

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION No. 830
TO BE ANSWERED ON MONDAY, JULY 24, 2017**

**SETTING UP OF A HIGH ALTITUDE CLOUD OBSERVATORY NEAR MUNNAR,
KERALA**

830. SHRI SANJAY SETH:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Government has decided to set up a High Altitude Cloud Observatory near Munnar in Kerala;**
- (b) if so, the details thereof and the objective behind it;**
- (c) the expected benefit that this region will get from this move;**
- (d) the estimated cost involved in setting up the observatory;**
- (e) whether Government proposes to set up such facilities in other parts of the country and if so, the details thereof; and**
- (f) the other steps taken by Government in mapping the impact of climate change on agriculture, fisheries, tourism, biodiversity and forestry sectors in long run?**

ANSWER

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

- (a) Yes Sir. Recently a high altitude cloud physics observatory was established at Munnar (Kerala), in Western Ghats, the region which is gateway for the monsoon of India.**
- (b) High altitude cloud physics observatory at Munnar is used to observe cloud and rain processes over that region with state of the art observations. Such facility will enable understanding of rainfall distribution and will allow better characterization of rainfall processes in the numerical models used for prediction of monsoon rainfall.**
- (c) It is expected that long term monitoring of cloud and rainfall processes will enable for accurate representation of cloud micro-physical process in forecast models to improve over all skill of rainfall prediction for severe weather phenomena viz, heavy rainfall, thunderstorm etc., not only over Kerala but for the whole country.**

- (d) An allocation of Rs. 10 Crore is made for the establishment of the laboratory.**
- (e) High altitude cloud physics laboratories are functional at Mahabaleshwar (Konkan) and Munnar (Kerala) to study the monsoon cloud microphysics process modulated by the Western Ghats only and hence no such additional facilities are contemplated.**
- (f) Studies were undertaken in four climate sensitive regions of the country, viz. Himalayan Region, Western Ghats, North Eastern Region, Coastal Areas to assess the possible impacts on the four sectors viz. agriculture, water, forests and health and associated ecosystem. A Report entitled, Climate Change & India: A 4X4 Assessment – A Sectoral and Regional Assessment of Impact of Climate Change in 2030s, has been released by the Government during November, 2010 under the aegis of the Indian Network of Climate Change Assessment (INCCA).**
