

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 20
TO BE ANSWERED ON THURSDAY, FEBRUARY 02, 2017
INVESTMENT BY IMD IN SUPERCOMPUTER FACILITY**

20. SHRIMATI VIJILA SATHYANANTH:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether it is a fact that the India Meteorological Department (IMD) plans to invest a sum of Rs. 400 crore in a supercomputer facility;**
- (b) whether it is also a fact that the supercomputer would process about ten petaflops of data per second and would be used to make a dynamical monsoon forecast; and**
- (c) whether these forecasts factor in evolving global weather conditions to improve the accuracy of monsoon forecasts and if so, the details thereof?**

ANSWER

**MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)**

- (a) Ministry of Earth Sciences is augmenting the high performance supercomputing facility for rendering state of the art services related to weather, climate, ocean state and multi-hazard warning services to the nation with an estimated expenditure of Rs. 400 crores.**
- (b-c) Yes Sir. The augmentation effort is targeted to put in place the supercomputing facility having 10 peta flops (floating point operations per second) capability as against the existing 1.2 peta flops.**

The augmented computing power will be utilized for building next generation Earth System Models for improved climate change simulations, Coupled Ocean-Atmospheric Climate Forecast Models for 15-day, monthly and seasonal monsoon rainfall predictions and associated weather extremes, global/regional/local scale data assimilation-forecast models in the 1-10 day weather forecast range, Ensemble Prediction Models for Probabilistic Severe Weather Prediction for generating skilful warnings for extreme weather events viz. thunderstorms; heavy rainfall events associated with monsoon lows and depressions; local severe storms; cyclones
