GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES LOK SABHA

UNSTARRED QUESTION No. 1162 TO BE ANSWERED ON FRIDAY, JUNE 28, 2019

SUPERCOMPUTERS FOR WEATHER FORECASTING

1162. SHRI SANTOKH SINGH CHAUDHARY:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government is planning to buy supercomputers to improve weather forecasting in the country;
- (b) if so, the details thereof;
- (c) the problems faced by scientists in understanding and forecasting weather in India; and
- (d) the steps taken and financial allocation made by the Government to improve weather and monsoon forecasting?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI ASHWINI KUMAR CHOUBEY)

- (a) Yes Sir.
- (b) A high level committee is formed to look at the needs of the Ministry of Earth Sciences (MoES) institutes. Capacities of the systems to be installed by MoES will be decided by the committee.
- (c) Weather forecasting in India has improved significantly in recent decade due to availability of adequate High Performance Computing (HPC) resources to the scientists and also due to their efforts in improving the models used for forecasting.
- (d) Ministry of Earth Sciences has initiated several activities for improving weather and monsoon forecasting. A few of the initiatives taken up during the last 2-3 years are:

Infrastructure

- (i) Commissioning of a 8.0 Peta Flops Supercomputer
- (ii) Commissioning of Weather Radars
- (iii) Commissioning of Automatic Weather Stations

Research & Development

- (iv) Development of 12kms Global Ensemble Forecasting System (GEFS)
- (v) Monsoon Mission- II for development of applications (hydrology, agriculture)

Application

- (vi) Initiating Block Level including the aspirational districts Forecast for farmers
- (vii) Hurricane Weather Research and Forecasting Model (HWRF) for Tropical Cyclone forecasting
- (viii) Early Warning System for air pollution

Financial allocation during the last three financial years are:

2017-18: 423 crores 2018-19: 348 crores 2019-20: 390 crores
