

Sustained methods to tackle air pollution

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While the odd-even scheme has successfully created public participation, this is not enough. An appropriate approach to deal with air pollution is to carefully assess the nature and account of the sources of occurrence

The odd-even scheme, implemented by the Delhi Government from January 1, has elicited a number of comments not only from the public in general, but also from people in positions of authority. While some comments have political considerations, many have been objective and unbiased.

The most significant feature of this odd-even scheme is the enormous interest it has evoked from the public and the surprisingly high level of involvement that it has created among the Delhiites. Noteworthy is the fact that for the first time in recent history, the people of Delhi have directly been involved in something that relates to air pollution and have taken steps to deal with this problem. To that extent, this measure has been successful in creating public participation, to deal with a problem that had thus far been the sole responsibility of the Government.

It is, however, necessary to state that by itself, the odd-even regulation is not the final answer to deal with the poor quality of air that plagues the city of Delhi. In fact, to focus on Delhi itself has major limitations, because there are several cities in the country that have equally serious, if not worse, problems of air pollution than the National Capital Region.

Successive Governments have for long, neglected the huge benefits from improved air quality that the public could have derived and correspondingly, huge costs could have been avoided in terms of serious health impacts that people have been suffering. This suffering is a result of neglect of an extremely serious problem which has major implications for the public at large.

An appropriate approach to deal with this challenge is to carefully assess the nature of air pollution in the city and on a quantitative basis account for the sources from which it is occurring. We now have simulation models to evaluate the potential of different interventions to improve air quality in the current and future scenarios, and all of these must be used to evaluate choices, as is the case with every major city in the world.

There would then be a basis for tackling the problem at the source and across the board. The vehicles which have been subjected to the odd-even arrangement in Delhi, no doubt, are an important source of air pollution, but there are other factors which deserve equal priority, even though in the short-run, there will be limitations to what is possible. However, reduced level of congestion with the odd-even regulation is a welcome relief for Delhiites.

For many years, The Energy and Resources Institute has been presenting to the decision-makers, in every possible forum, that in the ultimate analysis, with the increase in the country's automobile fleet, there is a need to move towards higher standards of automobile efficiency and fuel quality.

The ban on diesel vehicles could have been avoided if the country adopted the BS-VI emission standards earlier than planned. This could have ensured vehicular emissions becoming extremely low and fuel neutral. The Auto Fuel Policy of 2002 came up with a roadmap for introduction of cleaner fuels and vehicles in the country up to 2010. Based on this, 13 selected cities were moved to BS-IV norms by 2010, while the rest of the countries remained on BS-III norms.

As it happens, the rate of increase in Respirable Suspended Particulate Matter concentrations grew much faster in cities with lower quality fuel than in those with BS-IV norms. Heavy duty trucks which are the highest

contributors towards vehicular emissions still remain on BS-III standards across the country, despite some cities having moved to BS-VI standards.

An Auto Fuel Vision Committee was set up in 2013, to recommend the future roadmap on advancement of fuel quality and vehicular emission standards up to 2025. The committee recommended the introduction of BS-IV and BS-V norms across the country by 2017 and 2020 respectively. BS-VI emission norms were recommended to be introduced by 2024.

This roadmap recommended by the Auto Fuel Vision 2025 committee put India almost 10 years behind the US and Europe. It is heartening that the Ministry of Road Transport and Highways, in November 2015, issued two draft notifications for advancing implementation timelines to 2019 for BS-V and 2021 for BS-VI emission standards.

Given the huge negative impact of poor air quality and the health implications for people living in cities, automobile manufacturers as well as our refineries need to move proactively to advance the date by which BS-VI standards can be introduced.

There are varying estimates of the mortality caused by ambient air pollution in the country. One estimate places this number at six lakh people dying annually because of ambient air pollution, but actually, this number could be an underestimate. The total number of registered vehicles in India increased from 5.3 million in 1981 to 159 million in 2012. If this rate of growth continues, vehicular population of this country could reach close to half a billion in 2031.

Efforts to improve public transport have been far from satisfactory, and, therefore, private vehicles have taken up the largest share of increase in demand for transport both intra-city as well as inter-city. A far more serious effort to provide public transport options across the country is now long overdue.

A move to cleaner fuels (BS-V standards) and cleaner vehicles (BS-VI compliant) will lead to a longer term reduction in PM2.5 concentrations. When BS-VI norms are established and followed, vehicles will become fuel neutral in terms of emissions and the ban on diesel vehicles may not be required.

Diesel technology has several benefits which can then be realised without any environmental damage that is currently being caused as a result of technologies and standards which are far below those which have been achieved in other parts of the world.

It is heartening that the Ministry of Road Transport and Highways has now announced a move directly to BS-VI emission standards instead of BS-V in between, because the problem is not confined only to the national capital, and there is need to look at the problem of air pollution as a challenge at the national level.

It is hoped that public awareness and action which has been triggered by the odd-even arrangement, introduced in Delhi, will lead to a widespread demand by the public to implement vehicle and fuel standards timely, with a sense of urgency, so that health impacts of poor air quality can be eliminated.

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