

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 1177
TO BE ANSWERED ON 05.12.2024

Air pollution in major cities

1177. SHRI PRAMOD TIWARI:

Will the MINISTER OF ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether air pollution in country's 10 major cities drive 7 per cent of deaths, with Delhi having the highest fraction of annual fatalities attributable to PM2.5 concentrations;
- (b) if so, the details thereof, major city-wise;
- (c) whether PM 2.5 levels exceed WHO limits;
- (d) if so, the details thereof and the reasons therefor;
- (e) whether experts are urging revisiting air quality management strategies; and
- (f) if so, the remedial steps proposed to be taken in this regard?

ANSWER

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

(a) to (f): There is no conclusive data available to establish a direct correlation of loss of life due to air pollution. Air pollution is one of the many factors affecting respiratory ailments and associated diseases. Health is affected by cumulative impact of 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.

WHO Air quality guideline for PM2.5 levels (annual average) is 5 $\mu\text{g}/\text{m}^3$. WHO Air quality guidelines are recommendatory in nature as a guidance document. However, countries notify ambient air quality standards based on technical capabilities, economic capacity, air quality management policies and other factors. Accordingly, MoEFCC has notified National Ambient Air Quality Standards (NAAQS) in 2009.

Air quality monitoring in terms of PM2.5 levels is monitored in 454 cities out of which 246 cities met national ambient air quality standards for annual average of PM2.5 levels in the year 2023. PM2.5 levels of metro cities measured in the year 2023 are enclosed at **Annexure I**.

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 130 cities (non-attainment cities and Million Plus Cities) in 24 States/UTs by engaging all stakeholders. NCAP envisages reduction by 20-30% in PM10 concentration over baseline in year 2017 by 2024-

25. Target has been revised to achieve reduction in PM10 level up to 40% or achievement of national standards (60 microgram/cubic meter) by 2025-26.

NCAP is a multi-sectoral initiative involving the coordinated efforts of the Central and State Governments, Urban Local Bodies (ULBs), and other stakeholders. It emphasizes source-specific mitigation measures through city, state, and national-level clean air action plans. Resources are mobilized through the convergence of Central Government schemes (e.g., Swachh Bharat Mission, Smart City Mission, PM e-bus Sewa, AMRUT, SATAT, and Nagar Van Yojana), state schemes, and city's own resources. Performance-based incentive grants from NCAP and the XV Finance Commission are provided to address critical gaps in action plan implementation.

Initiatives such as BS-VI fuel norms, solid waste management under the Swachh Bharat Mission, and implementation of Extended Producer Responsibility (EPR) framework for plastic and e-waste contribute to PM2.5 reductions.

As per the annual performance assessment carried out for 2023-24, 97 cities out of 130 cities have shown improvement in air quality in terms of PM10 concentrations in FY 2023-24 as compared to base levels of 2017-18. 55 cities have achieved reduction of 20% and above in PM10 levels in 2023-24 with respect to the levels of 2017-18. Further, 18 cities conform to national ambient air quality standards in terms of Particular Matter concentrations during FY 2023-24.

Some of the other measures taken by the Government for air quality management are placed at **Annexure II.**

Details of annual average of PM2.5 levels in metro cities during the year 2023

| Sr. No. | State | City | Annual average PM2.5 levels ($\mu\text{g}/\text{m}^3$) |
|----------------|--------------|------------------|--|
| 1 | Delhi | Delhi | 105 |
| 2 | Gujarat | Ahmedabad | 39 |
| 3 | Gujarat | Surat | 50 |
| 4 | Karnataka | Bangalore | 33 |
| 5 | Maharashtra | Mumbai | 47 |
| 6 | Maharashtra | Pune | 52 |
| 7 | Tamil Nadu | Chennai | 28 |
| 8 | Telangana | Hyderabad | 38 |
| 9 | West Bengal | Kolkata | 48 |

Note: National Ambient Air Quality Standards (NAAQS) and WHO Air Quality guidelines for PM2.5 concentrations (annual average) is $40 \mu\text{g}/\text{m}^3$ and $5 \mu\text{g}/\text{m}^3$, respectively.

Measures taken by the Government for air quality management

- i. Emission standards for more than 80 industries have been notified under Environment (Protection) Rules, 1986
- ii. Emission standards recently notified/revised:
 - a) Thermal power plants
 - b) Diesel/petrol/CNG generator sets
 - c) Industrial boilers
 - d) Lime Kilns
 - e) Brick kilns and conversion of zig-zag technology
 - f) Calcinated petcoke industry
 - g) Hot mix plants
- iii. Leapfrogging to Bharat Stage-VI (BS-VI) emissions norms from 1st April 2020
- iv. Vehicle Scrapping Policy, Rules for Registered Vehicle Scrapping Facilities and Automated Testing Stations by MoRTH
- v. Waste management rules for solid waste, plastic waste, hazardous waste, e-waste, battery waste, biomedical waste, 100% ash utilisation by Thermal Power Plants
- vi. Market-based Extended Producer Responsibility (EPR) regulations introduced for waste categories, viz. plastic packaging, e-waste, battery waste, waste tyres & used oil
- vii. 12 identified Single-Use Plastics (SUP) having high littering potential and low utility were banned from 1st July, 2022
- viii. Mandate for utilisation of minimum 5% of crop residue along with coal (pellets/bricklettes) in thermal power plants in NCR and adjoining areas
- ix. Categorization of industrial areas as Critically and Severely Polluted Areas (CPAs/SPAs) based on Comprehensive Environmental Pollution Index (CEPI).
