

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 964
TO BE ANSWERED ON 10.02.2025

National Clean Air Programme

964. SHRI DUSHYANT SINGH:

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

- (a) the details of progress made in improving air quality and reducing particulate matter (PM10) levels under the National Clean Air Programme (NCAP) and the XVth Finance Commission air quality grants, during the last three years, State and year-wise;
- (b) the details regarding current air quality improvement in major cities of the country, compared to global standards for particulate matter levels, along with key challenges faced in meeting the 40% reduction target by 2025-26;
- (c) the details of specific actions taken by the Government to address vehicular emissions, industrial pollutants and construction dust in cities under the NCAP; and
- (d) the steps taken to control pollution sources like vehicular emissions, industrial emissions, and waste burning?

ANSWER

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

(SHRI KIRTI VARDHAN SINGH)

(a) & (b): National Clean Air Programme (NCAP) was 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 through implementation of National, State and City level clean air action plans. NCAP envisages reduction in PM10 levels up to 40% or achievement of national standards (60 microgram/cubic meter) by 2025-26.

NCAP is 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.

City Specific Clean Air Action Plans have been prepared by all cities to implement air quality improvement measures in respective cities. These plans target air pollution sources like soil & road dust, vehicular emissions, waste burning, construction & demolition activities, and industrial pollution. In addition, funding for implementation of City Action Plans (CAPs) is mobilized

through the convergence of resources from various Central Government schemes such as Swachh Bharat Mission- Urban (SBM-U), Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart City Mission (SCM), Sustainable Alternative Towards Affordable Transportation (SATAT), Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME-II), and Nagar Van Yojana (NVY), as well as resources from State/UT Governments and agencies like Municipal Corporations and Urban Development authorities.

Further, an allocation of Rs. 19,611 crore has been made for 130 cities. It includes an allocation of Rs.16,539 crore to 48 million plus cities through 15th Finance Million Plus City Challenge Fund (MPCCF) for the period FY 2020-21 to 2025-26, and Rs.3072 crore to remaining 82 cities through Control of Pollution Scheme of MoEFCC for the period FY 2019-20 till 2025-26. These are performance linked grants for critical gap funding to implement air pollution mitigation measures, and an amount of Rs. 11,541.88 crore has been released based on achievement of air pollution reduction targets in respective cities.

The progress made in improving air quality in terms of particulate matter (PM10) levels under NCAP during the last three years (2021-22, 2022-23, and 2023-24) is provided at **Annexure I**.

Ministry of Environment, Forest and Climate Change has notified National Ambient Air Quality Standards (NAAQS) in 2009 for 12 parameters. NAAQS take into account of Indian conditions and factors such as background air pollution levels, pollutants and sources, exposure of pollutants and health impacts.

97 cities out of 130 cities have shown improvement in air quality in terms of annual PM10 concentrations in FY 2023-24 with respect to the levels of FY 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. 18 cities have met National Ambient Air Quality Standards (NAAQS) for PM10 (60 µg/m³) in FY 2023-24. Details of air quality improvement in cities covered under NCAP is enclosed at **Annexure II**.

(c) & (d): To address vehicular emissions, the Government has taken several proactive measures such as introduction of BS-VI fuel norms for vehicles from 1st April 2018 in NCT of Delhi and from 1st April 2020 for the rest of the country, introduction of vehicle scrapping policy and promotion of Electric Vehicles and charging infrastructure through various Central Schemes. A total of 1,130 E-buses have been deployed across 13 cities and 163 E-charging stations have been set up in 16 cities through convergence under Smart City Mission.

Further, under PM E-bus Sewa scheme of MoHUA, an allocation of ₹13,778 crore out of the total ₹57,613 crore scheme outlay has been provided for enhancing urban transport through deployment of electric buses and charging stations. A total of 76 NCAP cities are eligible for 6,889 electric buses under PM E-bus Sewa Scheme. So far, 3,989 buses and 61 depots have been sanctioned in 46 NCAP cities.

Further, Ministry of Road, Transport & Highways (MoRTH) has directed the State Govt./UT administrations to establish 64 Registered Vehicle Scrapping Facilities (RVSF) and 130

Automated Testing Stations (ATS) in NCAP cities. As of now, 22 RVSFs are operational, with 11 sanctioned, and 18 ATS are functional, with 42 more sanctioned.

Ministry of Environment, Forest and Climate Change notified the Environment Protection (End-of-Life Vehicles) Rules, 2025 on 06.01.2025 for environmentally sound management of end-of-life vehicles.

Under Swachh Bharat Mission-Urban 2.0 (SBM 2.0) Scheme of the Ministry of Housing and Urban Affairs (MoHUA), solid waste processing facilities of 42500 TPD in 130 cities, Construction and Demolition (C&D) waste facilities of 7,300 TPD in 130 cities, legacy waste remediation of 11.19 crore tonnes in 93 cities and procurement of 516 nos. of mechanical road sweepers in 118 cities have been undertaken.

To address open burning of waste, Public Grievance Redressal System (PGRS) App has been developed and floated in all 130 Cities for online registration of complaints by the citizens and quick redressal by local bodies. Further, local bodies under NCAP have been directed to clear garbage vulnerable points, which are prone to open burning.

For control of industrial pollution, a total of 4,933 out of 11,728 industries across 130 cities have switched to cleaner fuels. Further, industrial pollution is monitored by concerned SPCBs/PCCs through Consent Mechanism under the Air (Prevention and Control of Pollution) Act, 1981 and Environmental Clearance issued under EIA Notification, 2006, as applicable, by MoEFCC and its regional offices. 17 categories of highly polluting industries have been directed to install Online Emission and Effluent Monitoring System (OCEMS).

Some of the other key measures taken by the Central Government for air quality management including control of vehicular and industrial pollution are enclosed at **Annexure III**.

Annexure I

Annual Average PM10 levels ($\mu\text{g}/\text{m}^3$) in 130 Cities during the last three years (2021-22, 2022-23 and 2023-24)					
States	S. No.	Cities	FY 2021-2022	FY 2022-2023	FY 2023-24
Andhra Pradesh	1	Ananthapur	52	57	61
	2	Chittur	49	52	59
	3	Eluru	65	66	68
	4	Guntur	58	60	61
	5	Kadapa	54	57	42
	6	Kurnool	61	64	56
	7	Nellore	55	56	52
	8	Ongole	52	50	56
	9	Rajahmundry	68	68	76
	10	Srikakulam	75	71	68
	11	Vijayawada	67	90	61
	12	Visakhapatnam	98	116	120
	13	Vizhianagaram	71	75	73
Assam	14	Guwahati	103	106	119
	15	Nagaon	104	121	107
	16	Nalbari	99	128	127
	17	Silchar	45	49	32
	18	Sivasagar	47	42	41
Bihar	19	Patna	145	193	178
	20	Gaya	97	150	104
	21	Muzaffarpur	153	175	168
Chandigarh	22	Chandigarh	97	116	116
Chhattisgarh	23	Korba	61	70	61
	24	Durg Bhilainagar	58	70	68
	25	Raipur	61	78	76
Delhi	26	Delhi	196	209	208
Gujarat	27	Ahmedabad	113	91	98
	28	Rajkot	116	92	92
	29	Surat	100	118	103
	30	Vadodara	121	104	95
Haryana Himachal Pradesh	31	Faridabad	209	212	190
	32	Baddi	132	145	111
	33	Damtal	64	64	52
	34	Kala Amb	114	93	100

	35	Nalagarh	84	78	68
	36	Paonta Sahib	90	103	90
	37	Parwanoo	35	47	39
	38	Sunder Nagar	47	46	44
Jammu	39	Jammu	170	158	101
	40	Srinagar	111	88	96
Jharkhand	41	Dhanbad	235	203	138
	42	Jamshedpur	110	126	130
	43	Ranchi	110	107	107
Karnataka	44	Bengaluru	67	68	70
	45	Devanagere	57	61	66
	46	Gulbarga / Kalaburgi	84	74	56
	47	Hubli- Dharwad	68	76	71
Madhya Pradesh	48	Bhopal	116	124	113
	49	Dewas	81	105	99
	50	Gwalior	109	145	136
	51	Indore	103	109	99
	52	Jabalpur	115	125	91
	53	Sagar	79	83	74
	54	Ujjain	114	111	84
Maharashtra	55	Aurangabad	86	107	98
	56	Akola	64	62	85
	57	Amravati	66	68	87
	58	Badlapur	94	146	152
	59	Chandrapur	104	121	102
	60	Greater Mumbai	106	116	94
	61	Jalgaon	59	66	97
	62	Jalna	93	93	102
	63	Kolhapur	81	80	86
	64	Latur	57	53	66
	65	Nagpur	68	97	94
	66	Nashik	59	62	72
	67	Navi Mumbai	97	102	98
	68	Pune	85	96	98
	69	Sangli	60	69	77
	70	Solapur	60	76	96
	71	Thane	130	115	111
72	Ulhasnagar	77	128	149	
73	Vasai virar	174	155	125	

Meghalaya	74	Byrnihat	181	131	104
Nagaland	75	Dimapur	84	91	97
	76	Kohima	69	72	68
Odisha	77	Angul	97	98	167
	78	Balasore	74	82	124
	79	Bhubneshwar	95	118	114
	80	Cuttack	90	105	129
	81	Kalinga Nagar	114	104	101
	82	Rourkela	106	126	111
	83	Talcher	81	93	113
Punjab	84	Amritsar	118	120	119
	85	Dera Baba Nanak	71	58	56
	86	Dera Bassi	98	104	102
	87	Jalandhar	130	126	111
	88	Khanna	106	103	100
	89	Ludhiana	150	163	161
	90	Mandi Gobindgarh	122	131	126
	91	Naya Nangal	70	63	59
	92	Patiala	109	103	91
Rajasthan	93	Jaipur	126	143	148
	94	Alwar	112	116	127
	95	Jodhpur	161	146	124
	96	Kota	112	128	124
	97	Udaipur	122	128	121
Tamil Nadu	98	Chennai	57	66	63
	99	Madurai	53	68	68
	100	Trichy	45	47	47
	101	Tuticorin	67	54	57
Telangana	102	Hyderabad	88	83	81
	103	Nalgonda	70	55	59
	104	Sangareddy	83	86	81
Uttar Pradesh	105	Agra	146	118	116
	106	Allahabad	119	125	124
	107	Ghaziabad	216	198	172
	108	Kanpur	170	143	125
	109	Lucknow	148	149	137
	110	Meerut	186	177	149
	111	Varanasi	114	94	73
	112	Anpara	154	166	166

	113	Bareilly	175	110	80
	114	Firozabad	137	106	102
	115	Gajraula	155	194	167
	116	Gorakhpur	122	102	111
	117	Jhansi	128	118	96
	118	Khurja	173	150	104
	119	Moradabad	155	116	115
	120	Noida	203	202	182
	121	Raebareli	112	102	91
Uttarakhand	122	Dehradun	146	117	109
	123	Kashipur	119	112	98
	124	Rishikesh	117	103	76
West Bengal	125	Asansol	112	147	108
	126	Barrackpore	85	84	99
	127	Durgapur	168	139	106
	128	Haldia	94	91	87
	129	Howrah	125	125	111
	130	Kolkata	105	97	94

Annexure II

Improvement in PM10 concentrations of 130 Cities in FY 2023-24 w.r.t. FY 2017-18				
S. No.	Cities	PM10 concentrations in 2017-18 (µg/m³) (Annual Avg.)	PM10 concentrations in 2023-24 (µg/m³) (Annual Avg.)	Percentage reduction in PM10 concentrations in 2023-24 with respect to the year 2017-18 (%)
1.	Varanasi	230	73	68
2.	Bareilly	207	80	61
3.	Firozabad	247	102	59
4.	Dehradun	250	109	56
5.	Dhanbad	315	138	56
6.	Tuticorin	123	57	54
7.	Nalagarh	146	68	53
8.	Moradabad	222	115	48
9.	Khurja	195	104	47
10.	Trichy	88	47	47
11.	Kohima	127	68	46
12.	Lucknow	253	137	46
13.	Kanpur	227	125	45
14.	Kadapa	75	42	44
15.	Sivasagar	73	41	44
16.	Sunder Nagar	78	44	44
17.	Agra	202	116	43
18.	Greater Mumbai	161	94	42
19.	Rishikesh	129	76	41
20.	Parwanoo	66	39	41
21.	Byrnihat	175	104	41
22.	Ahmedabad	164	98	40
23.	Ghaziabad	285	172	40
24.	Rajkot	150	92	39
25.	Jalandhar	178	111	38
26.	Raebareli	145	91	37
27.	Amritsar	189	119	37
28.	Baddi	174	111	36
29.	Kolkata	147	94	36
30.	Jammu	157	101	36
31.	Silchar	49	32	35

32.	Jodhpur	189	124	34
33.	Vijayawada	91	61	33
34.	Naya Nangal	87	59	32
35.	Dimapur	142	97	32
36.	Khanna	142	100	30
37.	Durgapur	150	106	29
38.	Kurnool	79	56	29
39.	Dera Baba Nanak	79	56	29
40.	Vadodara	133	95	29
41.	Allahabad	169	124	27
42.	Asansol	147	108	27
43.	Srinagar	132**	96	27
44.	Hyderabad	110	81	26
45.	Gorakhpur	150	111	26
46.	Ananthpur	78	59	24
47.	Ranchi	141	107	24
48.	Bengaluru	92	70	24
49.	Akola	111	85	23
50.	Durg Bhilainagar	86	68	21
51.	Surat	130	103	21
52.	Noida	229	182	21
53.	Howrah	139	111	20
54.	Thane	138	111	20
55.	Latur	82	66	20
56.	Nellore	64	52	19
57.	Gajraula	204	167	18
58.	Faridabad	229**	190	17
59.	Alwar	152	127	16
60.	Chittur	70	59	16
61.	Kala Amb	118	100	15
62.	Mandi Gobindgarh	148	126	15
63.	Amravati	102	87	15
64.	Patiala	106	91	14
65.	Jaipur	172	148	14
66.	Ongole	65	56	14
67.	Delhi	241	208	14
68.	Chandrapur	118	102	14
69.	Nashik	82	72	12
70.	Jhansi	109	96	12

71.	Sangli	87	77	11
72.	Devanagere	74	66	11
73.	Kota	139	124	11
74.	Rajahmundry	85	76	11
75.	Hubli-Dharwad	79	71	10
76.	Jabalpur	101	91	10
77.	Ujjain	93	84	10
78.	Guntur	66	61	8
79.	Kalinga Nagar	109	101	7
80.	Meerut	159	149	6
81.	Nagpur	100	94	6
82.	Eluru	72	68	6
83.	Madurai	72	68	6
84.	Damtal	55	52	5
85.	Haldia	92	87	5
86.	Anpara	175	166	5
87.	Badlapur	160	152	5
88.	Udaipur	127	121	5
89.	Sangareddy	85	81	5
90.	Chennai	66	63	5
91.	Ludhiana	168	161	4
92.	Pune	102	98	4
93.	Jamshedpur	135	130	4
94.	Kolhapur	89	86	3
95.	Ulhasnagar	153	149	3
96.	Srikakulam	69	68	1
97.	Kashipur	99	98	1
98.	Talcher	113	113	0
99.	Nalgonda	59	59	0
100.	Bhopal	112	113	-1
101.	Sagar	73	74	-1
102.	Vizianagaram	72	73	-1
103.	Chandigarh	114	116	-2
104.	Gulbarga	55	56	-2
105.	Jalna	99	102	-3
106.	Patna	172	178	-3
107.	Korba	57	59	-4
108.	Paonta Sahib	84	90	-7
109.	Gwalior	126	136	-8
110.	Raipur	70	76	-9
111.	Navi Mumbai	88	98	-11

112.	Rourkela	99	111	-12
113.	Muzaffarpur	147	168	-14
114.	Barrackpore	86	99	-15
115.	Guwahati	103	119	-16
116.	Dera Bassi	88	102	-16
117.	Solapur	81	96	-19
118.	Dewas	83	99	-19
119.	Indore	82	99	-21
120.	Vasai Virar	99	125	-26
121.	Nagaon	82	107	-30
122.	Aurangabad	75	98	-31
123.	Gaya	79	104	-32
124.	Bhubaneswar	85	114	-34
125.	Jalgaon	70	97	-39
126.	Cuttack	93	129	-39
127.	Nalbari	87	127	-46
128.	Balasore	84	124	-48
129.	Visakhapatnam	76	120	-58
130.	Angul	97	167	-72

** PM10 levels in the FY 2017-18 for Faridabad and Srinagar are not available. PM10 levels of FY 2020-21 for Faridabad and PM10 levels of FY 2018-19 for Srinagar have been considered as a baseline.

* Patancheru non-attainment city has been merged with Hyderabad Urban Agglomeration and accordingly revised number of cities covered under NCAP is 130.

Measures taken by the Central 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/brickettes) 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).
