

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
RAJYA SABHA  
UNSTARRED QUESTION No. 2607  
TO BE ANSWERED ON MONDAY, MARCH 19, 2018**

**MODERNISATION OF WEATHER FORECASTING TECHNOLOGY**

**2607. SHRI PARIMAL NATHWANI:**

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

- (a) whether outdated technology, old equipments and shortage of skilled staff are causing hurdles for the India Meteorological Department (IMD) in weather prediction;**
- (b) if so, the details thereof and the reasons therefor;**
- (c) whether the Government proposes to purchase latest equipment, increase staff, upgrade/modernize the technology in weather centres and if so, the details thereof;**
- (d) the details of funds required and allocated for the purpose; and**
- (e) the other steps taken/being taken to enhance the capability and improve functioning of IMD?**

**ANSWER  
MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY  
AND MINISTRY OF EARTH SCIENCES  
(DR. HARSH VARDHAN)**

**(a)-(b) No Sir.**

- (c) Augmentation of observational systems is a continuing process. IMD also has a program for the upgradation of (i) advanced data assimilation tools (ii) advanced communication and IT infrastructure (iv) high performance computing systems and (v) intensive/sophisticated training of IMD personnel to facilitate the implementation of advanced global/regional/ meso-scale prediction models for improving the accuracy of weather forecasts in all temporal and spatial scales and for quick dissemination of weather forecast assessments/warnings to the users.**

**A High Performance Computing System with 6.8 Petaflop speed has been commissioned to meet the modelling requirements. This system is now the fastest super computing system in the country.**

**Under the Scheme “Integrated Himalayan Meteorology Programme for Western & Central Himalayas”(IHMP), ten (10) Nos. of X Band Doppler Weather Radars are proposed to be installed during 2017-2020 at the stations in three States; J&K, H.P. and Uttarakhand for improving the observing systems for severe weather services.**

**Under Gramin Krishi Mausam Sewa (GKMS), District Agro-Met Units (DAMUs) will be established at Krishi Vigyan Kendras (KVKs) in each district in collaboration with ICAR to implement district level Agromet Advisory Services during 2017-20. In addition to existing 130 Agromet Field Units (AMFUs) which will act as DAMUs for the districts of their location, 530 DAMUs will be established in a phased wise manner. The network of DAMUs will be extended to cover all the districts by March 2020.**

- (d) The funds are allocated scheme-wise. The following schemes have been approved by Govt. of India for implementation during 2017-20:-**

<b>SI No.</b>	<b>Name of the Scheme/Project</b>	<b>Budget Outlays (Rs. in Crores)</b>
<b>1</b>	<b>Weather &amp; Climate Services</b>	<b>450.00</b>
<b>2</b>	<b>Commissioning of Polarimetric Doppler Weather Radar (DWRs)</b>	<b>99.20</b>
<b>3</b>	<b>Upgradation of Forecast System</b>	<b>310.40</b>
<b>4</b>	<b>Atmospheric Observations Network</b>	<b>439.60</b>

- (e) Further upgradation of the weather forecasting capabilities is underway through implementation of the following programs (i) Atmospheric Observations Network, (ii) Upgradation of Forecast System, (iii) Weather & Climate Services and (iv) Commissioning of Polarimetric Doppler Weather Radars during 2017-20 and beyond.**

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