

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
LOK SABHA  
UNSTARRED QUESTION NO. 1631  
TO BE ANSWERED ON WEDNESDAY, 13<sup>TH</sup> DECEMBER, 2023**

**INDIGENOUS CLIMATE FORECASTING SYSTEM**

1631. DR. BEESETTI VENKATA SATYAVATHI:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the current climate forecasting systems being used by the Ministry;
- (b) whether the Government proposes to develop an indigenous climate forecasting system that is suited to the specific needs of the country;
- (c) if so, the details thereof and if not, the reasons therefor; and
- (d) the amount sanctioned and spent on developing an indigenous climate forecasting system?

**ANSWER**

**THE MINISTER OF EARTH SCIENCES  
(SHRI KIREN RIJJU)**

- (a)-(c) 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 Earth System Model from India and the climate change assessment carried out using IITM-ESM, was 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>
- (d) The approximate expenditure by CCCR is about 7.42 crores for the period 2017-2023.

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