In Where India Goes: Abandoned Toilets, Stunted Development and the Costs of Caste, authors Diane Coffey and Dean Spears propose that Modi's ambitious goal to introduce toilets to 123 million households across India will be thwarted by the failure to lower open defecation, which they argue, is linked to a concern for purity over germs, writes Asif Dowla.


If you build it, they will not go. This is the message of the wonderful book, Where India Goes: Abandoned Toilets, Stunted Development and the Costs of Caste by Diane Coffey and Dean Spears. Prime Minister Modi declared an ambitious goal of eliminating open defecation by October 2nd, 2019, on the 150th anniversary of Gandhi’s birth. The programme known as the Swachh Bharat Mission (SBM) proposes to achieve this goal by providing a latrine for 123 million households that lack one. This means building 67,000 latrines per day over a five-year period. However, the book suggests that the ambitious campaign is unlikely to be successful in eliminating open defecation – the math simply doesn’t work. To achieve the goal, the rate of open defecation has to decline by 50 percent over five years. Whereas the highest decline ever recorded was achieved by Ethiopia, was a decrease of 17 percent over 5 years.

The main hurdle to the elimination of open defecation in India is the notion of ritual purity. Many government built latrines are left unused and 89% of rural Indians openly defecate. Rural Indians, irrespective of income, class, and caste, don’t want to build and use latrines because they don’t want to empty the pit/tank once it is filled with human waste and they don’t want to live in proximity to human waste. Even though a cheap functional latrine works just fine, people want to build and use latrines with a large tank so that they don’t have to empty it. They don’t use affordable latrines because their pits have to be emptied by hand—a task meant for the Dalits, the lower caste. Even those who have the money to build large tank latrines don’t want to build one within the parameter of living quarter because they don’t want to live in such close proximity to human waste that is impure and therefore inconsistent with the idea of a home that is ritually pure. The people of rural India, Coffey and Spears suggest, are more concerned about ritual purity than germs. The book thus points out the puzzle of a worldview in which open defecation is considered pure and latrines are dirty.

Open defecation is a classic example of a negative externality. By defecating in the open, people are spreading germs to their neighbours, and especially to children. On the face of it, it would seem that standard economic tools can be used to solve the problem of open defecation. To prevent the spreading of germs, the government should provide a subsidy in the form of a free latrine to families that lack one. But the free latrine will remain mostly unused. As Coffey and Spears point out, “A problem that cannot be solved through construction funds, democratic pressure, international expertise, cooperative community engagement, decades of economic growth or subsidy is a problem that will be difficult to fix with the familiar toolkit of development policy” (p. 16). Further, they note, “Open defecation in rural India is a challenge rooted in the social forces of caste and untouchability, which cannot be solved merely by distributing affordable latrines” (p.211).

To study the problem of open defecation in India, Coffey and Spears became embedded researchers. They set up an institute in India and lived in the Sitapur district of Uttar Pradesh—a poor part of the province. Their main mode of transportation was the bicycle; they used it to visit participants in villages within cycling distance. They conducted participant observation by immersing themselves in the lives of the subject matter of their research. While living as embedded researchers is not quite the same as sharing the lived experiences of the poor – because Coffey and Spears could leave at any time, an option not available to the poor – their approach is as close as it gets. Moreover, via this approach, Coffey and Spears gained a unique vantage point for their research that informed their policy prescription.
The book is based on their work with other Indian researchers. It is a part ethnography, part participant observation, survey research, and econometric modelling. They called their survey instrument SQUAT (Sanitation Quality, Use, Access and Trends) and used qualitative research to make sense of quantitative findings. The research that culminated as a book began with a simple question, “Why are Indian children among the shortest in the world?” In trying to find an answer to this question they arrived at the next question, “Why is open defecation in rural India different?”

The book demolishes certain fallacies that are invoked to explain open defecation. For example, it seems reasonable to argue that because people are too poor to afford latrines, they end up defecating in the open. However, forty-six out of the fifty-five countries with lower GDPs per capita than India have lower rates of open defecation (p. 32, Figure 1). Similarly, lack of water is not an issue either. Compared to countries in sub-Saharan Africa, rural Indians have more water sources close to their homes. Rural Indians defecate in the open at a higher rate than sub-Saharan Africans even though they are comparatively more literate, have better government, and greater access to latrines.

Coffey and Spears carefully catalog the costs of open defecation: First, the costs are borne by the children in terms of higher mortality rates. Coffey and Spears cite the Muslim mortality paradox – more Hindu babies die before their fifth birthday than do Muslim babies even though the latter are a disadvantaged minority. The neighbourhood sanitation accounts for the difference in mortality, “66 percent of the average Hindu baby’s neighbour defecate in the open, compared with only 45 percent of the average Muslim baby’s neighbours” (p.102). Second, Indian children are shorter than children in sub-Saharan Africa. Interestingly, controlling for wealth, the average child in Bangladesh is taller than the average child in West Bengal. Third, workers who grew up with open defecation as a child end up earning less as an adult. Fourth, eliminating open defecation would save an average Indian fifty calories per day. Fifth, open defecation is hurting the government budget as the government is unable to collect taxes from workers who are earning less because of their exposure to open defecation as a child.

A girl standing outside public toilets in Fatehpur Sikri, India. Photo credit: Ignas Kukenny, Flickr, CC BY 2.0.

The book also explores the political economy questions: why does the Indian state build so many unused latrines and publish a detailed online record of such constructions? The authors point out that neither rural voters, nor the political elites of the left and right, nor the urban middle class are pressing for better sanitation policies. Two groups that are pushing for latrine constructions are rural elites and international aid agencies. The intention of the rural elite is clear. They are the intermediaries that ensure the flow of resources from the state to the village and in return supply votes from the village. And large construction projects can be used to grease the wheel of this intermediation. The role played by aid agencies is a bit more complicated and indirect. They want to implement the sustainable development goal (SDG) of eliminating open defecation. Supporting government programs of latrine construction shows that they are pro-active in trying to achieve the SDGs (sustainable development goals) and support their clients. More importantly, it allows them to bypass the issue of cultural differences.
Even though the open defecation rate is unusually high in India, it has been decreasing over time. However, the authors warn against depending on this natural tendency because climate change and antibacterial resistance could hamper the decline. They highlight the need to end open defecation sooner by pointing out that it is likely to cause six million child deaths in the future; two million of these deaths could be prevented by increasing the normal decline of open defecation by 50 percent.

Coffey and Spears are honest about not having a fool-proof solution to the problem of open defecation. There needs to be an active campaign to change people’s minds and convince them to use latrine. However, as they point out, “behavior change is nobody’s job” (p. 193). Only 3 percent of the budget for SBM is allotted to behavior modification. Despite this depressing state of affairs, the authors recommend the following policies to end open defecation. First, the government should make every effort to measure open defecation as building latrines is not the equivalent to reducing open defecation. Second, there needs to be a frank discussion about the role of culture and caste in the perpetuation of open defecation. Because one’s community is one’s caste and religion, the community-based sanitation program that is now popular in other parts of the world will not work in India. Third, they point out that a successful rural sanitation program must confront the casteist ideas that using normal pit latrines is unacceptable and that large tanks are necessary. They end the book by providing a list of ideas that need to be tested.

My only quibble with the book is that the authors don’t report any gender-based differences in the height of the children. In a 2017 paper published in the American Economic Review, Seema Jayachandran and Rohini Pande showed height difference can also be caused by son preference and birth order. Coffey and Spears are aware of this explanation but they do not address this possibility in their analysis. In the absence of data about gender, it is difficult to untangle the influence of son preference from exposure to open defecation. Now we are faced with two competing hypotheses that explain why Indian children are so short and we don’t know which one is right. Maybe they both are. We hope future research will test these competing hypotheses jointly.

The book illustrates that development is complex and that the usual economist toolkit is sometimes insufficient to provide a more nuanced picture. It also points out the role of culture in perpetuating underdevelopment and causing human misery, especially for children. However, the authors were not deterred by these challenges. They address the unglamorous issue of sanitation head-on and document its deadly consequences. In doing so, they offer an alternative way to study development—being embedded with the subjects to simulate their lived experiences and mixing qualitative and quantitative tools. I really enjoyed the book and plan to use as a supplementary text in my course on the economics of developing countries.

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