## GOVERNMENT OF INDIA EARTH SCIENCES LOK SABHA

UNSTARRED QUESTION NO:2331 ANSWERED ON:08.12.2011 FORECASTING ABILITIES OF IMD Swamygowda Shri N Cheluvaraya Swamy

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

- (a) the progress made in the upgradation of the observational infrastructure of the India Meteorological Department (IMD) and its computing power to provide better forecasting of weather and monsoon in the country;
- (b) whether the ability of the IMD to accurately forecast cloudburst well in advance has improved; and
- (c) if so, the details thereof?

## **Answer**

MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI ASHWANI KUMAR)

(a) Under Modernization-Phase-I of IMD, 12 High Performance Computing Systems (HPCS), 8 Doppler Weather Radars (DWR), 535 Automatic Weather Stations and 507 Automatic Rain Gauges have been commissioned at different locations in India. Commissioning of the state-of-the-art observing, monitoring/ early warning and data visualization/information processing and communication technologies under the Phase-I of the modernization of IMD, several manual operations have been fully automated. All the manpower that was engaged earlier for such manual operations have been provided due orientation, training and skill development opportunities not only to attain appropriate operating skills of advanced technological platforms but also contribute efficiently to the quality enhancement through customization of sector specific warning and forecasting services.

Commissioning of the high performance computing (HPC) system has provided opportunity to assimilate satellite radiance data in to the global/regional forecast systems and to enhance the spatial resolution of the global forecast systems from about 50km grid scale to about 22km grid scale. The performance evaluation of the new global forecast system has demonstrated enhanced forecast skill quantitatively.

- (b) The ability of the IMD to accurately monitoring and nowcasting (up to 6h in advance) highly local scale phenomena like cloudburst can only be substantively enhanced after the commissioning of the DWR network covering the whole country.
- (c) Does not arise.