

## Policy versus Pretence Tackling Air Pollution in India

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**A**ir pollution was only beginning to get acknowledged as a public health crisis by the political class in India when COVID-19 redefined how a public health crisis is perceived for a generation. And now, either seeking to improve the “ease of doing business” or being unwilling to impose costs on polluters citing the economic crisis, there is a real risk that the Indian state may regress on its recent, tentative steps.

*Air: Pollution, Climate Change and India's Choice Between Policy and Pretence* by Dean Spears is an instructive reading to navigate this moment. Two themes surface repeatedly in this book. First, Spears argues that the notion of a trade-off between development and environment is vastly overstated, and especially when we consider the impacts of pollution exposure on early childhood development, the two converge. Second, he discusses how governments often engage in the pretence of appearing to be serious

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about environment, while doing little in practice to make substantive progress. Both these themes have important implications on sustaining progress on environmental outcomes in the coming years.

### Outline

The book is divided into three parts. Part 1 focuses on air quality and discusses three important sources of pollution (household biomass burning, stubble burning and coal power), and the health impacts, particularly on children. Part 2 discusses climate change: how India is especially vulnerable to a warmer world, and how accounting for adverse health impacts linked to climate change and air pollution justifies more ambitious mitigation pathways. Spears argues that India can tackle the health crisis linked to air

quality domestically, while citing the same policy efforts to signal leadership at the global climate negotiations. In the concluding Part 3, Spears reflects on the role of the political class, experts and voters in framing and prioritising meaningful environmental policy.

The book draws extensively from the environmental economics literature, and especially the author's own body of work with his collaborators. As a result, the book also provides a peek into quasi-experimental methods to investigate the effects of pollution on health. This could be especially valuable for researchers and government officials approaching air pollution from other vantage points. Notably, most of the research cited here is based in India.

While drawing from his body of work, Spears also draws parallels from his sanitation policy work to identify two key insights that hinder a variety of development and environmental outcomes in India. One, on how effective the government can be in meeting certain types of targets (toilets for all), while flailing at broader structural changes (providing reliable water supply). And two, on the critical role that social inequalities play in sustaining widely shared habits and traditions that block progress towards

the desired outcomes. Much like the behavioural shift needed to curtail open defecation, gender roles and traditional preferences sustain the use of polluting solid fuels for household purposes, even when the households can afford to move to cleaner fuels like liquefied petroleum gas (LPG). Subsidies are necessary but not sufficient to accelerate the transition.

### Clean Air and Economic Growth

The author lays out several arguments for how development economics is convergent with environment economics. One important linkage between them is the impact of air pollution and climate change on public health, especially on children. In India, over 60,000 infants of less than five years of age are estimated to succumb to air pollution in a year (WHO 2018). Prenatal exposure within the womb can lead to permanent effects on the cognitive abilities, and on the respiratory and cardiovascular systems. Other impacts on infants include acute lower respiratory infections, stunting, obesity, and development of neurological disorders. As the book points out, there is a growing literature in economics on how effects on early childhood development continue to affect education, productivity and income as adults. The book covers the work done by the author and his collaborators on birthweight and child height in some detail.

Besides the very large effects on health, there are a variety of economic costs posed by air pollution. Black carbon, a form of particulate matter emitted from combustion activities, is also a short-lived climate pollutant (SLCP) that affects precipitation and the solar radiation reaching the crops directly affecting crop yields. Ozone, another air pollutant and SLCP, is toxic to crops. Burney and Ramanathan (2014) estimate that climate change and air pollution, largely due to the direct impacts of the SLCPs, reduced wheat yields in India in 2010 by 36% on average, with Uttar Pradesh—the largest wheat producer in the country—being especially badly affected with 50% reduction.

Far from a trade-off, India cannot afford to ignore air quality and climate change precisely because of their impacts on development and well-being.

Environmental policy is often characterised by symbolic measures and grand declarations that are not followed up in practice. As the book points out, policy pretence is not restricted to the environment, but welfare outcomes in other spheres often improve despite the government, given the larger global advances in technology and commerce. Unfortunately, there is no real substitute for the state in regulating against polluting activities. Since environmental degradation is an externality of economic activities, “environment policy requires navigating the ship of state against the current, not with it” (p 20).

Examples abound of air quality management efforts lacking scientific credibility. Consider the growing popularity of smog towers and other outdoor air purifiers. The Delhi government’s budget for 2020 allocated ₹30 crore to the installation of smog towers. A member of Parliament from Delhi got a smog tower installed in one of the local markets with much fanfare in winter 2019. Other cities like Bengaluru and Mumbai are investing in some variants of this as well. Despite not reducing emissions, a smog tower is perhaps attractive to governments because it seems plausible as an intervention, is a physical manifestation of the government’s promise to do something, and does not impose any new cost on polluters. But, as Spears argues, such instances of “fake policymaking could crowd out demand for the genuine article” (p 197).

Among the genuine articles are the foundational knowledge resources needed as inputs for air quality management. Monitoring pollution levels in the ambient environment in a scientific, representative manner is crucial to measure and track air quality over time. While there has been progress in Delhi and a few metros, smaller cities have some distance to go, and rural monitoring sites are non-existent. Similarly, regularly commissioning studies to estimate the relative contribution of different sources of air pollution is an important input for prioritising action. Channelling resources towards plugging these gaps is a political choice. Spears outlines how “ambiguity ... offers a place to hide” (p 24).

While discussing health impacts, Spears repeatedly stresses on the absence of a reliable registry of deaths, and argues that developing such a nationwide database is ultimately also a political choice. In the wake of COVID-19, with new infections and deaths under increased scrutiny, there might be an opportunity to prioritise developing a reliable database of deaths by cause.

### ‘Strong Arms, Clumsy Fingers’

One crucial difference between India and other countries that have had to deal with air pollution is its much weaker state capacity. Or as the author puts it, “India is tasked with regulating pollution on a 21st century scale with a 19th century regulatory state” (p 31).

In fact, air quality in India is affected by sources that span centuries: extensive continued reliance on solid fuels for household needs, poor public service delivery in terms of managing waste or maintaining roads, and industries and vehicles of the modern economy. Jurisdictions are fragmented, and the formal regulatory agencies—the state pollution control boards—have direct oversight only on industries (Ghosh 2019). Several other agencies like the municipal corporations, state transport departments, the ministry of petroleum and natural gas, and electricity regulators have prominent roles to play.

The strategy ought to be to prioritise measures not necessarily based on the “theoretically optimal set of regulations” (p 183), but also on the ability of the state to implement them. Spears puts it well: “the Indian state indeed has its powers: it can build things, it can ban things, and it can give things to citizens” (p 206).

However, while it can flex these “strong arms,” the “clumsy fingers” of day-to-day public services or regulation are its undoing (p 205). The Ujjwala programme to provide access to LPG hits the sweet spot in this regard—arguably, even the fingers have proved to be rather nimble in providing targeted support to the beneficiaries. Of course, access to LPG does not mean its regular usage—a successor initiative is needed (Josey et al 2019). All things considered though, this is one source where health, pollution mitigation, political incentives, and state capacity are well aligned.

Based on a similar line of thinking, Spears recommends an end to coal-based power as a part of India’s strategy for both climate change and air pollution. Coal power plants have significant impact on air quality and health. Regulatory capacity cannot be expected to enforce the emission norms as they exist, let alone more sophisticated instruments such as cap and trade. Renewables have become cost competitive, if not cheaper than new

coal. Transitioning away from coal would then be a reasonable strategy to follow. While the technical path to this transition is increasingly becoming clear, there are significant political economy considerations (Dubash et al 2019).

The book has a few shortcomings. While recognising that the book does not seek to be read as a primer on the issue, it would have helped for the author to synthesise the literature a little more, especially from disciplines other than economics. For instance, the book does not quite capture the full range of air pollution’s impacts on health. There are sections of the book, particularly in Part 2 on climate change, where the reader may feel that the book is trying to do too much, or lose track of the underlying argument. In particular, Chapter 4 on the impact of electrification, while interesting, felt to me like a digression from the larger story. Likewise, the penultimate chapter on political salience, while being provocative, did not seem to probe deep enough.

But, these are small missed opportunities in a book that manages to be both accessible and engaging to the uninitiated, while offering new perspectives and arguments for the converted.

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