

**GOVERNMENT OF INDIA  
MINISTRY OF EARTH SCIENCES  
LOK SABHA  
UNSTARRED QUESTION No. 185  
TO BE ANSWERED ON FRIDAY, JUNE 21, 2019**

**AVERAGE TEMPERATURES**

**185. SHRI NISHIKANT DUBEY:**

**Will the Minister of EARTH SCIENCES be pleased to state:**

- (a) the average temperatures recorded in the country during the last five years;**
- (b) whether the average temperatures has shown an alarmingly rising trend as compared to the rest of the world; and**
- (c) if so, the steps taken/being taken by the Government to tackle this situation?**

**ANSWER**

**MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND  
MINISTRY OF EARTH SCIENCES  
(DR. HARSH VARDHAN)**

- (a) Details of average annual temperature and anomalies over the country as a whole during the last five years (2014 to 2018) are given in the table below;**

<b>Year</b>	<b>Annual Average Temperature (°C)</b>	<b>Annual Temperature Departure from Long term Normal (°C)</b>
<b>2014</b>	<b>25.73</b>	<b>+0.23</b>
<b>2015</b>	<b>25.92</b>	<b>+0.42</b>
<b>2016</b>	<b>26.20</b>	<b>+0.70</b>
<b>2017</b>	<b>26.04</b>	<b>+0.54</b>
<b>2018</b>	<b>25.90</b>	<b>+0.39</b>

- (b) Global temperatures in 2018 were 0.83 degrees Celsius warmer than the long term climate normal (1951 to 1980), according to scientists at NASA's Goddard Institute for Space Studies (GISS) in New York. Globally, 2018 ranks behind those of 2016, 2017 and 2015. The past five years are, collectively, the warmest years in the modern record. The warming is observed in all parts of the world during the above five years. The same trend is observed in India also.**

(c) **Anthropogenic (human induced) activities, mainly burning of fossil fuels, deforestation and transport have resulted in increasing Earth's average temperature leading to climate change. This in turn leads to a wide ranging impacts including sea level rise, melting of snow and glaciers, changes in weather patterns, increased frequency and intensity of extreme events and natural disasters etc. The Ministry of Environment, Forest and Climate Change (MoEF&CC) is the nodal Ministry for addressing the climate change issues, especially mitigation and adaptation. In order to create and strengthen the scientific and analytical capacity for assessment of climate change in the country, different action plans have been initiated under the Climate Change Action Programme (CCAP) of MoEF&CC. Some of the programs are**

**National Action Plan on Climate Change (NAPCC)**

**State Action Plan on Climate Change (SAPCC)**

**National Adaptation Fund on Climate Change (NAFCC)**

**Climate Change Action Programme (CCAP)**

**India's post-2020 climate goals as per MoEF&CC are :**

**For post-2020 period, in response to the decisions of the Conference to the Parties, India submitted its Nationally Determined Contribution (NDC) to the UNFCCC on 2nd October, 2015, outlining the climate actions intended to be taken under the Paris agreement.**

**The eight goals put forth by India in its NDC are:**

- 1. To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation.**
- 2. To adopt a climate friendly and a cleaner path than the one followed hitherto by others at corresponding level of economic development.**
- 3. To reduce the emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005.**
- 4. To achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance including from Green Climate Fund (GCF).**

- 5. To create an additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent through additional forest and tree cover by 2030.**
- 6. To better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region, coastal regions, health and disaster management.**
- 7. To mobilize domestic and new & additional funds from developed countries to implement the above mitigation and adaptation actions in view of the resource required and the resource gap.**
- 8. To build capacities, create domestic framework and international architecture for quick diffusion of cutting edge climate technology in India and for joint collaborative R&D for such future.**

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