GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 32
TO BE ANSWERED ON 03.02.2025

Green House Gas Emission

32. SHRI MURARI LAL MEENA:

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

(a) the steps taken by the Government so far to reduce Green House Gas Emission in the urban areas of the country, particularly in the cities selected under Smart City Mission;
(b) whether major urban areas of Rajasthan, particularly Jaipur and Dausa, are being affected by rising temperatures and urban heat island effect due to global warming and if so, the details thereof;
(c) whether the Government proposes to implement special schemes for green energy, electrification of public transport and increasing urban green cover in various other urban areas including Dausa and if so, the details thereof; and
(d) the amount spent by the Government to deal with climate change in urban areas of Rajasthan and impact thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

(SHRI KIRTI VARDHAN SINGH)

(a) to (d) Climate change is a global collective action problem mainly precipitated by excessive historical and current emissions of the developed countries. India's share of historical cumulative emissions from 1850 to 2019 amount to less than 4 percent of global cumulative carbon dioxide emissions despite being home to more than 17% of the world's population. India is an emerging economy where Greenhouse Gas (GHG) emissions are set to increase, albeit from a low base, in pursuit of its development and poverty eradication goals. India's responsibility for global warming thus has been minimal; even today, its annual per capita emissions are only about one-third of the global average. Despite this, India has taken several steps to combat climate change.

The government is combating climate change through several programs and schemes. This includes the implementation of the National Action Plan on Climate Change (NAPCC), which comprises missions in specific areas of solar energy, energy efficiency, water, agriculture, the Himalayan ecosystem, sustainable habitat, green India, strategic knowledge on climate change, and human health. The NAPCC provides an overarching framework for all climate actions. Thirty-four States/Union Territories (UTs) have prepared their State Action Plan on Climate Change (SAPCC) in line with NAPCC, considering the state-specific issues relating to climate change. These SAPCCs outline sector-specific and cross-sectoral priority actions. 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 particularly vulnerable to climate change's adverse impacts. 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.

National Mission on Sustainable Habitat (NMSH) was launched in 2010 under NAPCC, which highlights strategies and guidelines to mitigate Greenhouse Gas (GHG) emissions and adapt to climate change impacts by building resilience in infrastructure assets and communities, measures for improving disaster risk management, and early warning systems for extreme weather events. The NMSH aims at (i) Promoting low-carbon urban growth towards reducing GHG emissions intensity for achieving India's Nationally Determined Contributions (NDCs) and (ii) Building resilience of cities to climate change impacts and strengthening their capacities to 'bounce back better' from climate-related extreme events and disaster risks.

Aligning with the NMSH, the Ministry of Housing and Urban Affairs (MoHUA) launched the "Climate Smart Cities Assessment Framework" (CSCAF) in February 2019 as a tool for cities to assess their present situation and provides a roadmap for cities to adopt and implement relevant climate actions. Under the CSCAF 3.0 cycle, Jaipur has received a 3-star rating in mobility and air quality.

Further, the Government has adopted various strategies to mainstream sustainable development and climate actions in all urban investments and development activities as part of its various urban missions and programs. These include the Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Pradhan Mantri Awas Yojana - Urban (PMAY-U), Deendayal Antyodaya Yojana - National Urban Livelihoods Mission (DAY-NULM), Swachh Bharat Mission - Urban (SBM-U), and the Smart Cities Mission (SCM).

The state government of Rajasthan has implemented a number of projects to reduce greenhouse gas emissions in smart cities. A few of the initiatives in the cities of Jaipur and Udaipur inter-alia include Smart Street Lighting Systems, Rooftop Solar Projects, Conservation of Buildings using Traditional methods, Public Bicycle Sharing Mobility services, and remediation of legacy waste. Further, Ajmer city initiatives include installing two solar plants with capacities of 350 KW and 300 KW, developing green parks, and installing rooftop solar heaters. In Kota city, works related to the reduction of GHG emissions include the construction of Oxyzone city park, the renovation of CV garden in Nayapura, and roads developed (16 km) with planters on dividers and footpaths.

The amount spent by the cities under SCM to deal with climate change in the cities of Jaipur, Udaipur, Kota, and Ajmer is Rs. 289 Cr, Rs. 304 Cr, Rs. 201 Cr, and Rs. 29.56 Cr, respectively. As of 20.01.2025, under SCM, for the environment sector, 6 projects amounting to Rs. 174 Cr. have been taken up in the State of Rajasthan.

A study conducted by the Ministry of Earth Sciences to analyse the mean daytime and nighttime surface urban heat island (UHI) intensity during summer found no UHI effect in Kota city, whereas Jodhpur city during the daytime and Jaipur city during the nighttime show a UHI effect with an intensity of 0.093 °C/decade and 0.015 °C/decade, respectively.

As a party to the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement, India has submitted its updated NDCs to UNFCCC in 2022, which includes inter-alia, achieving about 50% cumulative electric power installed

capacity from non-fossil fuel-based energy resources by 2030. As of 31st December 2024, 47.1% of India's total electric power installed capacity (or 217.62 GW) was based on non-fossil fuel-based energy resources. In Rajasthan, the total installed capacity from non-fossil fuel-based resources has reached 34.33 GW.

The Government has introduced several initiatives to promote green energy in urban areas. In February 2024, PM Surya Ghar- Muft Bijli Yojana was launched to transform the country's energy landscape through harnessing of solar energy. Further, the Waste to Energy Programme in India seeks to support the establishment of waste-to-energy projects for the generation of biogas/bioCNG/power/producer or syngas from urban, industrial, and agricultural wastes/residues.

To promote the electrification of public transport, the Government launched the "PM-eBus Sewa Scheme" on 16th August 2023 with the aim to augment bus operations by the deployment of 10,000 electric buses on the Public-Private Partnership (PPP) model and the development of associated infrastructure in urban areas with central assistance of ₹ 20,000 crores. As per the 2011 census, 169 cities falling in the range of 3 lakh to 40 lakh population size are eligible to participate in this scheme. Under this Scheme, all eight eligible cities of Rajasthan, namely Ajmer, Alwar, Bikaner, Bhilwara, Udaipur, Jaipur, Kota, and Jodhpur, have participated. A total of 675 e-buses have been sanctioned for these eight cities.

The Ministry of Environment, Forest and Climate Change (MoEFCC) has been implementing various afforestation schemes. Ministry is implementing Nagar Van Yojana (NVY) with the primary objective of creating forest/green spaces in urban areas by developing Nagar Van/Vatikas, with a view to protecting forest land within cities/towns or its fringes from degradation and encroachment. The scheme is designed to actively engage local residents and different agencies in developing bio-diverse forests for social and environmental benefits in an urban landscape. Under Nagar Van Yojana, the MoEFCC has sanctioned a total of 544 projects in 31 States/ UTs under NVY. Of these, 23 projects have been sanctioned to the State of Rajasthan with a total approved amount of Rs. 32.5 Cr, out of which Rs. 22.8 Cr has been released.

On the occasion of World Environment Day 5th June, 2024, the Hon'ble Prime Minister has launch 'Ek Ped Maa Ke Naam' (एक पेड़ माँ के नाम) campaign and urged all citizens to contribute to making our planet better and to plant a tree in the coming days as a tribute to our mothers. In Dausa, a total of 18,500 plants have been planted in urban areas, and separate 'Krishna Murari' Vatika on 100 bigha land has been developed under this initiative.

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