PRITHVIRAJ CHAVAN)

- (a) – (b) As of now, no conclusive evidence exists to attribute the Indian Summer Monsoon (ISM) variability to climate change. The medium and long range prediction of the monsoon along with associated extreme weather events is highly challenging scientifically. Nonetheless, continuous efforts are made by the India Meteorological Department (IMD) to enhance the skill of weather forecasts. Government of India has taken up a massive modernization programme of IMD with a major emphasis on establishing a robust and modern observational infrastructure, high-performance computing systems and Doppler Weather Radars in the country for facilitating the improved forecast service. Phase – I of the IMD's modernization programme with an allocation of Rs. 920 crores is underway.
- (c) – (d) No Sir. Under the existing meteorological data exchange policies of the World Meteorological Organisation (WMO), all available data is exchanged freely across its member countries. Global satellite meteorological data is also exchanged bi-laterally among the countries, including between India and USA as a part of various bilateral cooperation agreements. India is already using global satellite data in its analysis-forecast system for generating medium range (up to 7 days in advance) weather forecasts.
- (e) – (f) No Sir. Agro-advisories based on 7-days weather forecasts has been operating since Monsoon - 2005. Further, in an attempt to provide an additional rainfall outlook up to 15-days, experimental extended range forecast assessment has been put under extensive performance evaluation.