

Delhi Today, Your City Tomorrow

94 Cities Haven't Met Air Quality Standards In 5 Years

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New Delhi: There's something the hillside retreat of Parwanoo in Himachal Pradesh has in common with the industrial town of Korba in Chhattisgarh—both have consistently recorded higher than acceptable particulate matter (PM) levels.

Since 2011, at least 94 Indian cities have not met national air quality standards. Many of these cities have been on the list from the 1990s, say officials of the Central Pollution Control Board (CPCB). Neither the Centre nor the states have put in place a plan to ensure that cities get taken off this list. The World Health Organisation's recent urban air quality database lists 10 Indian cities among the world's 20 worst polluted. But that doesn't seem to worry the CPCB or administrators either.

For the past couple of years when air pollution in Delhi, Kanpur, Lucknow and Varanasi touched dangerous levels, CPCB did nothing to ensure that its directions on meeting air quality standards were enforced. It also ignored its own studies, commissioned from Chittaranjan National Cancer Institute in 2003, on the impact of air pollution on children over 15 years, which found serious physical and psychological impacts.

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The National Air Quality Standard notification, 2009, says safe standards for air should be met 98% of the year, a criterion none of the cities monitored by CPCB meet. Dipankar Saha, additional director, air laboratory at CPCB said: "This is not relevant anymore since we have started real-time monitoring of cities. We alert the non-attaining cities every three years."

But CPCB only monitors 29 cities real time and has just one continuous air quality monitor at most locations. The rest are manual monitoring machines which are "highly inefficient" and at times "inaccurate", say experts.

"Only when there is pressure from the people and the judiciary, cities start acting on pollution. There is no national policy. Even the government's smart city project only makes a passing reference to air quality but doesn't make it binding on cities to meet this criteria," says Anumita Roy Chowdhury, head of Centre for Science and Environment's clean air programme. CPCB's air quality bulletins routinely show Faridabad, Agra, Kanpur and Lucknow in "severe" or "very poor" categories.

This month for the first time CPCB used its statutory powers to direct municipalities in NCR to take steps to curb air pollution. "The air act gives us statutory powers to issue closure orders or cut electricity or water supply to industries that do not meet norms but it doesn't give us powers to penalize municipalities. So our directions are not binding on them," said Saha. In this situation, he is not sure how air quality standards will be met in cities.

"CPCB and state pollution boards have the power to take immediate action," insists Kanishk Kohli of Namati Environmental Justice Programme. "They can hold municipalities accountable if they want to."

573 places still monitor air quality manually

5 SINS OF POLLUTION

2008 was when data on pollution sources was last collected in cities

1 We are not monitoring air quality in real time

Central Pollution Control Board gets real-time air quality data from only two or three monitoring stations in most cities. This gives a skewed picture of air quality status and compromises policy-making. Most cities depend on manual monitoring stations, which use obsolete technology, and data is released just twice a week.

2 We don't know sources of air pollution

A study by IIT Kanpur for Delhi revealed that the contribution of each source of pollution—vehicles, waste burning, construction dust—changes with the seasons, but most cities don't have this information. Bengaluru's emissions inventory was conducted in 2010 and Chennai's by IIT Madras in 2011, while Kanpur, Mumbai and Pune released their reports in 2010.

3 Governments fail to enforce

But no city administration seems worried about getting off that list. Delhi, for instance, is still short of 5,000 buses; it hasn't implemented SC directions on prohibiting waste burning or ensuring construction projects don't pollute. Data for most cities makes it obvious that air pollution is not high on any government's priority list.

4 Ignoring health risks

While air pollution is hurting the country's exchequer, it's also associated with certain cancers, lower birth weight of babies, premature birth, strokes and respiratory disease. Across the country, air pollution is linked to 6.7 lakh premature deaths.

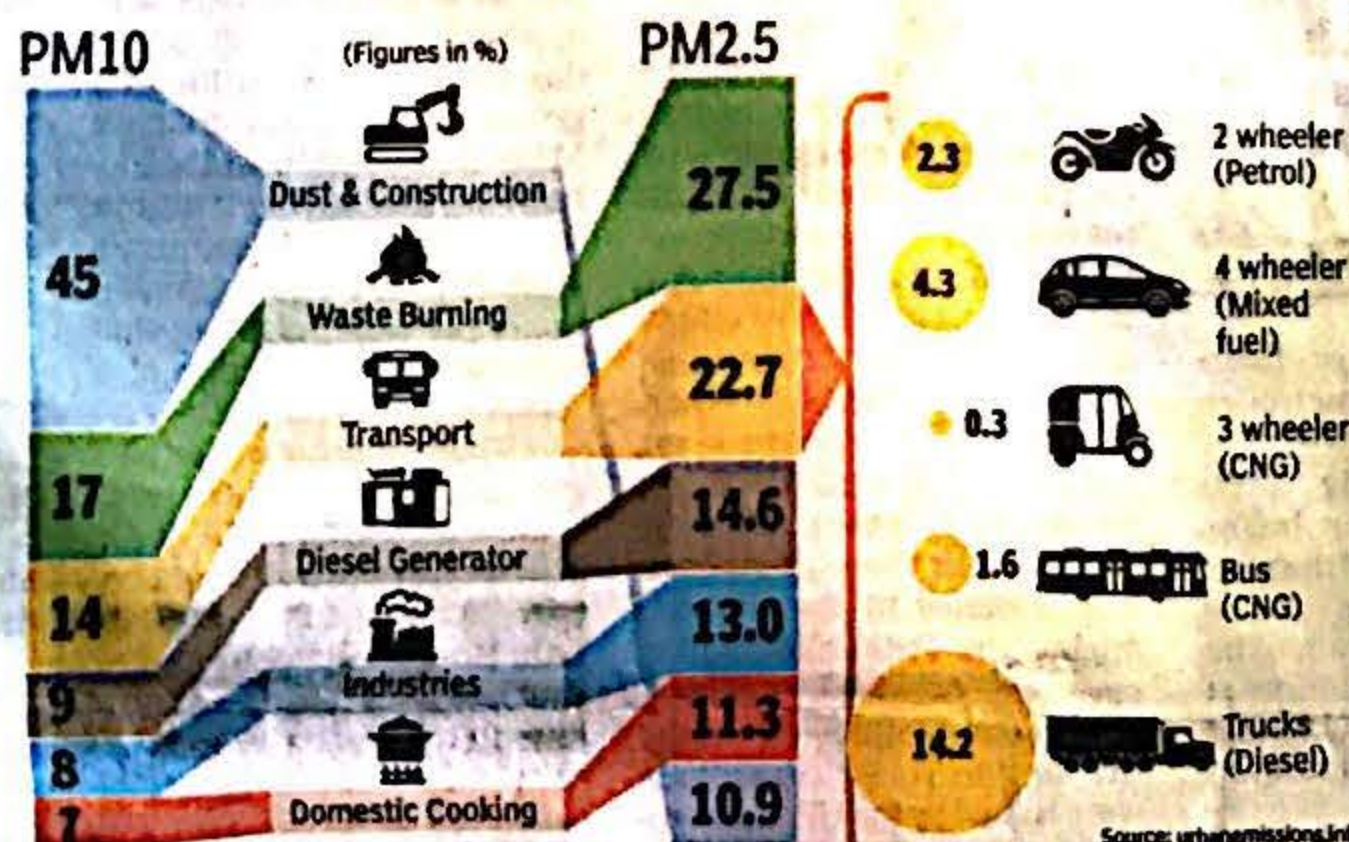
5 People aren't pitching in

The Deonar landfill fire drew attention to Mumbai's waste problem, while Delhi's three landfills are constantly on fire exposing lakhs to carcinogenic emissions. This is a common problem in all cities. If people segregated garbage at home, there would be no burning of waste. People can also choose public transport, or pick electric and CNG vehicles.

8.5% of GDP — Welfare costs and lost labour income due to air pollution in 2013 as per World Bank report

LEAD POLLUTANTS DISSECTED

The sources of PM10 and PM2.5 vary substantially

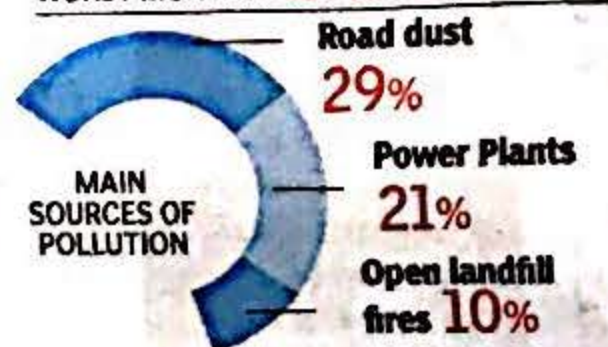


DELHI IS THE MOST POLLUTED, BUT OTHER METROS AREN'T GETTING BETTER

Mumbai's a coastal city, but the effect of the sea isn't always able to counter the pollutants in the air. On several days in the year, air quality drops into the poor category, and experts say more monitoring and data is needed to ensure it doesn't go the Delhi way. "Not all existing monitoring stations are able to give us the right picture because they don't meet the required standards. Having access to data and using it to take precautionary measures is important," says Neha Parkhi of Indian Institute of Tropical Meteorology. Local governments claim to have recognized air pollution as a major problem. "Some of the major sources of pollution are smoke from bakeries and burning garbage," says Vinayak Karnik, deputy chief engineer, Brihanmumbai Municipal Corporation environment department. The corporation issues an environment status report every August. In its recent report (2015-2016), BMC said the total number of vehicles in the city rose from 25 lakh in 2015 to 27 lakh in 2016, he says. —Vinamrata Borwankar

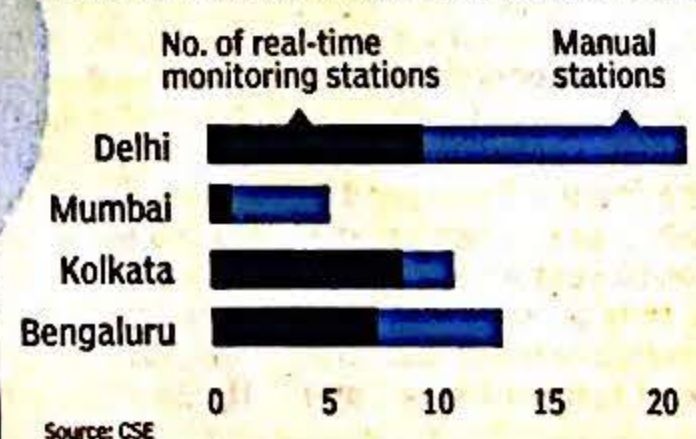
MUMBAI

1 year only since continuous air quality monitoring began in Mumbai
WORST MONTHS: Nov to Feb (winter)



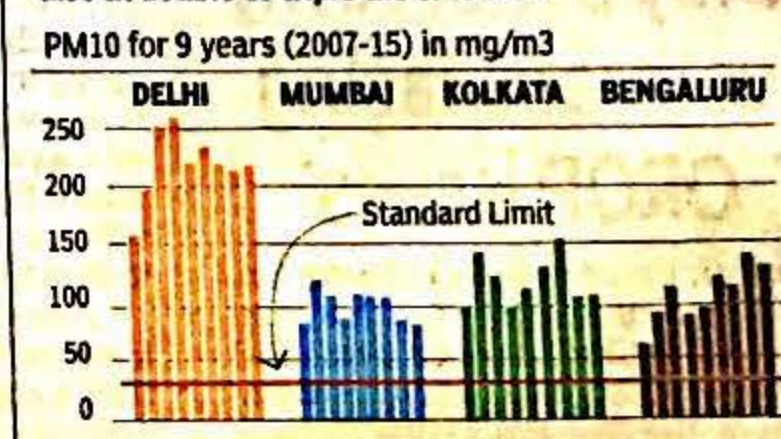
Scant monitoring

Beijing has nearly 100 real-time monitoring stations. Most Indian metros have less than 10



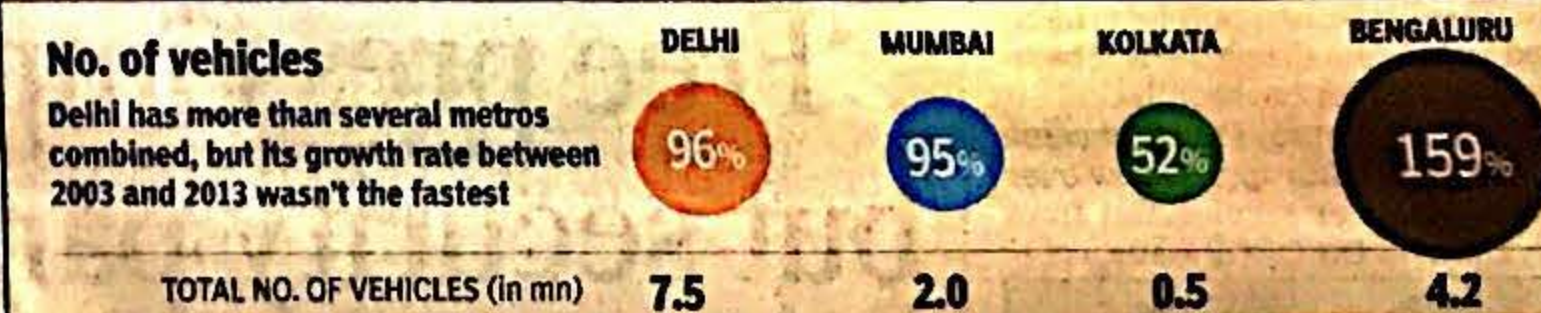
PM10

Delhi is clearly the worst, but other cities are also at double or triple the safe limit



No. of vehicles

Delhi has more than several metros combined, but its growth rate between 2003 and 2013 wasn't the fastest



WHAT'S IN YOUR AIR

PM2.5

Tiniest, most unhealthy, high levels in winter

PM10

Another lead pollutants on winter days

Ozone

Forms when oxides of nitrogen (NOx) react with volatile organic compounds in bright sunlight. Lead pollutant in summers