

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:2120
ANSWERED ON:02.12.2009
PREDICTION OF RAINFALL
Mahtab Shri Bhartruhari

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has made any progress in evolving a foolproof system to predict rainfall in advance; and
- (b) 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) Continuous improvement of weather forecasting services is a high priority activity for the agencies of the Ministry of Earth Sciences by adopting methodologies and modeling frameworks that have undergone rigorous performance evaluation in operational R & D environment. Following are important steps that are undertaken/underway.

- i) An improved numerical prediction models with 50Km grid globally and 27Kms/9Kms over India are already implemented.
- ii) All available global satellite radiance data sets are being assimilated in the numerical models for improving the forecasts.
- iii) A multi-model Man-Machine-Mix approach using the forecasts from different models has been adopted for improving the forecast skill on experimental basis.
- iv) Focusing on strengthening the existing observational network with expansion, improving the forecasting methodology and quick dissemination of weather forecast assessments/warnings to the users, a comprehensive modernization programme is currently underway.
- v) Focused R & D initiatives on understanding and prediction of the Indian monsoon rainfall variability, increasing accuracies of medium range weather predictions and potential predictability of monsoon are currently under implementation during the XI Plan.