

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 2269
TO BE ANSWERED ON 05.08.2024

Adverse Effect of Climate Change

2269 Dr. BACHHAV SHOBHA DINESH:
SHRI DILESHWAR KAMAIT:
Dr. PRADEEP KUMAR PANIGRAHY:

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

- (a) whether the Government has conducted any study regarding the adverse effects of climate change in the country, if so, the details including the outcomes thereof;
- (b) whether the Government has permitted other countries to carry out the said study with mutual consent keeping in view the spirit of 'Vasudhaiv Kutumbakam', if so, the details thereof;
- (c) whether the country is witnessing serious climate change, devastating floods and loss of lives, if so, the details thereof;
- (d) the details of the loss of life and property during the last three years, State and year-wise;
- (e) whether the country has suffered financial loss due to climate change, if so, the details thereof;
- (f) the details of remedial steps taken by the Government to tackle the adverse effects of climate change; and
- (g) the strategies proposed by the Government to combat environmental degradation, promote sustainable forest management, mitigate climate change impacts, protect biodiversity, ensure environmental sustainability, and achieve the country's environmental conservation goals in the face of increasing environmental challenges and climate change concerns?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) to (e) Climate change studies are undertaken by several Ministries and Departments of the Government of India and the research organisations under them. India submitted its Third National Communication (TNC) to the United Nations Framework Convention on Climate Change (UNFCCC) in December 2023. The TNC includes a chapter on 'Impacts, Vulnerability and Adaptation' based on the outputs of different studies awarded by the Ministry to various expert organisations. The TNC report highlights that extreme precipitation and flooding events have affected several parts of India in recent years. These floods were caused by heavy precipitation, as well as events such as glacier breaks and flash floods, and avalanches. These

events caused the loss of lives, massive damage to crops, public infrastructure, and private property across several districts in India.

Observations indicate that incidences of extreme weather conditions have increased across the globe including India in the recent decades. However, there is no established study for India providing a quantified contribution of climate change triggering natural disasters. The changes as observed may rise from a number of causes, including the inherent variability in climatic systems that are common in the biosphere and geosphere. While many studies monitor disasters such as drought, floods and breaking of glaciers, the science of attribution of these changes particularly to climate change is far more complex and currently an evolving subject.

As per the information from the National Disaster Management Authority (NDMA), no centralized data on loss of life and property due to extreme weather conditions in the States/ Union Territories is maintained. Each State has its own State Disaster Management Authority to deal with such events.

(f) and (g) The Government of India has been undertaking number of steps aimed at protecting and conserving the environment which have a direct/indirect impact on combating climate change. In August 2022, India updated its Nationally Determined Contribution (NDC) demonstrating higher ambition in its climate action, as agreed under the Paris Agreement. As a part of the updated NDC, India has introduced the concept of 'LiFE' (Lifestyle for Environment) for propagating a healthy and sustainable way of living based on traditions and values of conservation and moderation by focusing on behaviors and attitudes of individuals and communities. In addition, India's LT-LEDS (Long Term Low-Carbon Development Strategy) submitted to the UNFCCC in November, 2022, highlights India's vision of low carbon and sustainable development.

Further, India's climate actions across different sectors are embedded in various programme and schemes implemented by the Government of India. The National Action Plan on Climate Change (NAPCC) provides the overarching framework for all climate actions, through national missions in specific areas of Solar energy, Enhanced energy efficiency, Sustainable habitat, Water, Sustaining Himalayan ecosystems, Green India, Sustainable agriculture, Human health, and Strategic knowledge for climate change. All these Missions focus on strategies to combat the adverse impacts of climate change, and, are institutionalized and implemented by their respective Nodal Ministries/Departments. Further, 34 States/Union Territories (UTs) have prepared their State Action Plans on Climate Change (SAPCC) in line with NAPCC taking into account the State specific issues relating to climate change. The responsibility of the implementation of the SAPCCs rest with the respective States.

Under the National Adaptation Fund on Climate Change, projects worth Rs. 847.48 crore have been sanctioned in 27 States / Union Territories. India's Initial Adaptation Communication submitted to UNFCCC in December 2023 indicates that the total adaptation relevant expenditure for the year 2021-22 was 5.6 per cent of the Gross Domestic Product (GDP), growing from a share of 3.7 per cent in 2015-16, which shows that the Government has been making consistent efforts to integrate climate resilience and adaptation into development plans and spending a significant amount of resources to tackle the adverse effects of climate change, despite the competing demands especially from the social sector for resources.

The National Afforestation Programme (NAP) is implemented on pan India basis for afforestation in identified degraded forest areas with people's participation and decentralized

forest governance. Compensatory afforestation under CAMPA has also been used for taking up plantations on degraded forest lands and carrying out eco-restoration works. In addition, the Green Credit Program has been launched in 2023 under which the Forest Departments of every State and Union Territory have been requested to identify degraded forestland parcels under their control and management which shall be made available for tree plantation for the purpose of generation of green credit. The Government has launched Amrit Dharohar scheme to encourage optimal use of wetlands, and enhance bio-diversity, carbon stock, eco-tourism opportunities and income generation for local communities. Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) is being undertaken for protection of the shoreline and as a climate mitigation and adaptation measure. The Government of India has taken several initiatives for Biodiversity conservation. The Biological Diversity Act, 2002 is implemented through a three-tiered institutional mechanism, namely National Biodiversity Authority (NBA) at the national level, State Biodiversity Boards at the State level, and Biodiversity Management Committees at the local body level.
