

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 74
TO BE ANSWERED ON WEDNESDAY, FEBRUARY 24, 2016**

IMPACT OF RISING TEMPERATURE

**74. SHRI SANJAY DHOTRE:
SHRI BHARTRUHARI MAHTAB:
SHRI DEVJIBHAI G. FATEPARA:**

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has conducted any study to ascertain the impact of rising temperature on environment, human life and other sectors; and**
- (b) if so, the details and the outcome thereof and the corrective measures taken by the Government in this regard?**

ANSWER

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

- (a) Yes Madam.**
- (b) Studies under the aegis of India's Second National Communication (NATCOM) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in May, 2012 and scientific study titled "Climate Change and India: 4X4 Assessment - A Sectoral and Regional Analysis for 2030s" in 2010, have assessed the implications and impacts under a projected Climate Change scenario, based on which adverse effects on agricultural, water, forests, health, sea level rise, extreme events and infrastructure have been assessed. Summary of the observed long term changes so far is as follows:**
 - (i) Mean annual surface air temperatures show a significant warming of about 0.63 degree C during the year 1901-2015.**
 - (ii) No significant long-term trends are reported in the frequencies of large scale droughts or floods in the summer monsoon season.**
 - (iii) The total frequency of cyclonic storms that form over the Bay of Bengal has remained almost constant.**
 - (iv) Analysis of past tide gauge records for the Indian coastline regions gives an estimate of sea level rise of 1.30 mm/year.**
 - (v) There is evidence that glaciers in Himalayas are receding, however it is unclear as to how much of this recession is attributable to climate change, as glacial retreat is also due to natural long-term inter-glacial cycles.**

In order to address the likely adverse impacts of climate change, the government has initiated the National Action Plan on Climate Change (NAPCC) for addressing long term integrated strategies for achieving key goals of sustainable development in the context of climate change. NAPCC outlines eight sector specific missions in areas of Solar Energy, Enhanced Energy Efficiency, Sustainable Habitat, Water, Sustaining the Himalayan Ecosystem, Green India, Sustainable Agriculture and Strategic knowledge for Climate Change.