

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:433
ANSWERED ON:10.11.2010
INDIAN METEOROLOGICAL DEPARTMENT
Majhi Shri Pradeep Kumar

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has upgraded and strengthened the India Meteorological Department (IMD);
- (b) if so, the details thereof;
- (c) the salient features of the new forecast systems set up by the IMD; and
- (d) the details of the funds allocated and incurred for strengthening of the IMD thereon?

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) Yes Madam, India Meteorology Department (IMD) is currently implementing the phase-I of the modernization programme.

(b) The basic objectives of the IMD's modernization programme are

Induction of advanced technology for observational systems with installation of Automatic Weather Station (AWS), Automatic Rain Gauges (ARG) and Doppler Weather Radar (DWR) etc.

Digital data communication and data base integration.

Assimilation of non-conventional data into Numerical Weather Prediction (NWP) models.

Procurement and Commissioning of High Performance Computing (HPC) systems for implementing operational suit of advanced forecast models.

Improved data visualization, value-addition, dissemination for better public access/ utilization (SYNERGIE).

Induction of more objective oriented forecasting system.

Improvement in Public Weather Services (PWS) and Early Warning Services.

Generation and dissemination of Agro-meteorological advisories for farmers spanning for 5-days.

Detailed Progress of commissioning advanced observing systems is presented below:

Observational Instrument Number planned for Phase I Achievement till 31st October 2010

ARG	1350	334
AWS	550	494
DWR	16	2
Wind Profiler	7	In progress
Pilot Balloon	70	65
Aeronautical Instrumentation	28	8
Upgraded RS/RW	25	11

Upgradation of observing system along with its connectivity with high performance computing system, installation of digitised forecasting platform and dissemination of observations, forecast and warning in real time to the end users are to be developed by March 2011 under phase-I of the modernization programme.

(c) The salient features of new forecasting system:

Global Forecast System for forecast up to 7 days

Regional Forecast System for forecast up to 3 days

Meso-scale Forecasting System for forecast up to 48 hours

Now-casting up to 3-6hrs

Digitized weather analysis and forecasting platform:

SYNERGIE is a powerful tool with a user friendly interface for the operational meteorology forecaster. With Synergie, not only is it possible to display meteorological data, but also to extract information from this data, as well as enter expertised data or format documents produced by forecasters.

As a functional requirement, the SYNERGIE system has the following capabilities

Ability of the system to ingest all available data,

Display and prediction tools:

Plotting of Observations on weather charts,

Numerical Weather Prediction module,

Satellite, Radar, Tropical Cyclone and warning module,

PWS system is a set of interfaces and automatic processes, that provide simple way to design, generate and disseminate products.

(d) Out of the allocated grant of Rs. 920crores for the Phase-I of the IMDs modernization programme, a sum of Rs 316crores has been spent till the end of October, 2010.