

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

UNSTARRED QUESTION NO:1123

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Study on Climate Change

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

- (a) the number of expert studies taken up by any professional committee to find out the impact of climate change in view of the deteriorating climatic scenario across the globe and in the country during the last one year;
- (b) the terms of reference of the committees which undertook such studies;
- (c) the findings of the said studies and the status of its implementation thereof;
- (d) whether such findings has helped in tackling climate change and growing threat to the environment; and
- (e) if so, the details thereof and if not, the reasons therefor?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI ANIL MADHAV DAVE)

(a) to (e) The Intergovernmental Panel on Climate Change (IPCC) constituted by the World Meteorological Organisation in cooperation with United Nations Environment Programme is an internationally recognised body of professional experts having a mandate to assess research on climate change and present its findings in the form of "assessment reports" every 5-7 years. The Fifth Assessment Report (AR5) of IPCC is the latest in a series of such reports released during the period 2013-14. AR5 consists of three Working Group Reports and a Synthesis Report. Some salient features of AR5 are as follows:

â€¢ Global temperatures have risen by about 0.8°C over the last century and sea levels have risen by about 20 cm.

â€¢ In many regions, snow and rainfall patterns have changed.

â€¢ Snow, ice, permafrost and glaciers are melting at the poles and around the rest of the world.

â€¢ Extreme weather events are becoming more frequent. For example, heat waves are lasting longer and becoming more intense.

However, IPCC Reports do not provide country level assessment on the impact of climate change. Such country level assessments are conducted as part of National Communication (NATCOM) prepared by the Government of India periodically. The 2nd National Communication to the United Nation Framework Convention on Climate Change (UNFCCC) was submitted by the Government in 2012. The First Biennial Update Report (BUR) to UNFCCC was submitted by the Government on 22 January 2016.

In addition, a scientific study to assess the impact of climate change was undertaken and a report entitled "Climate Change and India: A 4X4 Assessment - A Sectoral and Regional Analysis for 2030s" was published in 2010. The study assessed impacts of climate change on four key sectors of Indian economy, namely, agriculture, water, forests and human health in four climate sensitive regions of India, namely, the Himalayan region, the Western Ghats, the Coastal region and the North-Eastern Region.

The above study projects a variable rate of change in agriculture production including losses in some crops, change in the composition of the forests and net primary productivity. The extreme precipitation events are likely to increase in all the regions. Water yield is projected to increase in the Himalayan Region, whereas it is likely to be variable across other three regions. Malaria is projected to spread to new areas and threats of its transmission are likely to increase for longer duration.

The above studies have helped in assessing emissions of greenhouse gases and identification of climatic impacts, risks and vulnerability of different sectors. Further, the studies have also led to formulation of State Action Plans on Climate Change, as well as, various policies, measures and programmes at the national level with a view to addressing the threat of climate change.
