

## **Take Indore Activity All Over**

- Amitabh Kant\*

The monsoons have brought Delhi's air quality down to double digit levels, a much needed breather for its citizens. However, in the coming months, through a combination of factors, air pollution levels will rise again. Cities are drivers of growth. With ambitious growth targets ahead of us, our cities will only grow in size, with more than half of our population projected to be living in them. 42 Indian cities figure amongst the top fifty global cities with the most polluted air. Close to half of our 603 rivers are polluted, and less than 20% of the waste generated is treated. Climate related events are putting cities under increasing stress.

There is a need for a clear roadmap for cleaning India's top 50 most polluted cities by 2030, together with sector-specific action plans ready for all pollution sources: residential combustion; industrial and power plant emissions; transport; and solid and liquid waste. There are important lessons to be learnt from Indore's cleanup. In 2015, Indore lacked waste management infrastructure, and had a hundred year old legacy landfill. Rivers and *nallahs* were polluted through discharge of sewage from homes. Today, Indore stands as India's cleanest city.

Door-to-door collection of waste and training of municipal workers was a big part of this strategy. 6 types of waste would be segregated and collected from 5.85 lakh houses. Specialised vehicles were acquired for waste transportation. Apart from waste transport, vehicles were also acquired for road sweeping, meat collection, and garden waste, amongst others. This allowed Indore to achieve 100% coverage of all wards. This segregated waste, in turn, would be transferred to six world class waste processing plants, fully mechanised. Technology was leveraged to track vehicles, and a digitalised weighting system developed. For wet waste processing, a bio-CNG was setup in 2022, which produces 17,000 kg of CNG every day. Perhaps most strikingly, the existing garbage dumpsite in the city has been reclaimed and turned into a forest. Sanitation has been transformed too.

Apart from building individual and community toilets, the infrastructure deficit in liquid waste management was also addressed. Sewage outfalls in *nallahs* were identified using GIS technology, and leakages plugged. Over 200 km of *nallahs* were cleaned, providing efficient discharge during monsoon season. Reuse of treated sewage water, along with rainwater harvesting and other initiatives, has made Indore India's First Water Plus City. In tackling air pollution, Indore has taken steps such as banning the burning of solid waste and introduced stringent regulations around construction and demolition waste. Shifting to clean cooking fuel and industrial boilers to cleaner fuels was another

part of their strategy. The city is also increasingly shifting towards electrification of public transport, by procuring electric buses.

The city has also been able to leverage novel financing mechanisms. Selling of advertising rights at community and public toilets is one example. By embedding sustainable and circular economy principles, made Indore India's first urban local body (ULB) to trade in carbon credits. Indore also issued India's first green bonds, with an issue size of ~ 244 crores.

Indore has shown it is possible to clean up our cities and make them more liveable. Based on these learnings, a city-level Grand Challenge (GC) programme, with clear timelines and targets is needed to clean our cities. The Central Government, along with bodies such as the Central Pollution Control Board (CPCB), can run such a programme by scaling the National Clean Air Programme (NCAP). The GC should target a minimum 35% reduction in PM 2.5 level by 2030.

Cities should be judged on their performance on tackling the sources of pollution. First, residential combustion, for both cooking and heating purposes. According to a report by NCAP, residential combustion can account for upto a third of PM 2.5 levels. Indicators to measure the performance could include shift to clean cooking and elimination of stubble burning, biomass power plant projects, and shift from firewood heating to electric heating solutions.

Second, stricter norms for industrial and power plant emissions. Traditional brick kilns contribute to PM2.5 pollution. Converting all traditional brick kilns to advanced technology is one action area. Thermal power plants are another large source of industrial emissions. Several power plants have not yet been upgraded to 2015 emission standards, resulting in higher than projected pollution levels. Implementation of 2015 emission standards at all thermal power plants is another important area for action. Boilers in industrial settings also contribute to air pollution. Incentivising transition to electric boilers will be important in reducing industrial emissions.

The third action area should be on electrification of transport. Phasing out of old 2Ws (> 12 years of age), mandates around registration of e-3Ws, e-Buses, and electrifying airport transport are potential indicators. Clear waste management practices should form the fourth pillar. A defined value chain for waste segregation, collection, recycle & reuse, as per the Indore model can be incentivised. Prohibition on burning of solid waste & phasing out single-use plastic is another action area. Green belt development and moving to a waste to wealth model can be other potential indicators to measure. Installation of air quality monitoring devices should be an important component as well. The onus of action will lie with cities and municipal governments. Rs. 10,000 crores can

be set aside for such a programme for the next five years, with the top 5 cities receiving financial incentives based on their performance.

To effectively combat urban pollution, India must adopt a city-level Grand Challenge programme, learning from Indore's success. With clear targets and strong accountability, cities can reduce pollution and improve liveability. This mission requires collaboration between the Central Government, state governments, and municipal bodies. We can transform our cities into sustainable urban centres, making them not just engines of growth but models of environmental stewardship. The time to act is now, for the future of our cities and the well-being of our people.

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