## GOVERNMENT OF INDIA EARTH SCIENCES LOK SABHA

UNSTARRED QUESTION NO:2068
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NEW INNOVATIONS AND INITIATIVES IN IMD
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## Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether any new innovations have been made and new initiatives taken in meteorological and observational services;
- (b) if so, the details thereof; and
- (c) the extent to which these innovations and initiatives are being implemented at the local and village level?

## **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 (DR. ASHWANI KUMAR)

- (a) Yes Madam.
- (b) Integrated Agro-meteorological Advisory Service (AAS) is rendered now on twice-weekly basis in collaboration with State Agricultural Universities (SAUs), institutions of Indian Council of Agricultural Research (ICAR) etc. Realized weather of the previous week and quantitative district level weather forecast for next 5 days in respect of rainfall, maximum temperature, minimum temperature, wind speed, wind direction, relative humidity and clouds as well as weekly cumulative rainfall forecast are provided. Further, crop specific advisories, generated in partnership with SAUs and ICAR, to help the farmers are issued and widely disseminated. The AAS of IMD has been successful in providing the crop specific advisories to the farmers at the district level twice weekly through different print/visual/Radio/ IT based wider dissemination media including short message service (SMS) and Interactive Voice Response Service (IVRS).

Under Modernization-Phase-I of the India Meteorological Department (IMD), High Performance Computing Systems (HPCS), 8 Doppler Weather Radars (DWR), 675 Automatic Weather Stations (AWS) and 843 Automatic Rain Gauges (ARG) have been commissioned covering all districts of India. Commissioning of the state-of-the-art observing, monitoring/ early warning and data visualization/information processing and communication technologies, 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.

(c) AAS to the country at the district level has already been made fully operational by the India Meteorological Department (IMD) during the XI Plan. A third party evaluation carried out by the National Center for Applied Economic Research (NCAER) has brought out the usefulness of the mobile and IVRS usage in dissemination of advisories on different farming operations. The report says that the farmers find the information disseminated, through the effective IT dissemination modes, very useful. At present, the AAS products are disseminated through SMS and IVRS to 3.0 million farmers in the country. As per the report of NCAER, 24% of the farmers are using AAS advisories.