

GURUGRAM NEWS

Wayu devices reduced dust pollution by 35-50%, shows data; experts sceptical of impact

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PUBLISHED ON FEB 04, 2021 10:34 PM IST

A preliminary analysis of particulate matter concentrations near 53 outdoor air purifiers, which were installed at six locations in the city by the Gurugram Metropolitan Development Authority (GMDA) last year, shows that the devices are able to reduce dust pollution by 35 to 50% in the immediate vicinity of the device.

Authority officials said that this analysis, conducted by Delhi-based NGO Indian Pollution Control Association, although promising, needs to be substantiated with better data before a decision can be taken on installing more such purifiers at other locations.

In November last year, GMDA had launched Project Air Care, a corporate-funded partnership with a private pharmaceutical company, the National Environmental Engineering Research Institute (Neeri) and Indian Pollution Control Association (Ipc), which is certified by the central pollution authority and founded under the aegis of IIT-Delhi.

The campaign involved installing a total of 65 Wayu — Wind Augmentation purifying Unit — devices at Subash Chowk, Iffco Chowk, Bakhtawar Chowk, and other areas with high traffic volume. Of these, 53 were installed by November-end and have been operational since launch.

“Each week, a team is sent out to change the filters, do routine maintenance, and monitor variations in air quality around the device. All of Gurugram’s Wayu units are in working condition. Our preliminary findings suggest that they are being able to reduce particulate matter pollution to a significant degree in a radius of 20 metres around the device, or 500 square metres, in terms of area,” said Dr Radha Goyal, deputy director, Ipc.

“The efficiency depends on local conditions and proximity to emission sources. We are installing another 12 units at AIT Chowk and in Sector 54 by Saturday and will start monitoring those weekly too,” she said.

Goyal added that Ipc has been granted a three-year operation and maintenance contract for these devices by the GMDA, which includes submitting timely reports on their performance. While all the devices are not going to have an equivalent impact, Goyal said that the range of efficacy lies between 35 and 50%. “This basically means that when the device is turned on, it can reduce at least a third of total dust pollution load, if not more. We have also sent filters from each device to be tested by Neeri, which developed the technology, to understand the chemical constituents of particulate matter at key traffic junctions in Gurugram,” she said.

Subash Yadav, head of the GMDA's urban environment division, however, clarified that the authority does not have immediate plans to install more such devices, beyond the 65 stated in the contract. "The interim results look promising, but we need more proof of performance before we can scale up this intervention. We will give it a couple of more months to see if these devices are durable, and we will require a more detailed report about each device's impact. Ipca is currently preparing one, which will be reviewed next month," he said.

This view was also echoed by VS Kundu, the chief executive officer of GMDA, who said, "We may also seek an independent report from a third-party agency to see how the Wayu units are performing. Any decision to install more devices will also depend on the CSR budget of the partner organization for the next financial year."

Experts, however, remained sceptical of these measures. A senior Delhi-based air pollution scientist and former member of the erstwhile Environment Pollution Control Authority (EPCA), requesting anonymity, said, "These purifiers did not work when Delhi implemented them in late 2018. The devices kept getting tampered with or vandalised because there was no concessionaire appointed for maintenance. While the technology itself is sound, the impact is going to be negligible because the principle is weak. In an indoor setting, with limited volumes of air, filters are a good option. But the sheer volume of ambient air is too much for these devices to be effective outdoors."

Responding to this, Kundu said that a detailed air pollution mitigation plan for the city is currently in the works. "We cannot provide any more details at the moment because it is in too early a stage. Proposals have been sought from three organisations, including The Energy and Resources Institute (TERI) and NeERI. The broad contours of the plan are yet to be worked out, and the final draft is a few months away. We will share more details as the plan progresses."

However, Yadav and Kundu both said that this plan would be part of a larger environment management plan for the city, along the lines of the recently published Comprehensive Mobility Management Plan for Gurugram, which was outsourced to the Delhi School of Planning and Architecture.