

A POLLITICAL CHOICE

Pollutants are in the air — and so is particulate matter. Indian cities crowd lists of Earth's most heavily air-polluted urban areas, Delhi leading these surveys. Yet, in all the hot air of electioneering, while we hear about migrants and mahals, civic supplies and sewers, it's rare to find a well-thought-out plan tackling air pollution. This evasion is extraordinary, given how high AQI is a citizen's greatest enemy — as we inhale particulate matter, we gain respiratory diseases, heart ailments, strokes, reduced lung function and cancer, with, as the World Health Organization finds, an increased risk of diabetes and neurological diseases. Air pollution also impacts the mind — exposure to high AQI lowers IQ among children and adults, causing academic decline and cognitive losses equalling one year less of your education.

These effects are immense — and the political silence around them, resounding. The truth is, worldwide, most politicians either don't have the vision to tackle air pollution's dark heart — fossil fuels — or are bankrolled by companies singing 'Drill, baby, drill'. It may seem we, the people, can only cheer such callousness, coated in charisma — but that isn't so. Citizen outrage over air pollution has driven powerful change. London's Great Smog in December, 1952, killed thousands over three days, subjecting them to coal emissions trapped in cold air, people literally perishing on pavements. Subsequent public rallying forced the government to restrict industrial and domestic coal-burning and offer clean energy grants. In the 1960s, homemakers in Los Angeles, reeling under pollution generated by four million vehicles, formed 'Stamp Out Smog', lobbying government and protesting with grim cheer — they wore gasmasks to 'AQI parties' featuring 'skull cakes' — till vehicular emission standards were applied by abashed officials. Till recently, Beijing was adjudged the world's most polluted city — but citizens' melancholic misery at the airy grime budged even a bureaucratic Great Wall, inspiring clean-up measures.

Hence, as polls arrive upon us, gentle reader, please do see which candidate discusses your environment, not with hysteria or hyperbole, but understanding and time-planned commitments. Critics may say bread-and-butter issues come first but that's a political card trick, given how the World Bank finds air pollution costs India \$37 billion annually from GDP — the loss of lives, of course, has no numbers. As Times Evoke's global experts emphasise, citizens can encourage solutions and persuade politicians to now lend us their ears. Join Times Evoke in learning about a 'pollitical' choice — it impacts your health, wealth and happiness.

'Air pollution needs tough steps and long vision — instead, it's only politicised each winter'

Sunita Narain is director general of the Centre for Science and Environment (CSE). Speaking to Srijana Mitra Das at Times Evoke, she discusses how worries over air pollution in India are blown away:

Indian cities lead the world in high AQI — what are the main causes?

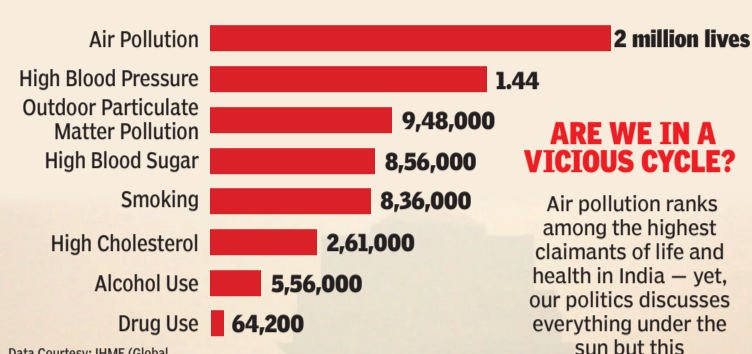
■ These have been inventorised — at its core, air pollution is about combustion or the fuel we burn and the emissions from this. Vehicles are among the main sources — even though we have moved to cleaner fuel, the sheer number of vehicles on Indian roads is negating gains. There is also industrial pollution — much comes from burning coal which industry resorts to as the cost of electricity is high. Even though gas is available at lower prices in Delhi, for instance, industry is no longer based only in official industrial areas but has spread into non-authorized areas where the use of polluting fuel continues. Although coal has been banned in the entire National Capital Region (NCR), alternative fuel or natural gas isn't under GST and hence, it is taxed heavily. Gas prices are thrice the cost of coal and given how electricity prices are also substantial, polluting fuels continue as industries see no alternative.

There is also the burning of waste — unlike other regions in India, where waste management practices have improved significantly, the NCR is failing to deal with the mountains of waste it generates. Consequently, whether it is landfill fires or smaller heaps being lit, waste burning is a major cause of air pollution now. Dust from construction, etc., also becomes a pollutant when solid particles from combustion are lifted into the wind, creating airborne particles which are inhaled. Household-related emissions are a cause as well — economically weaker sections in the outlying areas of large cities often have no option but to still use firewood, etc., to cook.

These sources remain the same through the year. We erroneously believe pollution is only a winter problem and the agricultural stubble-



BEFORE: Citizens suffered Beijing's smog



burning that occurs then is the main cause — this is not so. All these sources cause urban air pollution consistently through the year — in winter, climatic conditions turn adverse as it is cold, there's less wind and more inversion. Pollutants settle then and people feel the choke.

Does stubble burning play any part?

■ Certainly, the burning of residues constitutes another source — but it is a month-long problem. This is linked both to the direction of the winds then and the fact that farmers don't have viable alternatives yet. Projects like providing ethanol or bio-CNG from these residues should increase in speed and scale to offer options — at the moment, farmers are wrongly seen as the only cause of air pollution in the NCR.

Are current official responses to high AQIs adequate?

■ They cannot be as air pollution is not acted on through the year. In much of 2024's winter, the Graded Response Action Plan (GRAP) 3 restrictions were imposed on the NCR as a response to high AQIs. However, when we designed GRAP in 2016-17, we envisioned it only

as an emergency action, an alert in the worst conditions. Unfortunately, GRAP has now become the only step that is taken — yet, it is not a policy instrument to be applied year after year.

Other countries using similar measures, from Mexico to China, found these inconveniences citizens far too much. It is not ideal to keep closing schools or stop construction and other outdoor work. Instead of addressing the solutions we actually need, we're applying GRAP

like policy. Meanwhile, worry over high AQIs lasts until spring and is then forgotten till October — but air pollution persists all the while.

How did other countries correct similar situations?

■ China suffered from tremendous air pollution — then, it took two important steps. First, the authorities replaced coal with gas at a huge level, with a very strict ban enforced on using coal. They also pushed strongly for clean energy vehicles, shut down polluting industries and increased green spaces. Pollution control is a big issue — it needs big steps which can make a large difference. When India transitions out of coal, our air will be transformed.

Citizens in other countries have made air pollution a political issue, demanding and seeing action — how do you see this situation in India?

■ It's very positive that today, air pollution data is in everyone's hands — people know when AQI levels rise and there is huge concern across every strata of society. People are aware this is impacting the health and well-being particularly of children and elder people. There is very deep worry over this.

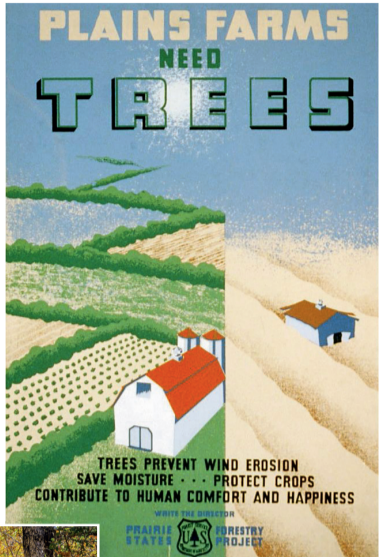
However, the challenge is that tough measures are needed — and we don't seem to have the political ability for this. When pollution becomes a political issue, it is entirely politicised — so, instead of developing serious cooperation among different authorities, this just becomes a skirmish among parties with name-calling and blame games. To tackle air pollution, we need coordination between the central government and all state governments. Air pollution in Delhi, for instance, isn't just a Delhi problem — it is rooted in the entire region around it. There is public concern — but political parties don't acknowledge it.

In the past, some steps were taken — when CNG was introduced in Delhi in 2001, protests broke out but the move was enforced, alongside subsidies being given to autorickshaw owners to buy new vehicles, etc. Efforts were made to see the measure through — today, politicians hope the issue will just blow over. While Delhi's bypass has helped matters somewhat, some trucks must still enter the city — these need to be BS6-compliant as those produce 90% lower emissions than BS4. However, unless more is done to enforce the official scrappage policy

at a massive scale. The last survey on this was carried out in 2009 — that found a million vehicles were traversing the NCR daily. No such survey has been conducted since but citizens are only too aware of how traffic has expanded, jamming multiple streets. We need an in-depth public transport strategy with car restraint measures, like higher parking charges — but then, you can't apply those unless you provide adequate public transport. This needs serious work at a consistent, long-term level — and not just politicking which passes by each winter, leaving air pollution with us all year round.



AFTER: Public voices cleaned China's air



WHERE THERE'S A WILL... Franklin D. Roosevelt's 1930s New Deal (above) forested eroding US lands (L) while generating jobs

and incentives are given to truck owners to replace their old vehicles, this measure won't work.

You have mentioned vehicles. These are part of aspirational Indian culture now — how can that aspect be managed?

■ Vehicles are aspirational — but they needn't be used every single day. We should provide people with adequate alternatives. Delhi's metro has been a boon but it lacks last-mile connectivity, forcing people to take further transport from metro stations to their destination. Weighing up the cost and hassle involved, people eventually decide to drive. Last-mile connectivity for public transport is key. We are also seeing fewer buses now with declining ridership, despite the focus on increasing electric buses. We should look at the entire system of bus services, not just buses themselves.

Private vehicles have also proliferated at a massive scale. The last survey on this was carried out in 2009 — that found a million vehicles were traversing the NCR daily. No such survey has been conducted since but citizens are only too aware of how traffic has expanded, jamming multiple streets. We need an in-depth public transport strategy with car restraint measures, like higher parking charges — but then, you can't apply those unless you provide adequate public transport. This needs serious work at a consistent, long-term level — and not just politicking which passes by each winter, leaving air pollution with us all year round.



WHO'S THE POLITICAL ANIMAL?

● Animals are victims of human politicking. Fox-hunting by horsemen and dogs shows brutality all dressed-up. From the 15th century in Britain, the hunt, where a fox is torn apart alive, was called 'tradition' and 'necessity', feudal lords with huge landholdings saying foxes harmed their livestock. This cruelty was finally banned. Oscar Wilde calling it 'the unspeakable in pursuit of the uneatable'



● Whale hunting intensified in the 18th century citing 'progress', whale oil lighting up a rising America. Several species became endangered and in 1982, a global moratorium on commercial hunting was established — Norway and Japan still don't follow this. Norway cites 'culture', Japan, 'scientific research' — where the meat from whales killed for 'knowledge' can be eaten



● Tigers were mercilessly hunted during the British Raj in India. Guns destroyed many — by the early 20th century, tigers went from 40,000 to 1,800. Nawabs and rajas, eager to please the Raj, hosted hunts — in 1911, King George V killed 39 tigers in 10 days. Post-colonialism also restored such victims of colonial politics

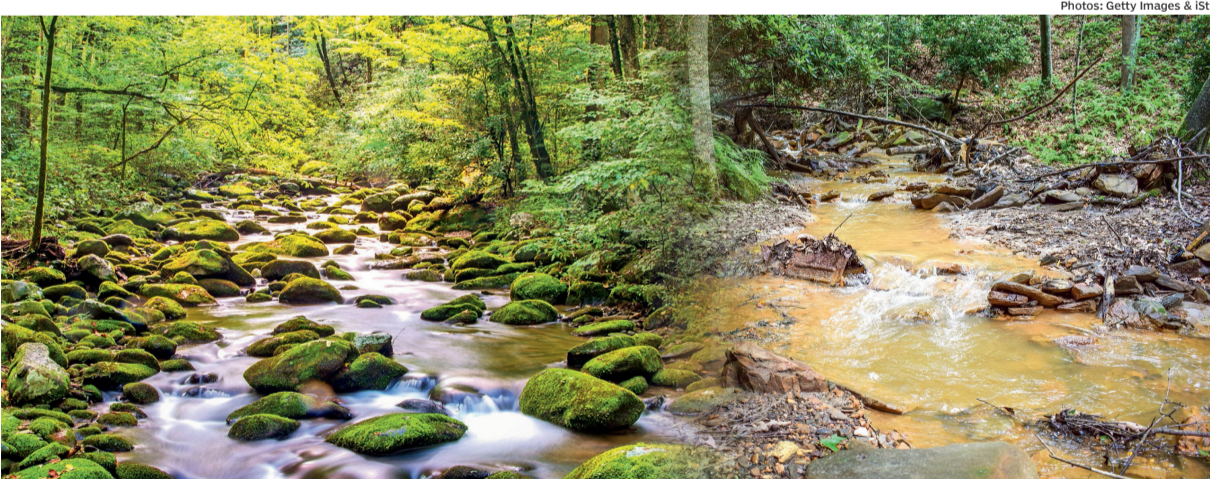
'Corporations claim it's always jobs vs nature — but workers in the US forged movements to protect both'

You can see a clear grey sky enfolded in the room where Chad Montrie speaks with precision. 'I was trained as a labour and an environmental historian. My research explores how the two fields overlap. I'm interested in how people develop an environmental consciousness and engage in ecological activism — I locate how workers were involved in the origins of environmentalism over two centuries in America.'

We often think of environmental movements as modern street protests outside bemused cafes or activists chaining themselves to artworks. However, Montrie finds this has much older roots. He explains, 'Environmental consciousness began among workers in the US in the early 19th century. As industrial mass production came into being, workers experienced its environmental hazards — textile mills came up in places like Lowell, Massachusetts, which built dams to control water. Meadows which gave cattle grass were flooded while fish which sustained many were poisoned as the mills released toxic chemicals into canals — these were also receiving raw sewage from growing cities meanwhile. Cholera spread among workers and they protested, seeing how ecological degradation was damaging their own well-being.'

This was never going to be easy. In the 20th century, workers found corporations

Chad Montrie is professor of history at the University of Massachusetts, Lowell. He tells Srijana Mitra Das at TE about the working-class roots of environmentalism:



CRY ME A RIVER... The Appalachian region houses some of America's greatest natural beauty spots — but surface coal mining both wrecked employment in the area and destroyed ecosystems, leaving workers with sharply reduced incomes and increased pollution

gaining more power, not only as Montrie says, on their work life and being able to exploit them but also on endangering their health. A labour movement began which sought more balance. Montrie adds, 'This came with a new consciousness about nature. Industrialisation meant rural migration — this changed these people's relationship with ecologies. In Lowell, women recruited to the mills left their rural homesteads and were deeply jarred by urban life — they built a working-class romanticism, parallel to the middle-class literary romanticism people are familiar with. In this view, they became separated from nature, rather than something they were part of in life on a farm. When they wrote poetry or stories,' says Montrie, 'They described nature in transcendent terms, ecology now telling them about the divine or the meaning of things. Alongside, they were being exposed to water or air pollution and this reality began to layer itself onto this new consciousness.'

Montrie dispels more myths. 'The classical perception about environmentalism starting in America hinges on Rachel Carson's book 'Silent Spring' published in 1962. People feel this launched the ecological movement — I disagree. Thinking about environmental problems and starting movements for these goes back to the

emerging industrial economy of the 19th century — the people at the centre of that history are working-class people while the 'Silent Spring' narrative focuses on middle-class white people in America's suburbs.'

WORKERS OF THE WORLD

Carson's book, an expose of pesticides, focused on what these chemicals meant for living things but, Montrie points out, 'With a few exceptions, she completely ignored farm workers. That was ironic, given how such workers were most likely to be exposed to large doses of these chemicals on a regular basis. By the 1960s, 71% migrant farmworkers showed symptoms



LET'S OVERLOOK: Vance (L) sidesteps coal

of chemical poisoning — they organised into the United Farm Workers union and bargained for better wages, hours — and controls on pesticide exposure. The first contract they got in the late 1960s gave them more protection than any state or federal legislation.'

There are further instances of workers starting environmental movements. After WWII, the coal industry shifted from underground to contour and surface mining. 'This was advantageous to companies,' Montrie comments dryly, 'It was more efficient and needed fewer workers, part of a longer mechanisation history. But it was also more environmentally devastating — people in the coalfields of southern Appalachia started to experience both unemployment and severe pollution of water, deforestation, landslides, etc.'

Eventually, the United Mine Workers demanded an end to surface mining in the 1960s, their president, Arnold Miller, even testifying to Congress. Montrie says, 'It seems astounding now that one of the leading voices trying to stop mining came from the coal workers' union. They also used tactics similar to ecological activism of the 1990s — non-violent civil disobedience,

blocking coal haul trucks, even sabotaging machinery. A collective in Kentucky was called the Appalachian Group To Save The Land And People', a name which tells you a lot.' The workers nearly got Congress to stop mining in 1973 but with the interests involved, that didn't happen. Activism then dipped as coal's market declined.

JD Vance, America's new Vice-President, hails from Appalachia — does he refer to this powerful labour history? Montrie laughs out loud. 'Well, he isn't exactly from Appalachia — he exaggerates that link, using this to seem more connected to common people. His grandparents lived there and he'd visit them. His book 'Hill-billy Elegy' speaks of the community but, in a nutshell, it blames people themselves for problems in this region, advising them to self-improve rather than have the government fix problems or blaming coal companies. For example, there is a lot of drug addiction in Appalachia — but Vance apparently doesn't see this as linked to the coal industry viceroying the region's economy and ruining the landscape.'



ON THE JOB: Farm workers and industrial labour often face the greatest brunt of pollutants

How does Montrie analyse the Hobson's choice people face in terms of keeping their employment versus damaging the environment? He says, 'Corporations have promoted this idea that you must 'choose' between your job and the environment. That assumes these two are mutually exclusive. It also comes with a historical amnesia that claims workers always chose their jobs. However, my research across two centuries finds workers have chosen both. Neoliberalism in the 1980s-90s made this more difficult but there is a moment — a long moment — in history where hard-pressed workers collectivised and campaigned for both these protections in their lives.'



BLOWING IT UP: Coal mining in Appalachia

READERS WRITE

Dear Times Evoke, I enjoyed reading 'Diplomaticus' in TE (25th January) with Swedish diplomat Daniel Westlen. The insightful points on the inevitability of nuclear energy were very thought-provoking. It was also wonderful to learn of India's solar energy success! The presentation was top-notch as per TE's excellent standards. — Kavya Sethi, Delhi

Thank you, TE, for the 'Diplomaticus' interview with Daniel Westlen, highlighting Sweden's approach to reducing fossil fuels. India is also making significant progress in solar and nuclear energy. As nuclear plants are capital-intensive and take more time to build, but are cheaper to operate, more private sector investment is required. The government must drive a dynamic strategy to fund alternative energies. — KV Jayaram, Bengaluru

Yet another wonderfully in-depth TE feature! Daniel Westlen provided rich insights on clean energy in Sweden. With India's rapid progress in both nuclear and solar power, Westlen's views are certainly handy for our continued strategies in these areas. Further, as geopolitics intensifies, the deployment of solar energy will become crucial globally. TE's articles are always so remarkable. — V. Rajagopal, Chennai

Every time I read TE, I am simply mesmerised by its in-depth coverage of vivid topics. TE 'Diplomaticus' was a real eye-opener about Sweden's reduced dependence on fossil fuels and its use of solar, hydroelectric and nuclear power. It was also amazing to read how temperature increases in Sweden's north are now exceeding the global average. It's high time we minimised fossil fuels on a mass scale. My heartfelt thanks and praise for the commendable efforts of TE's team for bringing us such informative articles. — Amit Tiwari, Amethi

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