

CREA

Centre for Research on Energy and Clean Air

NCAP progress and monthly ambient air quality snapshot for India

April 2025

● Good ● Satisfactory ● Moderate ● Poor ● Very Poor

Key highlights

National Clean Air Programme (NCAP) progress during FY 2024-25:

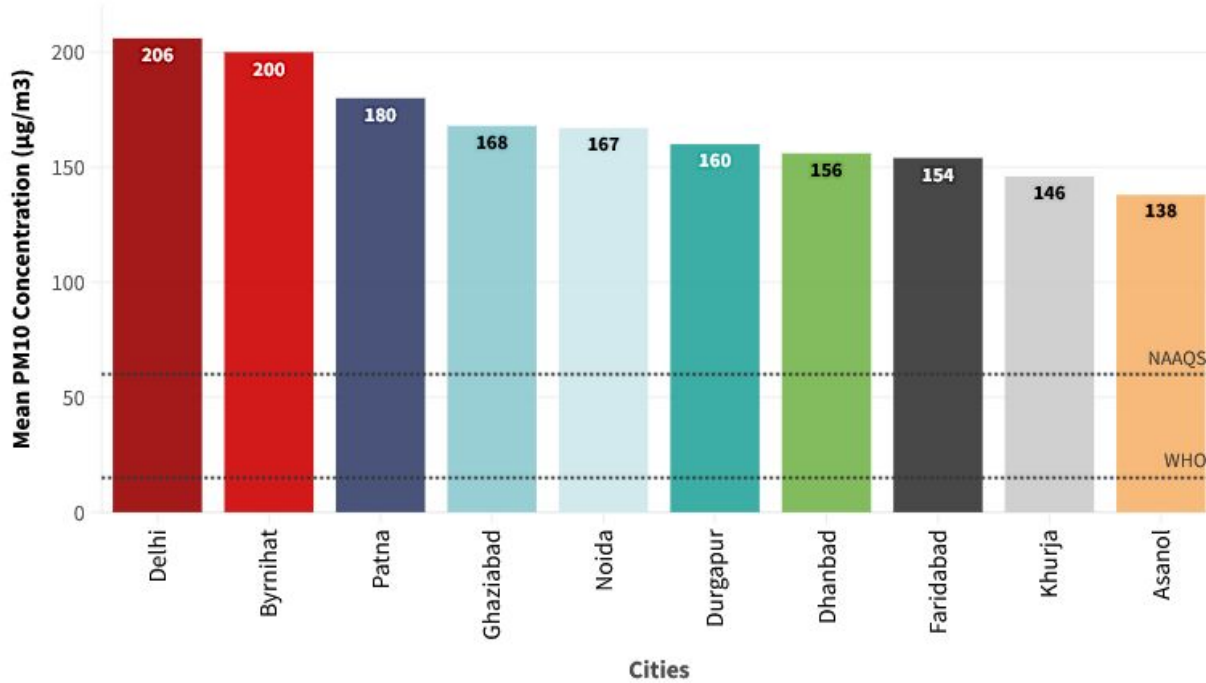
- Out of 130 cities under the National Clean Air Programme (NCAP), 28 still do not have Continuous Ambient Air Quality Monitoring Stations (CAAQMS), indicating critical gaps in real-time monitoring infrastructure. PM10 Data from the remaining 102 cities with CAAQMS was analysed for the period April 1, 2024 to March 31, 2025 (FY 24-25).
- Delhi recorded the highest annual (FY 24-25) PM10 concentration at 206 $\mu\text{g}/\text{m}^3$ among NCAP cities, followed by Byrnihat at 200 $\mu\text{g}/\text{m}^3$, and Patna at 180 $\mu\text{g}/\text{m}^3$ – each over three times higher than the national standard of 60 $\mu\text{g}/\text{m}^3$.
- Compared to the previous year (FY 23-24), PM10 levels decreased in 69 NCAP cities while 33 cities saw an increase during FY 24-25.
- Compared to the NCAP baseline year of 2017-18, PM10 levels increased in 23 cities and remained unchanged in two cities. The remaining cities showed varying degrees of improvement: a 1-10% decrease in 18 cities, 10-20% decrease in 15 cities, 20-30% decrease in 12 cities, 30-40% decrease in 11 cities, and an over 40% decrease in 21 cities.
 - Ten cities in Uttar Pradesh recorded an over 40% reduction in PM10 levels compared to the baseline year, followed by two cities each in Uttarakhand and Punjab. One city each from Tamil Nadu, Jharkhand, Jammu & Kashmir, Rajasthan, Nagaland, Maharashtra, and West Bengal also achieved an over 40% reduction.
 - Odisha and Maharashtra had the highest number of cities with increased PM10 levels at five cities each. Assam reported four such cities, Madhya Pradesh had three, while Bihar, West Bengal, and Chhattisgarh had two cities each. Chandigarh and Andhra Pradesh each had one city where PM10 levels increased.
 - Bareilly in Uttar Pradesh recorded the highest reduction in PM10 levels since the baseline year at 78%. In contrast, Jalgaon in Maharashtra recorded the highest increase at 57%. Delhi had a 15% reduction in PM10 levels.
- Despite these improvements, 91 out of the 102 NCAP cities with CAAQMS data still exceed the PM10 national standard in FY 24-25.

March Monthly Snapshot:

- **Compliance:** In March 2025, 209 out of 240 cities with more than 80% of days with continuous ambient air quality monitoring stations (CAAQMS) data available recorded PM_{2.5} concentrations below India's National Ambient Air Quality Standards (NAAQS) of 60 µg/m³. Only six cities complied with the World Health Organization's (WHO) daily safe guideline concentration of 15 µg/m³.
 - **NCAP cities:** The monthly average PM_{2.5} levels in 14 National Clean Air Programme (NCAP) cities (out of 98 cities with more than 80% of days with data) surpassed India's daily NAAQS for PM_{2.5}, while all 98 cities exceeded the WHO's daily guideline.
 - **Non-NCAP cities:** Among the 142 non-NCAP cities with over 80% of days with CAAQMS data, 136 cities reported monthly average PM_{2.5} levels above the WHO daily guideline. 17 cities exceeded the daily NAAQS.
- **Most polluted city: Byrnihat ranked as the most polluted city in India in March 2025**, recording a monthly average PM_{2.5} concentration of 160 µg/m³, surpassing the daily NAAQS limit of 60 µg/m³ 28 days in the month. Byrnihat recorded four days in the 'Severe' category (PM_{2.5} > 250 µg/m³), 16 days in 'Very Poor', eight days in 'Poor', one day in 'Moderate', and two days in the 'Satisfactory' category.
 - Hajipur, Talcher, Patna, Chandigarh, Guwahati, Barrackpore, Muzaffarpur, and Howrah were in the top 10 cities, with Hajipur and Howrah in third and tenth place, respectively.
 - **Assam accounted for three of India's top 10 most polluted cities, followed by two cities each from Bihar, Odisha and Haryana, and one from Uttar Pradesh.**
- **State with most polluted cities:** Among all Indian states, Bihar had the highest number of cities exceeding NAAQS, with seven out of 24 recording PM_{2.5} higher than NAAQS. Odisha also had a high proportion of polluted cities, with five out of 13 exceeding NAAQS. Similarly, Assam had three out of six cities breaching NAAQS limits.
- **Cleanest city: Tirupur, in the state of Tamil Nadu, was the cleanest city in India during March**, with a monthly average PM_{2.5} of 11 µg/m³. The other top 10 cleanest cities include Agartala, Maihar, Vrindavan, Aizawl, Tirunelveli, Bareilly, Surat, Palkalaiperur, and Damoh.

Ranking of NCAP Cities: Most polluted and cleanest in FY 2024-25

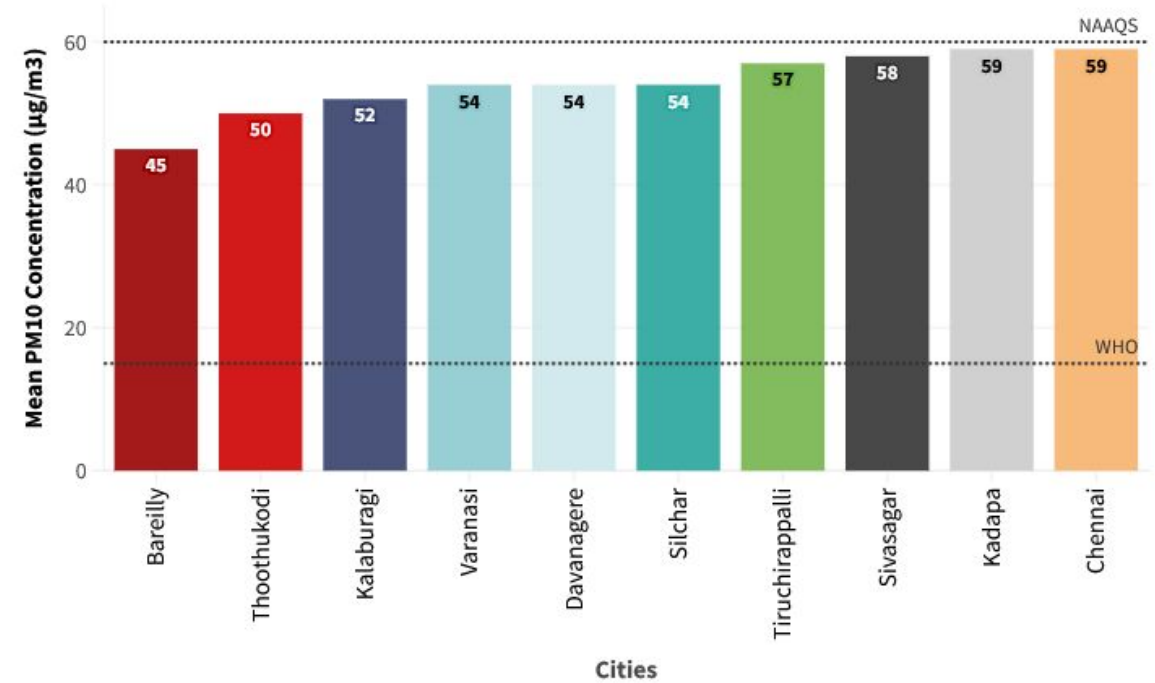
Top 10 most polluted NCAP cities in India by PM10 concentrations ($\mu\text{g}/\text{m}^3$) during FY 24-25



Data Source: [CCR](#)



Top 10 cleanest NCAP cities in India by PM10 concentrations ($\mu\text{g}/\text{m}^3$) during FY 24-25

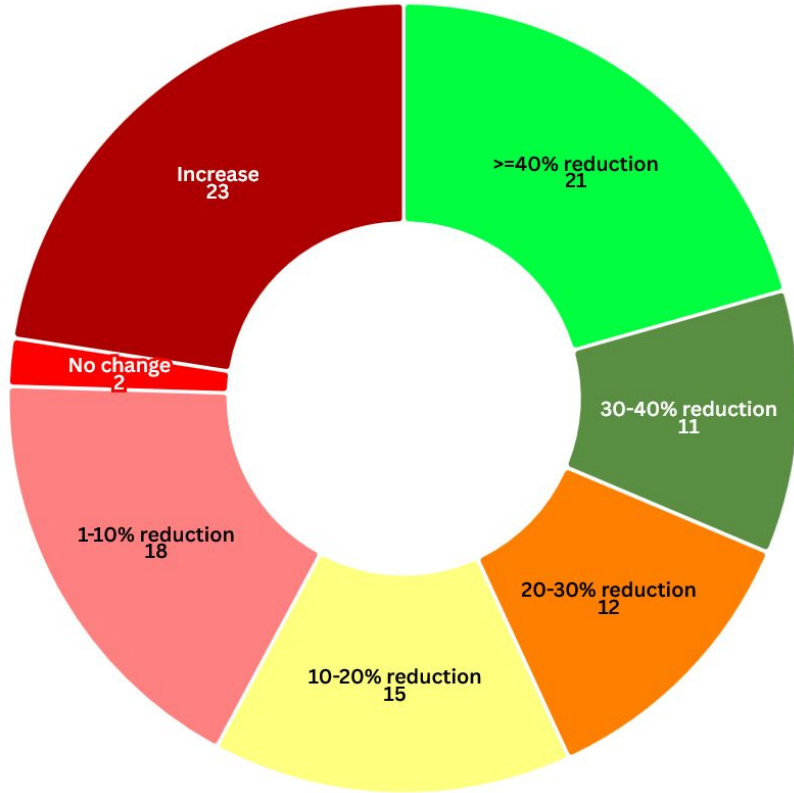


Data Source: [CCR](#)

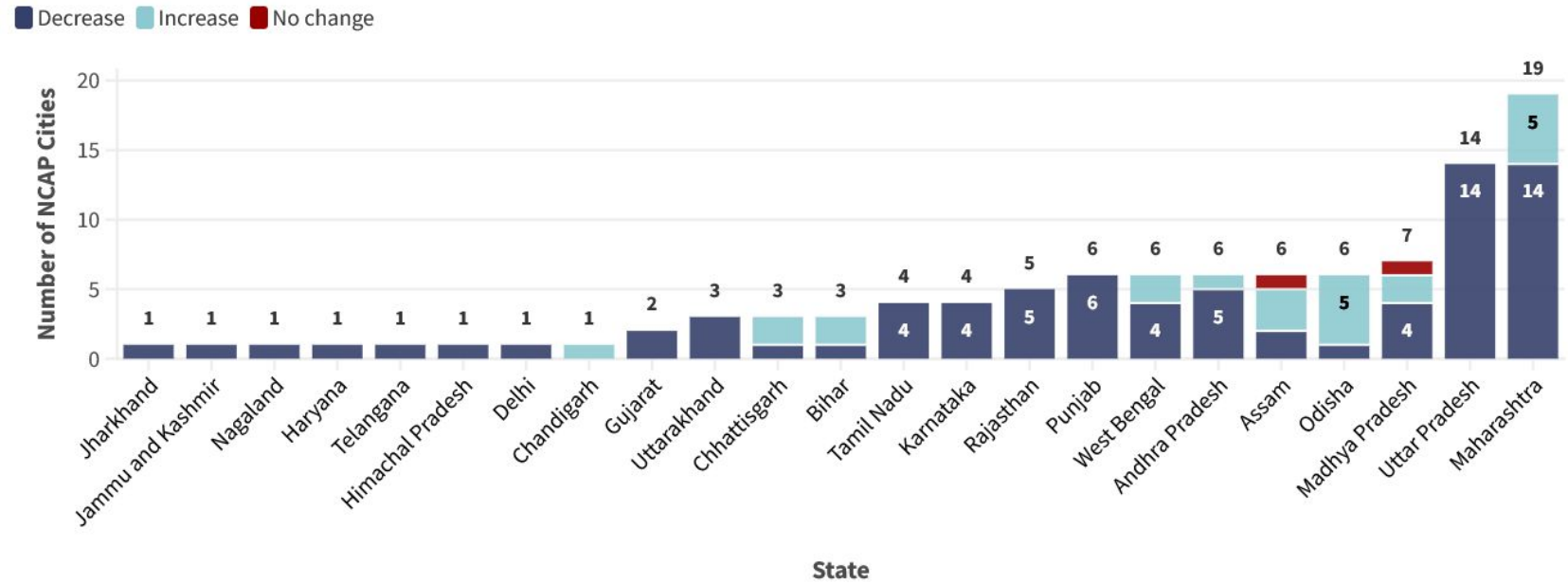


Change in PM10 levels compared to baseline year (FY 17-18)

Distribution of PM10 Level Changes in NCAP Cities

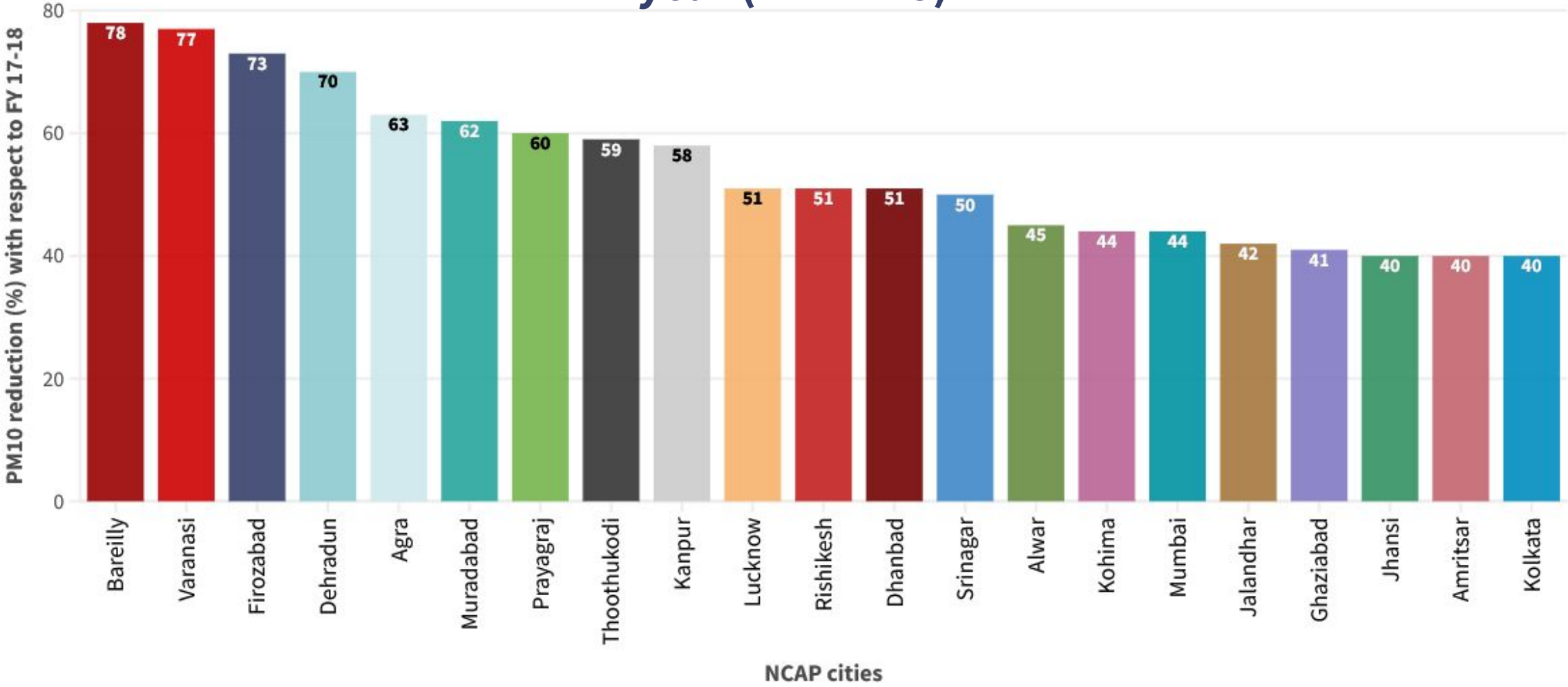


State wise change in PM10 levels compared to baseline year (FY 17-18)



Data Source: CCR

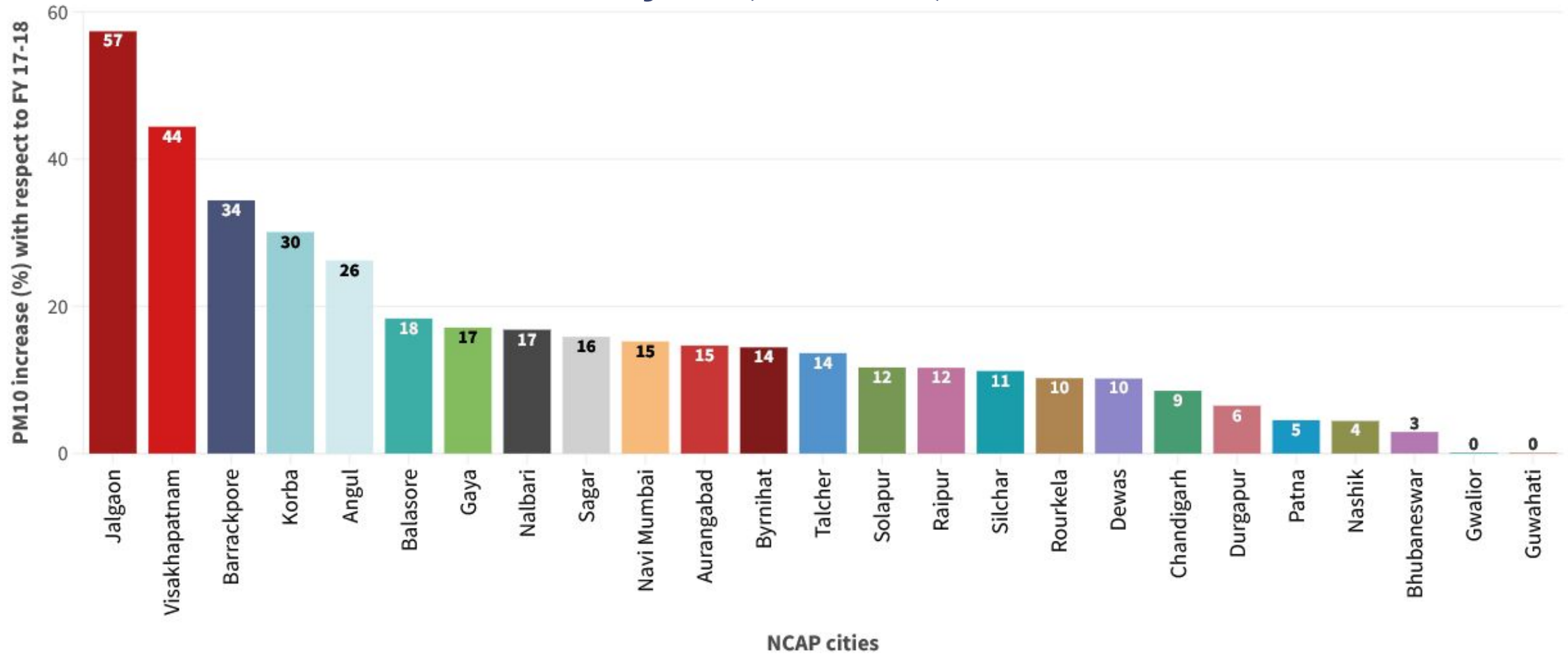
NCAP Cities with 40% or more reduction PM10 levels when compared to baseline year (FY 17-18)



Data Source: CCR



NCAP Cities with no change or increased PM10 levels when compared to baseline year (FY 17-18)



Data Source: [CCR](#)

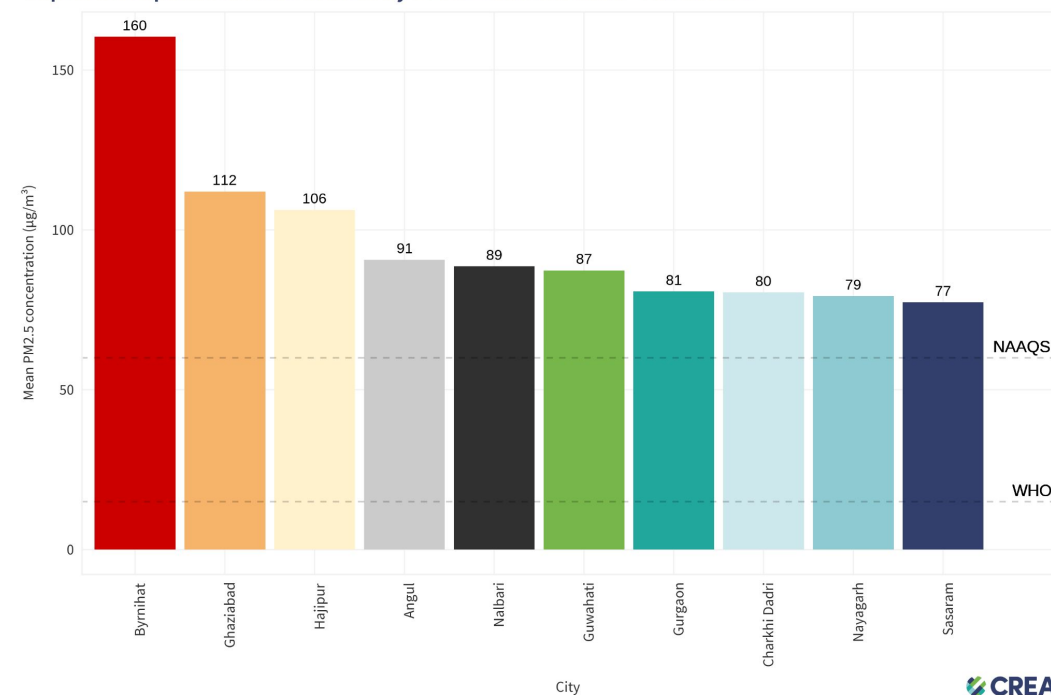


Top 10 most polluted cities in India by PM_{2.5} concentration - March 2025

Days in respective AQI categories based on PM_{2.5} (µg/m³) - March 2025

City	Monitored days	%Days > NAAQS	Good (0-30)	Satisfactory (31-60)	Moderate (61-90)	Poor (91-120)	Very poor (121-250)	Severe (>250)
Byrnihat	27	94	0	2	1	8	16	4
Ghaziabad	31	94	0	2	10	6	13	0
Hajipur	31	100	0	0	11	11	9	0
Angul	31	81	0	6	9	9	7	0
Nalbari	30	80	1	5	11	5	8	0
Guwahati	31	84	0	5	10	13	3	0
Gurgaon	31	68	1	9	8	10	3	0
Charkhi Dadri	30	77	1	6	12	8	3	0
Nayagarh	31	77	1	6	14	6	4	0
Sasaram	31	84	0	5	20	5	1	0

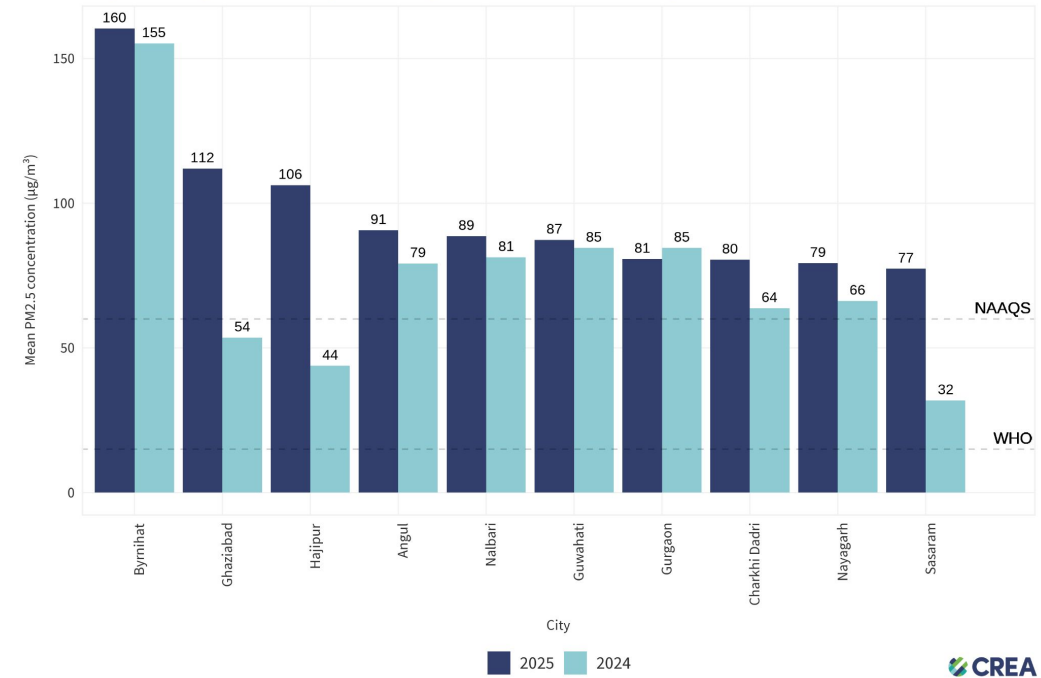
Top 10 most polluted cities in India by PM_{2.5} concentration - March 2025



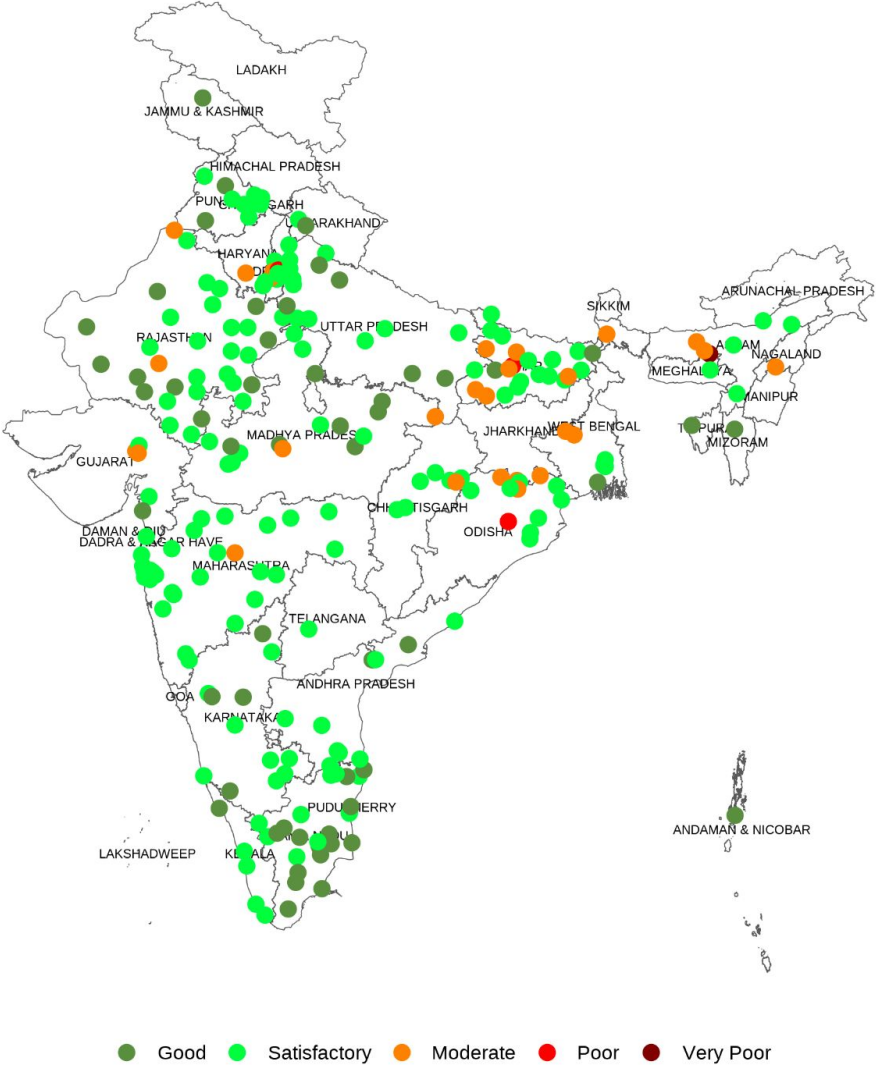
Status of PM_{2.5} concentration in March 2024 for top 10 most polluted cities in March 2025 across India

Days in respective AQI categories based on PM _{2.5} (µg/m ³) - March 2024								
City	Monitored days	Days > NAAQS	Good (0-30)	Satisfactory (31-60)	Moderate (61-90)	Poor (91-120)	Very poor (121-250)	Severe (>250)
Byrnihat	31	29	0	2	1	4	24	0
Ghaziabad	31	11	2	18	11	0	0	0
Hajipur	31	3	6	22	3	0	0	0
Angul	31	25	0	6	16	8	1	0
Nalbari	31	22	2	7	8	11	3	0
Guwahati	31	25	1	5	13	9	3	0
Gurgaon	31	29	0	2	17	11	1	0
Charkhi Dadri	31	20	0	11	19	1	0	0
Nayagarh	31	21	3	7	18	3	0	0
Sasaram	30	1	18	11	1	0	0	0

Year-on-year comparison of top 10 most polluted cities in India by PM2.5 concentration - March 2025



Distribution of cities by PM2.5 Air quality Index based on monthly average PM_{2.5} concentrations - March 2025



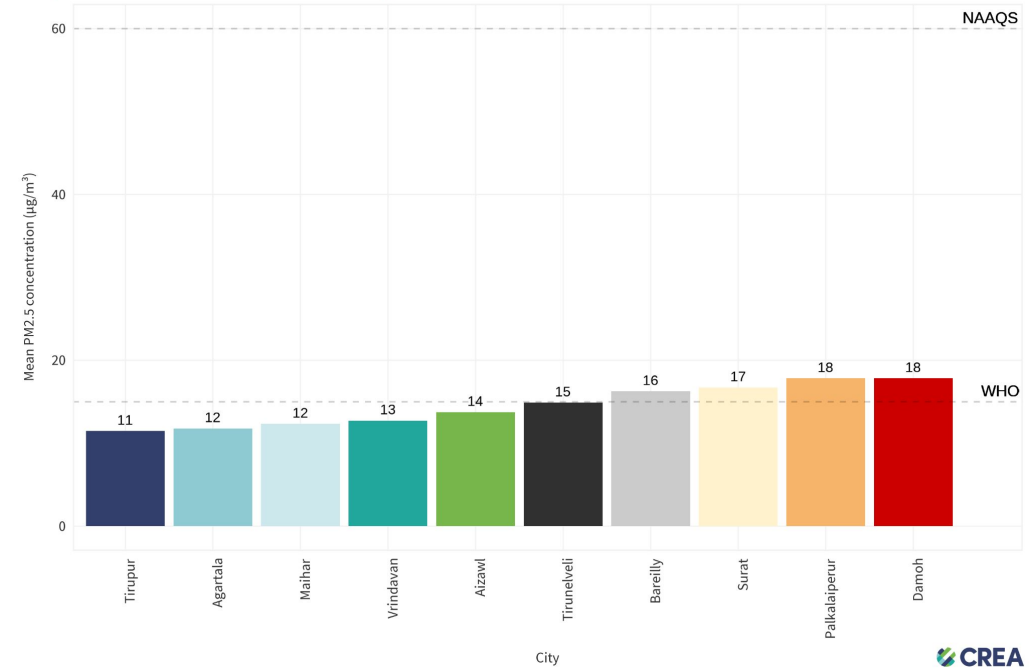
State/UT	Number of cities in AQI category (PM _{2.5} µg/m ³)				
	Good (0-30)	Satisfactory (31-60)	Moderate (61-90)	Poor (91-120)	Very Poor (121-250)
Andaman & Nicobar	1	0	0	0	0
Andhra Pradesh	2	7	0	0	0
Arunachal Pradesh	0	1	0	0	0
Assam	0	3	2	1	0
Bihar	2	14	6	0	1
Chandigarh	0	1	0	0	0
Chhattisgarh	0	7	1	0	0
Gujarat	1	3	2	0	0
Haryana	0	2	2	0	0
Himachal Pradesh	0	1	0	0	0
Jammu and Kashmir	1	0	0	0	0
Karnataka	4	8	0	0	0
Kerala	1	4	0	0	0
Madhya Pradesh	6	7	2	0	0
Maharashtra	0	30	1	0	0
Meghalaya	0	1	0	0	0
Mizoram	1	0	0	0	0
NCT of Delhi	0	0	1	0	0
Nagaland	0	0	1	0	0
Odisha	0	8	4	0	1
Puducherry	1	0	0	0	0
Punjab	2	6	0	0	0
Rajasthan	10	22	2	0	0
Tamil Nadu	14	10	0	0	0
Telangana	0	1	0	0	0
Tripura	1	0	0	0	0
Uttar Pradesh	6	13	0	0	1
Uttarakhand	1	2	0	0	0
West Bengal	1	3	3	0	0

Status of PM_{2.5} concentration in March 2024 for top 10 cleanest cities in March 2025 across India

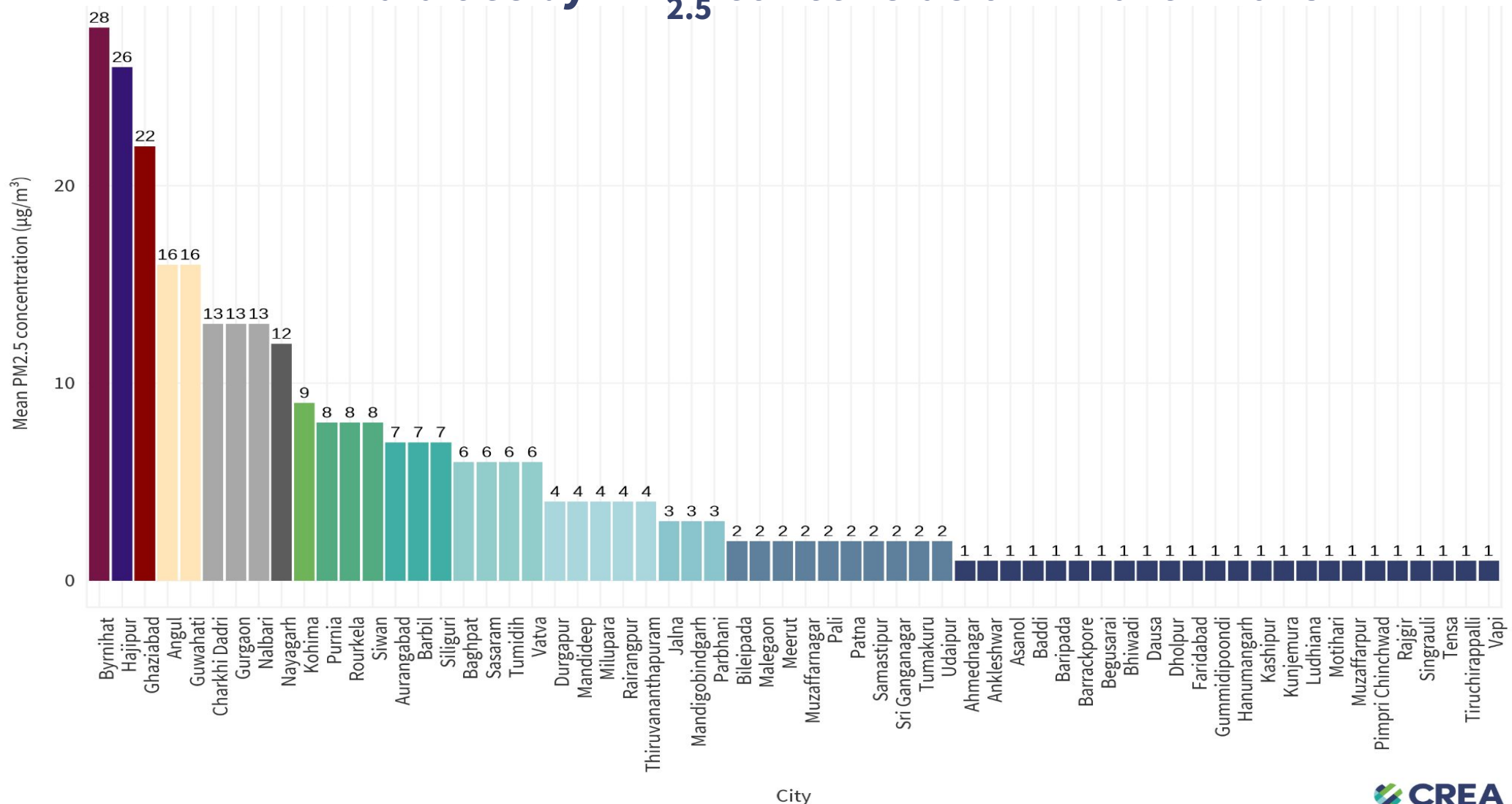
Days in respective AQI categories based on PM_{2.5} (µg/m³) - March 2025

City	Monitored days	%Days > NAAQS	Good (0-30)	Satisfactory (31-60)	Moderate (61-90)	Poor (91-120)	Very poor (121-250)	Severe (>250)
Tirupur	29	0	29	0	0	0	0	0
Agartala	31	0	31	0	0	0	0	0
Maihar	31	0	30	1	0	0	0	0
Vrindavan	31	0	31	0	0	0	0	0
Aizawl	31	0	31	0	0	0	0	0
Tirunelveli	31	0	31	0	0	0	0	0
Bareilly	31	0	29	2	0	0	0	0
Surat	31	0	29	2	0	0	0	0
Palkalaiperur	28	0	28	0	0	0	0	0
Damoh	31	0	31	0	0	0	0	0

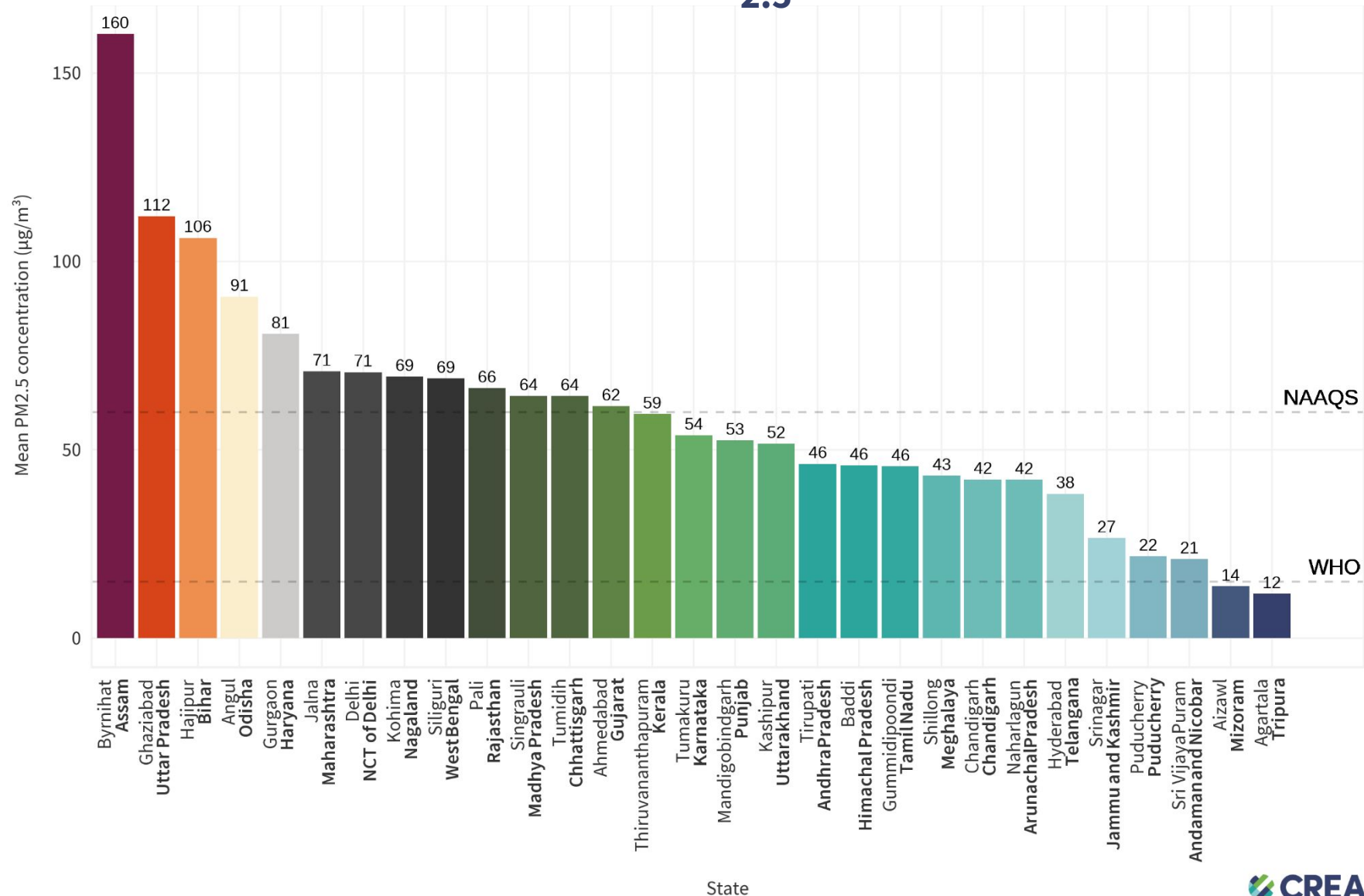
Top 10 most cleanest cities in India by PM_{2.5} concentration - March 2025



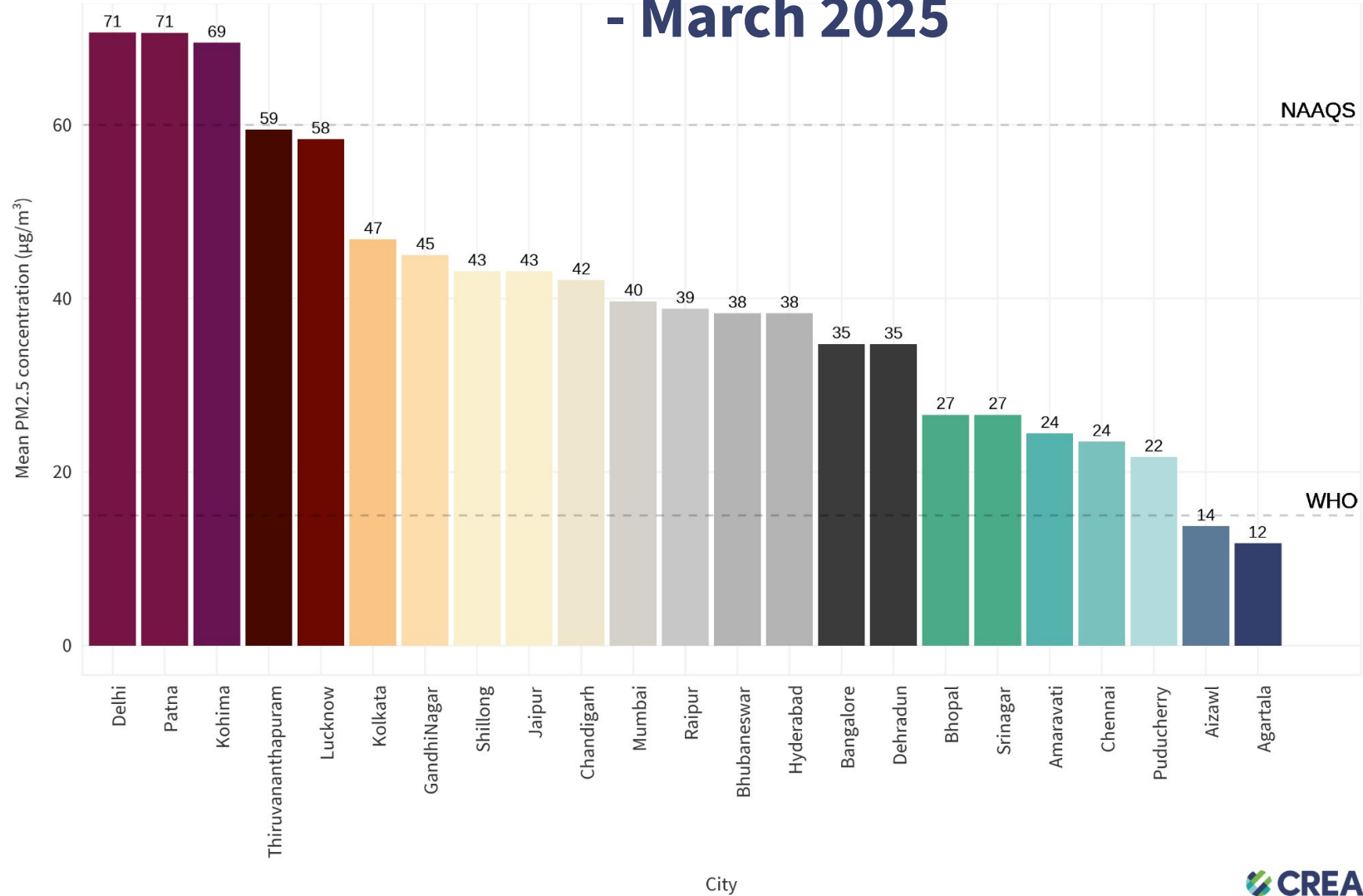
Frequency of appearance of respective cities in top 10 most polluted cities in India list by PM_{2.5} concentration - March 2025



State-wise most polluted cities (PM_{2.5}, µg/m³) in India - March 2025



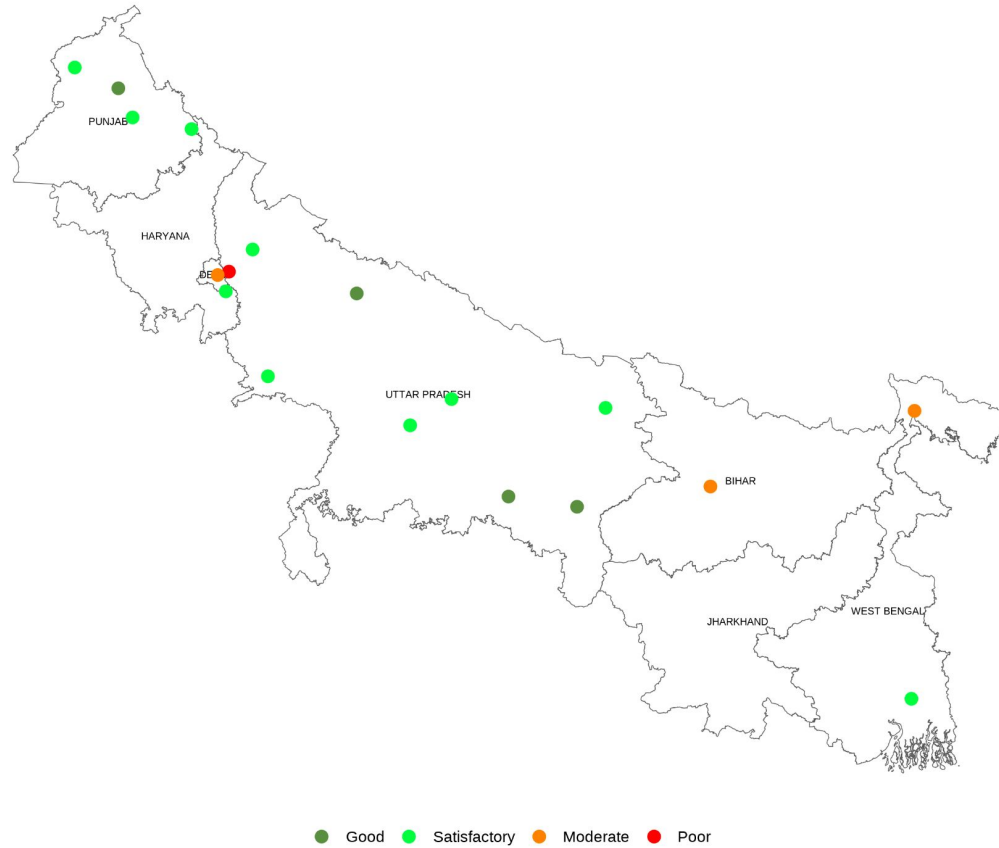
PM_{2.5} concentrations across state/provincial capital cities in India - March 2025



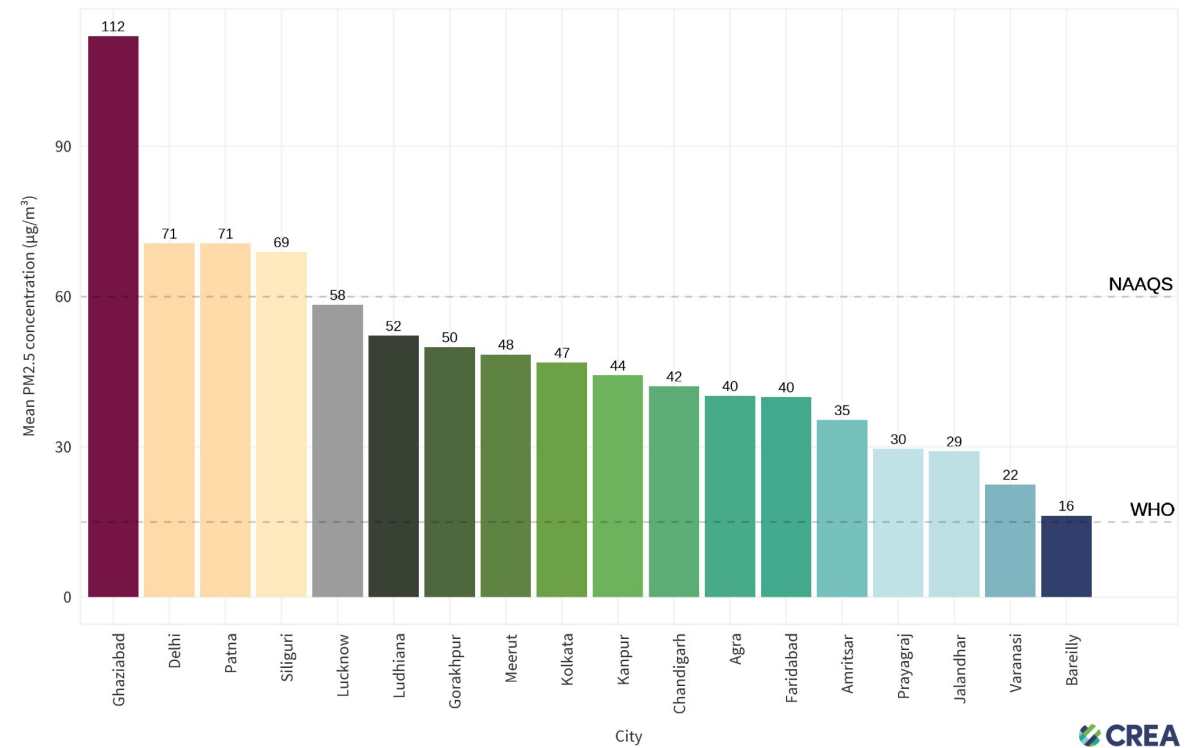
Itanagar (Arunachal Pradesh); Dispur (Assam); Panaji (Goa); Shimla (Himachal Pradesh); Ranchi (Jharkhand); Daman (Dadra and Nagar Haveli and Daman & Diu); Leh (Ladakh); and Kavaratti (Lakshadweep) don't have an operational CAAQMS.



PM_{2.5} concentrations across million plus cities in Indo-Gangetic Plain in India (with CAAQMS) - March 2025



PM_{2.5} concentrations across million plus cities in Indo-Gangetic Plain in India (with CAAQMS) - March 2025



Data sources

Ambient air quality data recorded by Continuous Ambient Air Quality Monitoring Stations (CAAQMS) is downloaded from the '[Central Control Room for Air Quality Management - All India](#)' dashboard operated by the Central Pollution Control Board (CPCB).

Resources

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