

Contributors to Delhi Air Pollution

What is the issue?

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- The union Ministry of Environment and Forests had published a white paper in 2003.
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- It reported that in the time between 1970 & 2000, the contribution of vehicles to particulate matter in Delhi's air rose from 23% to 72%. \n
- The four major government studies carried out since then have differed on the relative contribution of sources of particulate matter in Delhi's air. \n

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What are the findings?

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- IIT-Delhi, 2007 The study was commissioned to specifically understand the contributions of vehicle of different types to vehicular air pollution. \n
- A key finding was that "tempos contribute maximum amount of concentration of NOx and PM (58%) followed by trucks (24.1%), buses (12%), cars/taxis (9.7%), small trucks (3.7%) and tractor, trailer (0.18%)." $_{\rm \backslash n}$
- It concluded that "control on emissions of pollutants from vehicular traffic necessitates the control on the new registration of commercial diesel vehicles in Delhi".
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- NEERI, Nagpur 2008 The study was commissioned after the need for "better understanding" of air pollution sources was "recognised" in the Auto-Fuel Policy Document, 2002.
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- The study identified road dust as the biggest contributor (52.5%) to particulate matter in Delhi's air, followed by industries (22.1%). \n

- It attributed only 6.6% of particulate emissions to vehicles.
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- For NOx, the study found industries contributed 79% and vehicles 18%. \nphin
- \bullet Vehicles were the main source of CO and hydrocarbons: 59% and 50% respectively.

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• **SAFAR, 2011** - System of Air quality Forecasting and Research (SAFAR) project was developed for air quality forecasting during the Commonwealth Games.

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- The study reached the "surprising" conclusion that road dust from paved and unpaved roads contributed the largest share to air pollution (55%), followed by residential sources (15%), transport and vehicular pollution (13%), industrial sources (12%), and power (5%).
- Particulate pollution is a major problem for Delhi specially during winter and fire event festival and that the situation with regard to gaseous pollution (such as NOx and sulphur oxides) was "reasonably better". \n
- **IIT-Kanpur, 2016** The study carried out sampling during the winter of 2013-14 and the summer of 2014. It had five components: air quality measurements, emission inventory, air quality modelling, control options and an action plan.
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- For PM2.5, the source apportionment, according to the study, was: road dust (38%), vehicular pollution (20%), domestic sources (12%), industrial sources (11%), concrete batching (6%), hotels and restaurants (3%), municipal solid waste burning (3%), diesel gensets (2%), industrial area sources (2%), and cremation, aircraft and medical incinerators (1% each).
- For NOx emissions, industrial point sources (52%) and vehicles (36%) were the biggest contributors, followed by diesel gensets (6%), the study found. \n

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Source: The Indian Express

