

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:3579
ANSWERED ON:26.04.2012
INITIATIVES BY TERI
Anandan Shri K.Murugesan

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether The Energy and Resources Institute (TERI) has developed an in-house modelling super lab that would ultimately enable better prediction and planning for earthquakes, coastal storms and extreme sea level rise, among others;
- (b) if so, the details thereof;
- (c) whether a state of art super computer has been acquired to develop a better understanding of climate variability and climate change; and
- (d) if so, the details thereof?

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) No Madam.

(b) Does not arise.

(c) Yes Madam.

(d) A state-of-art supercomputer, based on hex-core technology from WIPRO having 512 cores (2GB/core of RAM) with a peak performance of 5.5 Terra Floating Point Operations (TFLOPs) along with 64TB of storage, has been acquired in June 2011 to perform long term climate simulations. In addition, 1 Quad-core server with 8GB RAM and 1TB storage space and Four Dual-core servers to perform the validation and impact assessment studies.

These facilities are presently used for:

i) Performing long-term climate simulations using Global Earth System Models (presently running Community Earth System Model, Version 1, Norwegian Earth System Model, and Community Climate System Model Version 3). The simulations for Global Climate Models are around 100 years for baseline and 150 years for future following the new RCP pathways are in progress.

ii) Regional Climate Models (presently running Weather Research and Forecasting Model version 3.2 and Center Regional Model Version 3 or PRECIS 1.9- Providing Regional Climate for Impact Studies).