CSE assesses air quality and mobility initiatives in Indian cities

New Delhi: 78 per cent of cities in India have particulate pollution levels that exceed the standards. Only two cities – both from Kerala – meet the clean air benchmark of the CPCB for PM10.

Bus transport ridership is declining. In Delhi, it has dropped from 60 per cent in 2000 to 41 per cent now.

Large numbers of people walk and cycle in Indian cities. Delhi has the highest number of cycle trips and Mumbai the highest number of walk trips. Small cities like Gangtok have taken progressive steps, while metros like Kolkata are trying to ban cycles on their roads.

Every year, Delhi needs an area the size of 310 football fields for parking its vehicles. Chennai needs space equivalent to 100 such fields, Chandigarh 58 and Bhubaneswar 30.

India needs over Rs 3,00,000 crore to refurbish and renovate its transport network. Governments are expected to foot half the bill, but can they?

These factoids are from Good News Bad News: Clearing the air in Indian cities – a book which was released here today by Harish Salve, senior advocate of Supreme Court of India and the Amicus Curiae on environmental cases. The book has been published by Centre for Science and Environment (CSE).

Put together by CSE's air pollution and sustainable urbanisation experts, the book provides a bird's eye assessment of the cities of India and how they fare on parameters such as air quality, public transport, walkability, parking policies and fiscal initiatives.

Sunita Narain (Director general, CSE) said, "Air pollution has become the fifth largest killer, and the seventh biggest illness burden in India as per the Global Burden of Disease report, released in 2013. Data from the new cancer registry, released by the Indian Council of Medical Research in 2013, gives chilling evidence of the high incidence of lung cancer in cities. Rapid motorisation, the face of growth today, is also hurtling cities towards energy guzzling and heat trapping gases. This book comes at a critical moment in the 'life-cycle' of Indian cities – it helps us understand how cities are moving ahead or stalling their progress, and what could be a possible roadmap for progress."

State of Indian cities
Smaller cities of India are experiencing a more rapid shift to personal vehicles, as they have not invested adequately in public transport. If two-wheelers are added to cars, the rate of personal motorisation in Indian cities has already exceeded that of the Western cities.

Anumita Roychowdhury (Executive director-research and advocacy, CSE) said, "Sprawls and flyovers are now increasing distances, while one-way streets, subways and foot overbridges are pushing people, hawkers and street activities out. On isolated roads, safety of people is compromised to protect the car. At the same time, road design to increase the speed of cars is adding to the accident risk."

Taxes, fuel pricing and parking charges do not include the cost of damage cars impose on the society. On the contrary, the mass carriers like buses are made to pay more taxes for carrying more people as the government treats it as a commercial business, and not a matter of public good to be supported.

Roychowdhury added, "We need measures to change urban design to make cities safe, more walkable, and public transport friendly."

The CSE assessment has reviewed practices across the world, and finds that cities worldwide have started to take action to reverse the trend in travel choices. In Amsterdam and Copenhagen, the share of bicycle ridership has increased to 38 and 35 per cent, respectively, by displacing cars. New York is reclaiming space from cars to make pedestrian and public space safer, and it has one of the best public transport ridership among the US cities.

The most dramatic turnaround comes from the cities of China -- Shanghai, and Beijing has put a cap on the number of cars that can be sold in a year.

Roychowdhury said, "The experience in Beijing indicates the challenge of latent demand for cars; if allowed, it can bring the city to a standstill. Beijing now allows 240,000 new cars to be sold in a year, as opposed to 800,000 in 2010. But the actual demand is for 1,515,449 cars."

"These trends set us on a search for evidence of action, and change in Indian cities. What are cities doing to turn the tide?" As the book points out -- India has begun to reflect the rethink. The National Urban Transport Policy (NUTP) has set the principle that cities should plan for people, not vehicles.

The assessment finds that the "action in mega and big metros is more layered, diverse and extensive. This is partly because of the attention they have, investments they have drawn, and strident and aggressive public opinion and media pressure. Initiatives in smaller cities are often singular or limited in scope but with strong potential."

About Delhi
Real time monitoring: Delhi has the largest capacity for continuous monitoring and reporting of tiny particles of less than 10 micron seize (PM10) and less than 2.5 micron size (PM2.5), nitrogen oxide, sulphir dioxide, carbon monoxide, ozone, ammonia and air toxics including benzene, xylene and toluene. It also reports data on toxics like polycyclic aromatic hydrocarbon (PAH), benzene, lead and nickel as well.
Transparency in data reporting: Delhi has taken the lead to create a common platform to report data generated by multiple agencies including Central Pollution Control Board(CPCB) and Delhi Pollution Control Committee (DPCC) from six monitoring stations. This provides real time data, 24 hour average status, historical data for previous seven days and so on. This is presented along with meteorological data including wind speed and direction, ambient temperature, humidity and solar radiation.
Builds bus ridership, arrests the slide: Among the mega cities, Delhi has demonstrated that with all its reforms in place, it has been able to achieve the maximum increase in bus ridership since 2009; as much as 25 per cent, reversing the trend of falling bus riderships.

Street design guidelines: Delhi has initiated steps to make a street accessible and safe, with space for various road users. The street design incorporates vending zones, three-wheeler stops, road furniture and pedestrian-oriented lighting, and is well integrated with other environmental elements including tree shade, water permeability etc. Crafted by the UTTIPEC, this is expected to be the basis of approval of future road projects in Delhi. If implemented with rigor and stringency, this can transform access network in the city. This can also improve safety in a city that is notorious for the highest incidence of road accidents in the country.

Autorickshaws and taxis: Delhi takes the lead by reversing the policy of capping the numbers of autorickhshaws -- Delhi government has, with the consent of the Supreme Court, has reversed the cap along with several reforms to make this service more organised. These vehicles have been put on GPS tracking system for enforcing proper metering and fare, safety, etc. The drivers are being issued smart cards for proper enforcement.

Protecting green spaces from parking: Delhi is developing a comprehensive parking policy as a restraint measure and also as part of transit oriented development guidelines. A noteworthy step that Delhi has taken is in barring parking structure in green areas and neighbourhood parks.

Narain said, "These are the ideas of change – however small and however insignificant they may seem today. They are the harbingers of a different tomorrow. The challenge now is to learn from these experiences and to upscale the practices so that once again, we can have the great leapfrog – move from cars to no cars. Move from pollution to no pollution."