

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 1055**  
TO BE ANSWERED ON 07.02.2020

**Increase in Temperature**

1055. SHRI SISIR KUMAR ADHIKARI:

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

- (a) whether the Government has any report on the gradual increase in average temperature and rainfall patterns in the country and if so, the details thereof;
- (b) whether it is a fact that within next 25 years, several areas of the country will come under worst hit hotspot and cyclone regions;
- (c) if so, the details thereof; and
- (d) the corrective measures taken by the Government in this regard?

**ANSWER**

**MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE**  
**(SHRI BABUL SUPRIYO)**

(a) As per the World Meteorological Organization, the global mean temperature for 2018 was estimated to be  $0.99 \pm 0.13$  °C above the pre-industrial levels (1850–1900). According to the Annual Climate Summary 2018 published by India Meteorological Department (IMD), during 1901-2018 the annual mean temperature showed an increasing trend of  $0.60^{\circ}\text{C}/100$  years with significant increasing trend in the maximum temperature ( $1.0^{\circ}\text{C}/100$  years) and relatively lower increasing trend ( $0.20^{\circ}\text{C}/100$  years) in the minimum temperature.

(b) and (c) As per Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of  $1.5^{\circ}\text{C}$ , there may be an increase in the frequency of cyclonic storms over the North Indian Ocean and Arabian sea. However, tropical cyclones have shown a decreasing trend over the Bay of Bengal. Temperatures will, in general, increase across India, but the exact locations of maximum temperature increases in any given period in the future is very difficult to predict due to considerable uncertainties in making such estimates.

(d) India is a Party to the United Nations Framework Convention on Climate Change (UNFCCC), its Kyoto Protocol (KP) and Paris Agreement (PA). For addressing the challenge of climate change, India adheres to the paramountcy of the UNFCCC processes. It has proactively contributed to multilateral efforts to combat climate change and continues to do so while undertaking its own independent, enhanced initiatives in climate mitigation and adaptation besides meeting all its commitments under the UNFCCC, its KP and PA. Independent studies rate India's efforts highly and compliant with the requirements under these instruments.

The Government is implementing National Action Plan on Climate Change (NAPCC) which comprises eight missions in specific areas of solar energy, energy efficiency, water, agriculture, Himalayan ecosystem, sustainable habitat, green India and strategic knowledge on climate change. NAPCC provides an overarching framework for all climate actions. Thirty-three States/Union Territories (UTs) have prepared their State Action Plan on Climate Change in line with NAPCC taking into account State's/UT's specific issues relating to climate change. Under the Paris Agreement, India has submitted Nationally Determined Contributions (NDC) with target to reduce the emissions intensity of its Gross Domestic Product (GDP) by 33 to 35 % by 2030 from 2005 level, to achieve about 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030, and to create an additional carbon sink of 2.5 to 3 billion tones of CO<sub>2</sub>eq through additional forest and tree cover by 2030.

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