

GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 667**  
ANSWERED ON 08/02/2024

**Development of indigenous climate forecasting system**

**667. Dr. M. Thambidurai:**

Will the Minister of **Earth Sciences** be pleased to state:

- (a) whether Government proposes to develop its own climate forecasting system indigenously which would suit the national requirements;
- (b) if so, the details thereof, and if not, the reasons therefor; and
- (c) the amount sanctioned and allotted for development of climate forecasting system?

**ANSWER**

THE MINISTER OF EARTH SCIENCES  
(SHRI KIREN RIJJU)

- (a)-(b) Yes Sir. A state-of-the-art Earth System Model (ESM) known as the IITM-ESM has been indigenously developed at Centre for Climate Change Research (CCCR), Indian Institute of Tropical Meteorology (IITM) under the Ministry of Earth Sciences. This is the first ESM from India and the climate change assessment carried out using IITM-ESM. It was also used in the latest Sixth Assessment Report prepared by the Intergovernmental Panel on Climate Change (IPCC). The National Climate Change Assessment report documenting the regional climate change projections, has been released to benefit students, researchers and policymakers. The report is available at <https://link.springer.com/book/10.1007/978-981-15-4327-2>.
- (c) An amount of Rs. 192.28 crores has been sanctioned to IITM-CCCR for Monsoon Convection, Clouds and Climate Change (MC4) sub-scheme during the period 2017-2023 for the development of climate forecasting system.

\*\*\*\*\*