City snapshots

Delhi

Delhi spent ₹ 10.77 Crores on improving its air quality – only 28% of the ₹38.21 Crores disbursed to the city by the union government.

The city saw PM2.5 levels fall by 5.9% in 2023 (compared to 2019) and PM10 levels by 3.9% (compared to 2019). There is still much ground to cover to meet the 40% reduction target set by the National Clean Air Programme (NCAP) for 2026.

Over the five years, the city's PM2.5 levels remained in the Central Pollution Control Board's (CPCB's) 'poor' category (91-120 µg/m³), while its PM10 levels were in the 'moderately polluted' category (100-250 µg/m³). (For CPCB's list of categories for all pollutants, see the figure at the end of this document.)

Between 2019 and 2023, the number of active monitors in the city for both PM2.5 and PM10 was 37.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	108.4	95.3	107.6	99.5	102.0	2.50%	-5.90%
PM10 (ug/m³)	216.8	184.9	214.2	213.1	208.4	-2.20%	-3.90%

Mumbai

Mumbai, which spent 72.4% or ₹ 680.32 Crores of the ₹ 938.59 Crores disbursed to it under the NCAP, saw a deterioration in particulate matter levels between 2019 and 2023. PM2.5 levels worsened by 38% over the five years and PM10 levels by 36%.

However, the city's PM2.5 levels were in CPCB's 'satisfactory' category (31-60 µg/m³) for all five years and its PM10 levels moved from 'satisfactory' (50-100 µg/m³) to 'moderately polluted' (101-250 µg/m³).

The city did expand its monitoring network between 2019 and 2023. The number of active monitors for both pollutants went up from 9 in 2019 to 22 for PM2.5 in 2023 and 23 for PM10.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	35.8	59.7	47.8	50.6	49.5	-2.20%	38.10%
PM10 (ug/m³)	80.6	129.3	110.0	119.7	110.3	-7.80%	36.90%

Hyderabad

Hyderabad spent a majority of the funds disbursed to it by the union government to improve air quality – ₹ 365.6 Crores or 80% of a total of ₹ 454.3 Crores.

Between 2019 and 2023, the city's PM2.5 levels improved for both PM2.5 (by 7%) and PM10 (by 7.1%). PM2.5 and PM10 levels were in CPCB's 'satisfactory' category for both pollutants for all five years. (For PM2.5, 'satisfactory' levels are in the 31-60 μg/m³ range and for PM10, they're in the 50-100 μg/m³ range.)

The city's active PM2.5 monitors went from 6 in 2019 to 14 in 2023, while those for PM10 went up from 5 to 13.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	41.6	36.3	39.7	34.2	38.7	13.10%	-7.00%
PM10 (ug/m³)	91.8	80.9	88.0	69.0	85.3	23.60%	-7.10%

Bengaluru

Bengaluru spent a mere 1% of funds disbursed to it by the union government, that is, only ₹ 5.47 Crores out of a total of ₹ 541.1 Crores.

From 2019 and 2023, the city's PM2.5 levels improved by 2% and its PM10 levels by 11.2%. For both pollutants, levels were in the CPCB's 'satisfactory' category over the five years. (For details about CPCB categories, see the figure at the end of this document.)

The city also expanded its monitoring network. It had 7 active monitors for both pollutants in 2019, while in 2023, the number of active monitors went up to 11 for PM2.5 and 13 for PM10.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	34.4	28.7	31.0	36.4	33.8	-7.10%	-2.00%
PM10 (ug/m³)	77.8	71.3	62.8	72.9	69.1	-5.20%	-11.20%

Ahmedabad

Ahmedabad spent nearly three-fourths of the funds given to it by the union government to improve air quality. Of the ₹ 365.54 Crores the city received, it spent ₹ 261.93 Crores or 71.6%.

Between 2019 and 2023, the city saw reductions in the levels of both PM2.5 (18.9%) and PM10 (9.3%). PM2.5 moved from CPCB's 'moderately polluted' category in 2019 to its 'satifactory' category in 2023, while PM10 remained in the 'moderately polluted' category for all five years. (For details about CPCB categories, see the figure at the end of this document.)

The number of active monitors for both pollutants went up from 1 in 2019 to 8 in 2023.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	61.7	46.7	45.1	57.9	50.0	-13.50%	-18.90%
PM10 (ug/m³)	120.0	108.7	93.7	119.2	108.9	-8.70%	-9.30%

Chennai

Chennai spent more than 100% of the funds it received from the union government to improve air quality – that is, all of ₹ 367 Crores and a little more.

Its PM2.5 levels improved by 33.4% between 2019 and 2023, moving from CPCB's 'satisfactory' category (31-60 µg/m³) to its 'good' category (0-30 µg/m³) over the five years.

The city's active monitors for both pollutants increased, from 3 in 2019 to 8 in 2023 for PM2.5 and from 0 in 2019 to 8 in 2023 for PM10.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	45.4	38.2	26.5	28.0	30.2	7.80%	-33.40%
PM10 (ug/m³)	NA	85.4	59.4	62.5	68.9	10.40%	NA

Pune

Pune spent 25.9% of the funds it received, that is, ₹ 70.48 Crores out of a total of ₹ 271.3 Crores.

From 2019 to 2023, the city's PM levels worsened – PM2.5 by 9.8% and PM10 by 8.4%. That said, PM2.5 levels were in the CPCB's 'satisfactory' category (31-60 µg/m³) over the five-year period, while PM10 levels slid up, from 'satisfactory' (50-100 µg/m³) to 'moderately polluted' (101-250 µg/m³).

The number of active monitors for both pollutants went up from 1 to 7 over the five-year period.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	47.9	61.7	41.9	79.2	52.6	-33.60%	9.80%
PM10 (ug/m³)	86.9	98.6	67.8	102.6	94.2	-8.30%	8.40%

Kolkata

Kolkata used 92.5% of the funds it received from the union government, that is, ₹ 636.18 Crores out of a total of ₹ 687.25 Crores.

The city's saw reductions in both PM2.5 and PM10 levels – PM2.5 by 16.9% and PM10 by 13.5% – between 2019 and 2023. PM2.5 stayed in CPCB's 'satisfactory' category (31-60 µg/m³) for all five years, whereas PM10 moved from 'moderately polluted' (101-250 µg/m³) to 'satisfactory' (51-100 µg/m³).

The city's active monitor for PM2.5 and PM10 remained constant at 7 over the five-year period.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	57.1	49.1	57.6	50.7	47.4	-6.50%	-16.90%
PM10 (ug/m³)	108.0	97.2	111.5	101.5	93.5	-7.90%	-13.50%

Jaipur

Jaipur used 80% or ₹ 260.71 Crores of the ₹ 325.85 Crores it received from the union government to improve its air quality.

However, it saw an increase of 13% for both PM2.5 and PM10 in 2023 as compared to 2019. PM2.5 stayed within the CPCB's 'satisfactory' category (31-60 µg/m³) between 2019 and 2023, while PM10 was in the 'moderately polluted' category (101-250 µg/m³).

The city's active monitors for both pollutants increased from 3 in 2019 to 6 in 2023.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	49.2	45.0	57.6	58.2	55.6	-4.40%	13.00%
PM10 (ug/m³)	114.8	102.5	120.0	128.1	129.7	1.20%	13.00%

Lucknow

Lucknow used a little more than half or 51.7% of the funds it received from the union government. That is, It utilised ₹ 199.5 Crores out of a total of ₹ 385.83 Crores disbursed to its urban local body.

Between 2019 and 2023, the city's PM2.5 levels saw a consistent, year-on-year decline of 41.2%. They moved from CPCB's 'moderately polluted' (61-90 µg/m³) category to 'satisfactory' (31-60 µg/m³).

In 2019, the number of active monitors for PM2.5 were 4 and those for PM10 were 0. In 2023, the city's active monitors went up to 6 for both pollutants.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	98.0	89.5	68.1	64.2	57.6	-10.20%	-41.20%
PM10 (ug/m³)	NA	217.6	136.4	134.1	120.7	-10.00%	NA

Patna

Patna spent a little more than half of the funds it received from the government to improve air quality – that is, 52.8% or ₹ 157.72 Crores out of a total of ₹ 298.57 Crores.

The city's PM2.5 improved by 25.2% between 2019 and 2023, but its PM10 worsened by 5.8%. PM2.5 moved from CPCB's 'poor' category to 'moderately polluted', while PM10 went in the opposite direction, from 'moderately polluted' to 'poor'. (For details about CPCB categories, see the figure at the end of this document.)

The number of active PM2.5 monitors increased from 4 in 2019 to 6 in 2023, while the active monitors for PM10 went up from 3 to 5 over the five years.

Pollutant	2019	2020	2021	2022	2023	% Change 2022-2023	% Change 2019-2023
PM2.5 (ug/m³)	119.6	72.8	76.5	91.3	89.5	-2.00%	-25.20%
PM10 (ug/m³)	200.5	126.4	154.8	191.6	212.1	10.70%	5.80%

Central Pollution Control Board's categories for PM2.5 and PM10

AQI Category	AQI	Concentration range*							
		PM$_{10}$	PM$_{2.5}$	NO$_2$	O$_3$	CO	SO$_2$	NH$_3$	Pb
Good	0 - 50	0 - 50	0 - 30	0 - 40	0 - 50	0 - 1.0	0 - 40	0 - 200	0 - 0.5
Satisfactory	51 - 100	51 - 100	31 - 60	41 - 80	51 - 100	1.1 - 2.0	41 - 80	201 - 400	0.5 - 1.0
Moderately polluted	101 - 200	101 - 250	61 - 90	81 - 180	101 - 168	2.1 - 10	81 - 380	401 - 800	1.1 - 2.0
Poor	201 - 300	251 - 350	91 - 120	181 - 280	169 - 208	10 - 17	381 - 800	801 - 1200	2.1 - 3.0
Very poor	301 - 400	351 - 430	121 - 250	281 - 400	209 - 748*	17 - 34	801 - 1600	1200 -1800	3.1 - 3.5
Severe	401 - 500	430 +	250+	400+	748+*	34+	1600+	1800+	3.5+

* CO in mg/m^3 and other pollutants in µg/m^3; 2h-hourly average values for PM$_{10}$, PM$_{2.5}$, NO$_2$, SO$_2$, NH$_3$, and Pb, and 8-hourly values for CO and O$_3$.

Source: https://cpcb.nic.in/