

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 4042
TO BE ANSWERED ON 28.03.2022

Impact of Climate Change and Globalization

4042. SHRI BALAK NATH:

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

- (a) whether the State of Rajasthan is facing double whammy of climate change and globalization and if so, the details thereof;
- (b) whether the unprecedented rise in the temperature in India is likely to adversely impact the hydrological system, environment, sea level, food grain production and other related aspects in Rajasthan and if so, the reaction of the Government thereto;
- (c) whether any study has been conducted on the ill-effects of climate change on human health and agriculture and if so, the details and the finding thereof;
- (d) whether the Union Government has launched academic study programme on climate change in consultation with the State Government and if so, the details thereof; and
- (e) the district-wise details of the funds provided to Rajasthan for the purpose?

ANSWER

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

(a) Climate change is a global collective action problem of dealing with the consequences of greenhouse gas emissions leading to global warming. Globalization is an economic phenomenon arising from increased commercial, industrial and financial interactions between countries, with many large firms and enterprises of various kinds functioning in many regions of the world. Both are global phenomena, but their causes and consequences are very different.

The Government of India's economic and other policies are intended to benefit from globalization utilizing various opportunities as well as minimizing the negative effects and impacts when they arise. This applies to all States in the country, ensuring the benefits and opportunities for all as well as minimizing the impact on the State-level economy. The Government of India's climate policy is intended to protect our citizens from direct and indirect impacts due to the consequences of climate change as well as adapting to such change. It is also intended to develop India along a low carbon pathway to ensure that India contributes its due share to global mitigation of GHG emissions while also ensuring development and growth. All State Governments are also actively involved in the same through the State Action Plans on Climate Change. Different States contribute in different ways to mitigation depending on their regional circumstances, while the burden of climate adaptation varies depending on their geographies and economic circumstances.

(b) and (c) The Government is seized of the matter. Studies show that average temperature over India has warmed around 0.7°C during 1901-2018 and similar warming has been

observed in the sea-surface temperature in the tropical Indian Ocean by 1°C for 1951-2015. The rise in temperature is gradual. The rise in extreme events is attributed to the complex earth system interactions due to global warming and regional anthropogenic influences.

The impact of climate change on agriculture and human health sectors is being assessed by the relevant Ministries. The Indian Council of Agricultural Research (ICAR) has initiated a network project, National Innovations in Climate Resilient Agriculture (NICRA) in 2011 to study and address the impact of climate change on Indian agriculture. As per the studies under NICRA, rainfed rice yields in India are projected to reduce marginally (<2.5%) in 2050 and 2080 and irrigated rice yields by 7% in 2050 and 10% in 2080 scenarios. Wheat yield is projected to reduce by 6-25% in 2100 and maize yield by 18-23%. Climate change is likely to benefit chickpeas with an increase in productivity (23-54%).

The Government has initiated the National Programme on Climate Change and Human Health. The programme aims to reduce morbidity, mortality, injuries, and health vulnerability among the population in the country due to climate variability and extreme weather. The Indian Council for Medical Research has constituted a committee to identify priority areas of research and initiated the work under three Task Force Groups viz, (i) Vector Borne Diseases (ii) Eye Health & (iii) Respiratory Diseases.

Further, under the National Knowledge Network programme on “Climate Change and Human Health”, the Department of Science and Technology has published a report in thematic areas of vector-borne diseases and heat stress & health and same is available on website at the link: https://dst.gov.in/sites/default/files/Report_DST_CC_Health.pdf.

(d) and (e) The concept of climate change has already been incorporated in the curriculum/textbooks developed by the National Council of Educational Research and Training (NCERT) for Social Sciences/Geography for classes VII and XI. Topics on climate change have also been incorporated in the NCERT’s Science Textbooks for classes VIII and IX and Biology Textbook for class XII. NCERT has been organizing in-service teachers’ capacity building programmes in Geography as well as in Social Sciences where teachers are sensitized over the issues related to climate change.

The Government is combating climate change through its several programs and schemes. This includes implementation of the National Action Plan on Climate Change (NAPCC) which comprises missions in specific areas of solar energy, energy efficiency, water, agriculture, Himalayan ecosystem, sustainable habitat, green India, and strategic knowledge on climate change. The NAPCC provides an overarching framework for all climate actions. Thirty-three States/Union Territories have prepared their State Action Plan on Climate Change (SAPCC) in line with NAPCC taking into account the State specific issues relating to climate change. These SAPCCs outline sector-specific and cross-sectoral priority actions, including adaptation. The Government is also implementing the scheme, ‘National Adaptation Fund for Climate Change (NAFCC)’ to support adaptation measures of States/UTs including Rajasthan in areas that are particularly vulnerable to the adverse impacts of climate change. A project titled “Mukhya Mantri Jal Swavlamban Abhiyaan for climate change adaptation and water harvesting in Arthuna, Anandpuri and Sajjangarh blocks of district Banswara” under NAFCC has been sanctioned for Rajasthan at a total cost of Rs. 24.97 crore.
