

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 4047**  
TO BE ANSWERED ON: 07.04.2022

**Achieving air pollution targets**

4047. DR. L. HANUMANTHAI AH:  
SMT. PHULO DEVI NETAM:

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

- (a) the annual levels of PM 2.5 and PM 10, from 2017 till date;
- (b) whether Government is on track to meet the objective of reducing PM 2.5 levels to less than 50 by 2022 as per the NITI Aayog New India @ 75 strategy report;
- (c) if so, the details thereof, and if not, the reasons therefor; and
- (d) details of measures taken to curb Methane emission from the burning of solid waste?

**ANSWER**

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

(SHRI ASHWINI KUMAR CHOUBEY)

(a) to (c):

The city-wise profiles of PM<sub>10</sub> concentration from 2017 to 2020-2021 are given in **Annexure I**. The analysis of ambient air quality data of Particulate Matter of 132 Non-Attainment Cities (NACs) state-wise indicated that PM<sub>10</sub> concentration has decreased in 107 cities in 2020-2021 as compared to 2018-2019, whereas 22 cities showed an increase in PM<sub>10</sub> concentration and 1 city showed no change in concentration. The ambient air quality data is not available in Vasai Virar and Faridabad for comparison.

The Government has launched National Clean Air Programme (NCAP) in 2019 as a national-level strategy to reduce air pollution levels across the country. PRANA a portal for monitoring implementation of NCAP has also been launched.

(d): Burning of solid waste is prohibited under Solid Waste Management Rules, 2016. The municipal solid waste present at dumpsites and landfills is a significant contributor to landfill gas (LFG), which is mainly constituted of methane and carbon dioxide. Under Swachh Bharat Mission Urban 2.0, there is a vision of 'Garbage Free Cities' over the next five years through remediation of legacy waste dumpsites and complete scientific management of all waste fractions, including safe disposal in scientific landfills.

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**Annexure I****Cities showing decreased concentration (107 cities) of PM<sub>10</sub> - 2018-2019 to 2020-2021**

No.	States / UTs	Cities	Average concentration of PM <sub>10</sub> (µg/m <sup>3</sup> )			
			2017 (C.Y)	2018- 2019(F.Y.)	2019- 2020(F.Y.)	2020- 2021(F.Y.)
1.	Andhra Pradesh	Anantpur	78	68	60	58
2.	Andhra Pradesh	Chittur	69	63	51	41
3.	Andhra Pradesh	Eluru	74	68	64	58
4.	Andhra Pradesh	Kadapa	74	61	48	50
5.	Andhra Pradesh	Kurnool	82	64	56	52
6.	Andhra Pradesh	Nellore	74	64	67	56
7.	Andhra Pradesh	Ongole	65	64	59	49
8.	Andhra Pradesh	Rajamahendravaram	65	77	61	69
9.	Andhra Pradesh	Srikakulam	70	71	66	66
10.	Andhra Pradesh	Visakhapatnam	73	108	68	63
11.	Andhra Pradesh	Vizianagaram	72	66	57	56
12.	Assam	Nagaon	75	97	92	90
13.	Assam	Nalbari	95	91	75	57
14.	Assam	Silchar	49	48	45	43
15.	Assam	Sivasagar	81	68	55	48
16.	Bihar	Gaya	77	82	76	71
17.	Bihar	Patna	156	211	170	143
18.	Chandigarh	Chandigarh	109	98	92	90
19.	Chattisgarh	Bhilai Nagar	97	78	75	56
20.	Chattisgarh	Korba	58	61	54	46
21.	Chattisgarh	Raipur	103	68	63	55
22.	Delhi	Delhi	241	226	192	193
23.	Gujarat	Ahmedabad	120	233	116	120
24.	Gujarat	Rajkot	NA	182	113	94
25.	Gujarat	Surat	106	175	109	93
26.	Gujarat	Vadodara	108	199	108	95
27.	Himachal Pradesh	Baddi	173	179	133	123
28.	Himachal Pradesh	Kala Amb	119	102	95	64
29.	Himachal Pradesh	Paonta Sahib	84	86	98	78
30.	Himachal Pradesh	Parwanoo	65	61	60	44
31.	Himachal Pradesh	Sunder Nagar	73	82	69	63
32.	Haryana	Faridabad	NA	NA	NA	229
33.	Jharkhand	Dhanbad	238	252	211	198
34.	Jharkhand	Jamshedpur	NA	121	138	96
35.	Jharkhand	Ranchi	NA	116	108	105
36.	Karnataka	Bengaluru	92	92	73	62
37.	Karnataka	Hubli-Dharwad	79	85	78	69
38.	Madhya Pradesh	Bhopal	93	134	141	114
39.	Madhya Pradesh	Dewas	75	107	91	93
40.	Madhya Pradesh	Gwalior	110	133	136	125
41.	Madhya Pradesh	Sagar	69	75	71	64
42.	Madhya Pradesh	Ujjain	75	113	90	104

No.	States / UTs	Cities	Average concentration of PM <sub>10</sub> (µg/m <sup>3</sup> )			
			2017 (C.Y)	2018- 2019(F.Y.)	2019- 2020(F.Y.)	2020- 2021(F.Y.)
43.	Maharashtra	Akola	127	71	66	54
44.	Maharashtra	Amravati	106	106	89	58
45.	Maharashtra	Aurangabad	83	77	76	65
46.	Maharashtra	Badlapur	159	148	88	67
47.	Maharashtra	Chandrapur	146	107	93	100
48.	Maharashtra	Greater Mumbai	151	132	106	98
49.	Maharashtra	Jalgaon	77	70	57	53
50.	Maharashtra	Jalna	101	101	95	86
51.	Maharashtra	Kolhapur	90	89	95	83
52.	Maharashtra	Latur	81	90	84	54
53.	Maharashtra	Nagpur	102	93	80	68
54.	Maharashtra	Nashik	81	73	57	51
55.	Maharashtra	Navi Mumbai	105	80	54	52
56.	Maharashtra	Pune	102	103	81	69
57.	Maharashtra	Sangli	76	80	70	71
58.	Maharashtra	Thane	125	118	79	105
59.	Maharashtra	Ulhasnagar	149	131	83	66
60.	Maharashtra	Vasai Virar	NA	NA	99	NA
61.	Meghalaya	Byrnihat	174	155	97	127
62.	Nagaland	Dimapur	138	124	84	85
63.	Nagaland	Kohima	114	103	81	84
64.	Odisha	Angul	94	101	95	88
65.	Odisha	Balasore	83	86	86	78
66.	Odisha	Bhubneshwar	91	100	103	78
67.	Odisha	Cuttack	86	116	104	86
68.	Odisha	Kalinga Nagar	126	120	113	104
69.	Odisha	Rourkela	117	118	112	96
70.	Odisha	Talcher	96	113	122	98
71.	Punjab	Amritsar	168	124	109	113
72.	Punjab	Dera Baba Nanak	90	84	68	66
73.	Punjab	Khanna	139	104	113	101
74.	Rajasthan	Alwar	134	176	126	110
75.	Rajasthan	Jaipur	177	144	124	112
76.	Rajasthan	Jodhpur	180	218	167	155
77.	Rajasthan	Kota	130	144	102	100
78.	Rajasthan	Udaipur	126	141	136	109
79.	Tamil Nadu	Chennai	NA	79	60	60
80.	Tamil Nadu	Madurai	67	85	66	57
81.	Tamil Nadu	Trichy	86	109	58	40
82.	Tamil Nadu	Tuticorin	132	98	84	84
83.	Telangana	Hyderabad	108	96	86	88
84.	Telangana	Patencheru	78	81	87	77
85.	Telangana	Sangareddy	79	82	87	77
86.	Uttar Pradesh	Agra	185	196	163	188
87.	Uttar Pradesh	Allahabad	140	225	219	184

No.	States / UTs	Cities	Average concentration of PM <sub>10</sub> (µg/m <sup>3</sup> )			
			2017 (C.Y)	2018- 2019(F.Y.)	2019- 2020(F.Y.)	2020- 2021(F.Y.)
88.	Uttar Pradesh	Anpara	153	176	169	142
89.	Uttar Pradesh	Bareilly	195	221	185	193
90.	Uttar Pradesh	Firozabad	221	211	213	186
91.	Uttar Pradesh	Gajraula	206	228	217	168
92.	Uttar Pradesh	Ghaziabad	280	256	218	218
93.	Uttar Pradesh	Gorakpur	186	284	278	168
94.	Uttar Pradesh	Kanpur	224	217	200	169
95.	Uttar Pradesh	Khurja	208	202	226	194
96.	Uttar Pradesh	Lucknow	246	210	216	209
97.	Uttar Pradesh	Moradabad	217	218	243	206
98.	Uttar Pradesh	Noida	216	252	213	197
99.	Uttar Pradesh	Raebareli	141	140	161	98
100.	Uttar Pradesh	Varanasi	244	211	180	168
101.	Uttarakhand	Dehradun	248	192	166	144
102.	Uttarakhand	Rishikesh	128	133	136	77
103.	West Bengal	Asansol	163	123	124	114
104.	West Bengal	Barrackpore	90	107	108	75
105.	West Bengal	Durgapur	154	144	125	103
106.	West Bengal	Haldia	97	95	69	93
107.	West Bengal	Howrah	110	145	144	117
108.	West Bengal	Kolkata	119	128	101	99
109.	West Bengal	Rani Ganj	163	161	177	107

**Cities showing increased concentration (22 cities) of PM<sub>10</sub> - 2018-2019 to 2020-2021**

No.	States / UTs	Cities	Average concentration (F.Y.) of PM <sub>10</sub> (µg/m <sup>3</sup> )			
			2017 (C.Y.)	2018- 2019(F.Y.)	2019- 2020(F.Y.)	2020- 2021(F.Y.)
1.	Andhra Pradesh	Guntur	69	49	58	56
2.	Andhra Pradesh	Vijayawada	99	64	97	104
3.	Assam	Guwahati	106	109	113	114
4.	Bihar	Muzafarpur	167	148	138	180
5.	Himachal Pradesh	Damtal	62	62	52	65
6.	Himachal Pradesh	Nalagarh	147	78	113	90
7.	Jammu&Kashmir	Jammu	149	157	145	186
8.	Jammu&Kashmir	Srinagar	NA	132	132	163
9.	Karnataka	Devanagere	87	50	66	72
10.	Karnataka	Gulburga / Kalaburgi	54	50	80	92
11.	Madhya Pradesh	Indore	80	85	91	96
12.	Madhya Pradesh	Jabalpur	NA	95	111	106
13.	Maharashtra	Solapur	64	65	90	79
14.	Punjab	DeraBassi	93	100	100	105
15.	Punjab	Jalandhar	223	115	121	150
16.	Punjab	Ludhiana	162	123	115	129
17.	Punjab	NayaNangal	90	94	98	95
18.	Punjab	Patiala	101	98	107	102
19.	Telangana	Nalgonda	60	59	59	60
20.	Uttar Pradesh	Jhansi	113	94	102	99
21.	Uttar Pradesh	Meerut	NA	178	203	200
22.	Uttarakhand	Kashipur	111	110	130	129

**Cities showing no change in concentration (01 cities) of PM<sub>10</sub>- 2018-2019 to 2020-2021**

States / UTs	No.	Cities	Average concentration (F.Y.) of PM <sub>10</sub> (µg/m <sup>3</sup> )			
			2017 (C.Y.)	2018-2019 (F.Y)	2019-2020 (F.Y)	2020- 2021(F.Y)
Punjab	1.	MandiGobindgarh	136	131	130	131

*Note: NA; Not Available; Vasai Virar - data not available for F.Y. 2018-19 and F.Y 2020-21 ; Faridabad- data not available for F.Y. 2018-19, 2019-2020.*

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