

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 939**  
TO BE ANSWERED ON 29.07.2024

**Deaths caused by Air Pollution**

939. SHRI CHARANJIT SINGH CHANNI:  
SHRI BHARTRUHARI MAHTAB:

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

- (a) the details of number of deaths due to air pollution in the country during the last five years, year and State-wise particularly in Northern States;
- (b) the steps taken/being taken by the Government to curb deaths due to air pollution;
- (c) whether the Government has any specific plans to tackle air pollution increasing in the country especially Northern States and National Capital Region and if so, the details thereof; and
- (d) whether the Government has provided any compensation to the families of those deceased persons who died due to air pollution and if so, the details thereof?

**ANSWER**

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

(a) to (d): There is no conclusive data available to establish a direct correlation of death exclusively with air pollution. Air pollution is one of the many factors affecting respiratory ailments and associated diseases. Health is impacted by a number of factors which include food habits, occupational habits, socio-economic status, medical history, immunity, heredity, etc., of the individuals apart from the environment.

National Clean Air Programme (NCAP) has been launched by Ministry of Environment, Forest and Climate Change (MoEFCC) in January 2019 with an aim to improve air quality in 131 cities (non-attainment cities and Million Plus Cities) in 24 States/UTs by engaging all stakeholders. NCAP envisages reduction of 20-30% in PM concentrations by 2024-25 over baseline of 2017-18. Target has been revised to achieve reduction in PM10 level up to 40% or achievement of national standards ( $60 \mu\text{g}/\text{m}^3$ ) by 2025-26.

Under NCAP, an amount of Rs. 19,614.44 crores has been earmarked to 131 cities during the period FY 2019-20 till FY 2025-26 out of which 49 Million Plus Cities/Urban Agglomerations

are funded under XVth Finance Commission air quality grant and remaining 82 cities are funded by MoEF&CC under Control of Pollution Scheme. So far, an amount of Rs. 11,211.13 crores was released to 131 cities to implement City Action Plans in their respective cities. Details of funds provided to cities in Northern States are provided as **Annexure I**. Further, the steps taken by the Government to improve air quality are enclosed as **Annexure-II**.

The Commission for Air Quality Management in NCR and Adjoining Areas (CAQM) has been constituted for air pollution abatement and control in Delhi-NCR. CAQM has devised a comprehensive policy for air pollution abatement in NCR stipulating sector-specific action points quantifying targets along with timelines and implementation plan by various agencies in NCR States.

Revised Graded Response Action Plan (GRAP) was formulated for Delhi-NCR to tackle the issue of sudden rise in air pollution levels and directions were issued for its implementation. Actions listed for different AQI levels under GRAP are invoked from time to time by a sub-committee constituted by CAQM.

Further, specific steps taken by the Government to improve air quality in Delhi-NCR are enclosed as **Annexure-III**.

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**Details of Funds provided to cities in Northern States for implementation of NCAP**

<b>State</b>	<b>Fund Released (in Crores)</b>
Chandigarh	32.81
Delhi	42.69
Himachal Pradesh	17.50
Jammu & Kashmir	115.95
Punjab	102.70
Rajasthan	57.39
Uttar Pradesh	397.14
Uttrakhand	68.27

### Steps taken by the Government to improve Air Quality

#### **National Clean Air Programme:**

- City Action Plans (CAPs) have been prepared by all 131 cities and being implemented by Urban Local Bodies.
- The city specific clean air action plans prepared under NCAP target city specific air polluting sources like Soil & Road Dust, Vehicles, Domestic Fuel, MSW Burning, Construction Material and Industries.
- Performance based financial support is provided to these 131 cities for implementation of activities of City Action Plan.
- Further, funding for implementation of CAPs is mobilised through convergence of resources from various schemes of Central Government such as Swachh Bharat Mission SBM (Urban), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart City Mission, Sustainable Alternative towards Affordable Transportation (SATAT), Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME-II), Nagar Van Yojna, etc. and resources from State/UT Governments and its agencies such as Municipal Corporation, Urban Development authorities and Industrial development authorities etc.
- Public Grievance Redressal Portal (PGRP)/helpline have been developed by all 131 cities to address public complaints of air pollution in timely manner.
- Emergency Response System (ERS/ GRAP) have been developed by all 131 cities for taking action in air emergencies
- 95 cities out of 131 cities have shown improvement in air quality in terms of annual PM10 concentrations in FY 2023-24 with respect to the baseline of FY 2017-18. 18 cities have met National Ambient Air Quality Standards (NAAQS) for PM10 ( $60 \mu\text{g}/\text{m}^3$ ) in FY 2023-24.

#### **Other steps**

- Notification of Ambient Air Quality Standards.
- Revision of emission standards for industrial sectors from time to time.
- Setting up of monitoring network for assessment of ambient air quality.
- Introduction of cleaner/alternate fuels like gases fuel (CNG, LPG, etc.).
- Promotion of ethanol blending.
- Launching of National Air Quality Index.
- Leapfrogging from BS-IV to BS-VI fuel standards.
- Introduction of BS VI compliant vehicles across the country since April, 2020.
- Notification of Construction and Demolition Waste Management Rules.
- Installation of on-line continuous (24x7) monitoring devices by major industries.
- Installation of Vapour Recovery System (VRS) in new and existing petrol pumps selling gasoline >100kl per month in million plus cities and those selling >300kl per month in cities with population between 1 lakh to 1 million.
- For strengthening monitoring mechanism and effective compliance through self-regulatory mechanism, CPCB directed all 17 categories of highly polluting industries to install Online Continuous Emission Monitoring System (OCEMS).

- Shifting of all operational brick kilns to zig-zag technology.
- Department of Heavy Industry is providing subsidy on e-vehicles under Faster Adoption and Manufacture of (Hybrid & Electric Vehicles in India (FAME -II India) scheme.
- Sustainable Alternative Towards Affordable Transportation (SATAT) has been launched as an initiative to set up Compressed Bio-Gas (CBG) production plants and make CBG available in the market for use in automotive fuels.

**Steps taken by the Government to improve Air Quality in Delhi-NCR**

**1.0 Measures for control of vehicular emissions:**

- Leapfrogging from BS-IV to BS-VI fuel standards since 1st April, 2018 in NCT of Delhi.
- Environment Compensation Charges introduced for commercial vehicles entering Delhi in compliance of Hon'ble Supreme Court order
- Operationalization of Eastern and Western Peripheral Expressways to divert non-destined traffic from entering Delhi
- Directions issued by CAQM to Government of NCT of Delhi and State Governments of Haryana, Rajasthan and Uttar Pradesh for migration of public transport services, especially buses in NCR to cleaner modes. All state govt. bus services between Delhi and any city/town in the states of Haryana, Rajasthan and Uttar Pradesh to be operated only through EV /CNG/BS-VI diesel w.e.f. 01.11.2023.
- Ban on 15-year-old petrol and 10-year-old diesel vehicles as per Hon'ble Supreme Court and Hon'ble NGT orders.
- Installation of VRS system at 3256 petrol pumps in Delhi-NCR in compliance with orders of Hon'ble Supreme Court and Hon'ble NGT.

**2.0 Measures for control of industrial emission:**

- Installation of Online Continuous Emission Monitoring System (OCEMS) in red category air polluting industries in Delhi-NCR
- Industrial units in Delhi have shifted to PNG/cleaner fuels and, operational units in NCR have shifted to PNG/Biomass.
- Directions issued for conversion of brick kilns to zig-zag technology in Delhi and NCR. A total of 3003 out of 4608 brick kilns have converted to zig-zag technology including 1762 kilns in Haryana, 1024 kilns in U.P. and 217 kilns in Rajasthan. Brick kilns not converted to zig-zag technology are not permitted to operate.
- In order to control DG set emissions, CPCB provides funding for retrofitment/upgradation of DG sets in Govt. hospitals in Delhi-NCR and guidelines have been issued in this regard.
- Ban on use of pet coke and furnace oil as fuel in NCR States since October 24, 2017.
- An approved fuel list is in force in Delhi-NCR w.e.f. 01.01.2023. Industries operating on only PNG or biomass are permitted in NCR, except for specific requirement of other fuels by specific industries owing to technical, technological and process requirements. Out of 7759 fuel based industries in NCR, 7449 have been shifted to approved fuels, with the balance 310 industries under closure.
- Stringent PM emission norms for biomass based boilers have been prescribed for compliance in NCR.

**3.0 Measures for control of emissions from Stubble Burning in Delhi-NCR:**

- MoA&FW in 2018 launched scheme for providing subsidy for purchase of crop residue management machinery and establishment of custom hiring centres (CHCs) in NCT of Delhi and the States of Punjab, Haryana and Uttar Pradesh. Under the said scheme, financial assistance is provided to the farmers for purchase of crop residue management machinery and establishment of custom hiring centres. 50% subsidy on the cost of crop

residue management machinery is provided to the individual farmers and 80% subsidy is provided for establishment of Custom Hiring Centres (CHCs) of crop residue management machinery. During 2018-2024, total fund released to Delhi and other states under the said scheme is Rs. 3398.56 crores using which, over 2.7 lakh crop residue machineries have been delivered to individual farmers and CHCs, and over 39,000 CHCs have been established. Further, MoA&FW in 2023 revised guidelines under the scheme to support establishment of crop residue/paddy straw supply chain, by providing financial assistance on the capital cost of machinery and equipment required for Establishment of crop residue/paddy straw supply chain.

- CAQM has issued directions permitting use of PNG or biomass as industrial fuel in NCR except Delhi where only PNG is permitted as industrial fuel. CAQM has also issued directions for co-firing of 5-10% biomass with coal in thermal power plants located within 300 kms of Delhi, and, in captive power plants of industrial units located in NCR.
- Directions issued by CAQM to State governments of Punjab, Haryana and Uttar Pradesh to strictly and effectively implement revised action plan to eliminate and control stubble burning.
- CPCB has framed guidelines for providing one-time financial assistance for setting up of paddy straw based pelletization and torrefaction plants which may help in addressing the supply chain issues and the issue of open burning of paddy straw in agriculture fields in Northern Region. A corpus of Rs. 50 crores have been earmarked for utilisation through the guidelines. Under this scheme, 06 plants (Mansa- 03, Patiala- 01, Hoshiarpur- 01, Amritsar- 01) are operational with cumulative capacity of 28 TPH.

#### **4.0 C&D Waste**

- CPCB published guidelines (available on
  1. Environmental Management of Construction & Demolition (C & D) Wastes' in March, 2017
  2. 'Guidelines on DUST Mitigation Measures in Handling Construction Material & C&D Wastes' in November 2017.
  3. Disposal of legacy waste by bio-mining and bio-remediation to address open burning and landfill fires
- Directions issued to DPCC and NCR SPCBs to enforce installation of anti-smog guns and other dust control measures at C&D sites.
- Directions issued for setting up of a "Dust Control and Management Cell" by road owning/ maintaining/ construction agencies for monitoring and effective implementation of dust control measures in the NCR.
- Online monitoring mechanism (through web portal) introduced for monitoring compliance of dust mitigation measures for construction sites.

#### **5.0 Technical Interventions in Delhi-NCR**

- Trial study of various new technologies for control of air pollution have been got conducted by CPCB out of which encouraging results were observed in case of Dust Suppressant for control of emissions at construction sites and road dust. Advisory have been issued for use of dust suppressant by road owning and construction agencies in Delhi-NCR.

## **6.0 Close Monitoring & Ground level implementation in Delhi-NCR**

- 40 teams have been deputed by CPCB since December 2021, to assist CAQM, for conducting incognito inspections of air polluting industries, C&D sites, DG sets in Delhi-NCR to check implementation status of pollution control measures and compliance of other provisions of the Air (P&CP) Act, 1981. A total of 17824 units/ entities/ projects have been inspected as on June 14, 2024. Based on these inspections, CAQM has issued Closure Directions in 977 cases and out of these resumption orders have been issued in 774 cases while 111 cases are still under closure and cases of 92 balance units have been transferred to SPCBs / DPCC for final decision.
- Another 15 teams (other than the 33 teams for Punjab and Haryana) were provided to CAQM as Flying Squads for carrying out incognito inspections of units/activities in various sectors contributing to air pollution such as Industrial activities, Construction and Demolition projects, Unpaved roads, DG Sets etc.

## **7.0 Regulatory Actions in Delhi-NCR**

- Directions prescribing measures for control of pollution from various sources such as implementation of RECD system/ dual fuel kits in DG sets, use of cleaner fuels in industries, shift to EV/ CNG/ BS VI diesel fuel in transport sector, implementation of dust control measures at C&D sites etc., have been issued by CAQM, wherein CPCB is also a member and provided technical inputs to CAQM. Further, policy to curb air pollution in NCR has also been formulated.
- CPCB on November 03, 2023 issued Directions under Section 5 of the Environment (Protection) Act, 1986 to Delhi-NCR SPCBs/ PCCs for strict implementation of actions prescribed under stages of GRAP invoked from time to time, in view of the deteriorated air quality situation in Delhi-NCR.

## **8.0 Other steps in Delhi-NCR**

- Monitoring and enforcement of regulated use of DG sets in Delhi-NCR, only with stipulated emission control devices/systems, as per CAQM's Direction No. 76 dated 29.09.2023 read with addendum dated 22.02.2024. Constant vigil on use of only approved fuels in Delhi-NCR across all sectors, including monitoring & enforcement of compliance of emission norms through inspections and monitoring by CPCB and NCR State PCBs/ DPCC.
- Implementation of CAQM's Direction No. 78 dated 19.10.2023 for migration of public transport services especially intercity bus services, to Delhi-NCR, to cleaner modes.
- Completely phasing out diesel auto-rickshaws from the districts of Faridabad, Gurugram, Ghaziabad and GB Nagar latest by 31.12.2024 and to ensure plying of only CNG/ E-Auto in such areas.
- CAQM's Direction No. 79 dated 13.02.2024 was issued to all agencies for issuance of completion certificates / occupancy certificates for C&D projects only after ensuring that no closure order has been issued or in force for the site so as to ensure compliance of dust control/ abatement measures.
- CAQM's Advisory No. 12 dated 14.02.2024 has been issued to all Municipal bodies/ ULBs and all related departments / bodies of the NCR State Govts. / NCT of Delhi to ensure that all prescribed measures towards effective mitigation of dust from C&D projects, which are highly vulnerable to the dust emissions, are incorporated in all the



contract documents, agreements etc., including in road construction and maintenance projects.

- Strict implementation of directions related to mandatory registration of construction / demolition projects on plot area >500 sqmtr. on the respective web-portal of the NCR State, besides deployment of anti-smog guns in proportion to the site/area. Punitive measures, including closure directions for non-compliances in this regard.
- Implementation of a standard Schedule issued vide letter dated 06.02.2024 for imposition of Environmental Compensation (EC) Charges by enforcement agencies across all NCR States.
- CPCB has come out with System and Procedure for Emission Compliance Testing of Retro-fit Emission Control Devices (RECD) for Diesel Power Generating Set Engines up to Gross Mechanical Power 800 kW. RECDs have been developed for DG sets of 61-799 kW capacity and installation of RECDs is in progress in Delhi-NCR. In order to control DG set emissions, CPCB is funding retrofitment/ upgradation of DG sets in Govt. hospitals in Delhi-NCR under EPC (Environment Protection Charges) fund.
- In order to control road dust emissions, CPCB is funding NCR Urban Local Bodies (ULBs) for construction/ repair of roads and procurement of anti-smog guns and Mechanical road sweepers under EPC funds.

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