# GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

# LOK SABHA UNSTARRED QUESTION NO. 3154 TO BE ANSWERED ON 06.08.2021

### **Global Warming**

#### 3154. SHRI SUNIL KUMAR PINTU:

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

- (a) whether assessment has been made regarding the likely impact of global warming on climate;
- (b) if so, the details thereof and the extent to which it has impacted the climate of the country; and
- (c) the details of initiatives taken/being taken by the Government to maintain ecological balance and tackle climate change?

# **ANSWER**

# MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE (SHRI ASHWINI KUMAR CHOUBEY)

(a) and (b) Intergovernmental Panel on Climate Change (IPCC), prepares comprehensive Assessment Reports about knowledge on climate change, its causes, potential impacts and response options. Scientists from all over the world, including India, contribute to the IPCC Assessment Reports. The Fifth Assessment Report of IPCC (2014) has observed that warming of the climate system is unequivocal, and since the 1950s many of the observed changes are unprecedented. The atmosphere and ocean has warmed, the amounts of snow and ice have diminished and sea level has risen.

Nationally, a study was conducted by the Ministry of Environment, Forest & Climate Change (MoEF&CC) titled "Climate Change and India: A 4X4 Assessment -A Sectoral and Regional Analysis for 2030s" which provides assessment of 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, viz. the Himalayan region, the Western Ghats, the Coastal region and the North-Eastern Region.

As part of the Second National Communication (SNC), MoEF&CC conducted studies on impact of climate change in India which are summarized in the 'Vulnerability Assessment and Adaptation' chapters. The climate change scenarios were analysed using high-resolution regional climate model. Simulations for 2020s, 2050s and 2080s indicate an all-round warming for Indian subcontinent. Impact of climate change and climate variability on the water resources are likely to affect irrigated agriculture, installed power capacity, environmental flows in the dry season and wet season.

(c) Global warming is a global collective action problem and has to be solved by international cooperation. India is a Party to the UNFCCC and its Paris Agreement (PA). Under the Paris Agreement, India has submitted its Nationally Determined Contribution (NDC) balancing the concerns and priorities of climate change, sustainable development including poverty eradication, and economic growth of the country. India's NDCs comprise eight goals for 2021-2030, including (i) to reduce the emissions intensity of its GDP by 33 to 35 per cent by 2030 from 2005 level; (ii) to achieve about 40 per cent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030 with help of the transfer of technology and low-cost international finance; and (iii) to create an additional carbon sink of 2.5 to 3 billion tonne of CO<sub>2</sub> equivalent through additional forest and tree cover by 2030.

At domestic level, Government is implementing the National Action Plan on Climate Change (NAPCC) which provides the overarching framework for climate actions, through eight national missions in specific areas of solar energy, enhanced energy efficiency, water, agriculture, Himalayan eco-system, sustainable habitat, green India and strategic knowledge on climate change. Under the NAPCC's overarching framework, thirty-three (33) States/UTs have prepared State Action Plans on Climate Change (SAPCC). Further, to support adaptation measures in States / UTs in areas that are particularly vulnerable to the adverse impacts of climate change, Government is implementing the National Adaptation Fund for Climate Change (NAFCC). In addition, Government has set up an Apex Committee for Implementation of Paris Agreement (AIPA) to coordinate and oversee the implementation of the Paris Agreement.

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