

**GOVERNMENT OF INDIA
ENVIRONMENT, FORESTS AND CLIMATE CHANGE
LOK SABHA**

UNSTARRED QUESTION NO:110
ANSWERED ON:24.02.2015
VOLATILITY IN CLIMATIC CONDITIONS
Rao Shri Rayapati Sambasiva

Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

(a) whether the Government has conducted any evaluation to assess India's position in regard to volatility in the climatic conditions across the globe and if so, the details and outcome thereof; and

(b) the details of major programmes and plans undertaken to ensure that no disastrous impact is felt in the country due to the fast changing climatic scenario in the world?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FORESTS AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR)

(a) & (b) Ministry of Earth Sciences carried out scientific studies on projected climate change and variability under Global and Regional Climate Change (GRCC) under ongoing programme of Indian Institute of Tropical Meteorology (IITM), Pune. Summary of the observed long term changes so far include:

(i) Mean annual surface air temperatures show a significant warming of about 0.5 degree C/100 years during the last century.

(ii) No significant long-term trends are reported in the frequencies of large-scale droughts or floods in the summer monsoon season.

(iii) The average seasonal rainfall over India has shown decline in the last five decades, especially after 1970, that is not found to be statistically significant. Further over core monsoon zone, the contribution from increasing heavy rain events is offset by decreasing moderate events and hence on the long term the change is not appreciable. Many studies have discussed the possible reasons for recent weakening monsoon.

(iv) 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. 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).

As per the report of Working Group-II titled 'Climate Change 2014: Impacts, Adaptation and Vulnerability' of fifth assessment report (AR5) of Intergovernmental Panel on Climate Change (IPCC) published in March, 2014, India is one amongst the top 20 countries at risk based on analysis of climate risk and coping ability by country.

Recognising the challenges of Climate Change, Government is implementing the National Action Plan on Climate Change (NAPCC). NAPCC includes eight National Missions in specific areas of energy, habitat, water, agriculture, forests and Himalayan eco-system. State governments are also preparing the State Action Plan on Climate Change in line with the objectives of NAPCC, to address state specific issues.