# GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES RAJYA SABHA UNSTARRED QUESTION No. 836 TO BE ANSWERED ON MONDAY, JULY 24, 2017

### **RISE IN AVERAGE TEMPERATURES**

## 836. SHRI DILIP KUMAR TIRKEY:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) what has been the average temperature in the country during the last ten years;
- (b) whether the average temperature shown an alarmingly rising trend compared to rest of the world; and
- (c) if so, what steps are being taken by Government to tackle this situation?

## **ANSWER**

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

- (a) Average Temperature during last ten years (2007 to 2016) was 26.10 °C. Rise in the average temperature was 0.51°C during this period. Spatial pattern of trend in mean annual temperature anomalies, for the period 1902-2012, suggests significant positive (increasing) trend (0.50 C in general with few pockets of 1.00 C) over most parts of the country except some parts of Rajasthan, Gujarat and Bihar, where significant negative (decreasing) trend was observed.
- (b) No Sir. The latest Intergovernmental Panel on Climate Change (IPCC) report (2014) highlights that mean surface temperature of the globe has risen by 0.85°C ± 0.18°C. However, all India mean temperature has risen around 0.64°C over the last 110 years.
- (c) Following steps have been undertaken in the area of Climate Change:
  - i) Launched a high-priority Programme to address the Science issues of Global and Regional Climate Change (GRCC) with a well-equipped state-of-the-art Center for Climate Change Research (CCCR) at Indian Institute of Tropical Meteorology (IITM), Pune for interdisciplinary research and training in the area of science of climate change.

Development of Earth System Model (ESM) has been taken up for generating future climate change scenarios. Currently, CCCR is leading "Co-ordinated Regional Downscaling Experiment (CORDEX)" for the South Asian region under the aegis of the World Climate Research Program (WCRP) of the World Meteorological Organisation (WMO). The CORDEX program provides an important framework for a co-ordinated set of downscaled regional climate simulations for both the historical past and future decades. Training workshops are also conducted for end-users, stakeholders in the South Asian region.

ii) The National Action Plan on Climate Change (NAPCC) released in 2008 by Government of India. Outlines eight missions in specific areas of Solar Energy, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture and Strategic knowledge for Climate Change. Eight National Missions form the core of the National Action Plan, representing multipronged, long term and integrated strategies for achieving key goals in the context of climate change.

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