Can we create an environmentally liveable Bangladesh?

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In terms of air quality, Dhaka ranks as one of the worst cities in the world. Because the city is perennially drowned in a sea of polluted air, it is often labelled as "hell with the lid off." Indeed, the entire population of Bangladesh is regularly exposed to unhealthy levels of pollutants in the air.

Most of the pollutants in Dhaka's air and elsewhere are anthropogenic, such as effluents from vehicles, emissions from industries and power plants using fossil fuels. Other sources are roadside waste dump facilities, methane-emitting agricultural waste, contaminants from foundries, not to mention dust and smoke from the thousands of slender, cylindrical chimneys attached to the wood- and coal-fired kilns of brick fields. The large quantities of pernicious pollutants emitted by these sources are precursors to the formation of smog, the worst form of air pollution with dangerous health consequences, especially for children and the elderly.

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A possible solution to the freshwater problem is rain and the roof a la Bermuda. Made of limestone blocks and sliced into individual slates, the roofs of houses in Bermuda are fashioned in step-like sloped surfaces with gutter ridges to collect rainwater, the most precious liquid in the tiny island nation. The ridges direct the water through a long concrete trough to a pipe that filters and funnels it into a tank buried alongside the house so that it can be pumped and used throughout the household.

All the cities in Bangladesh are dirty beyond description. Garbage can be found everywhere—by roads, on the roads; around parks, in the parks; by rivers, in the rivers; inside trash cans, outside trash cans. Garbage disposal is not a recent problem, though it certainly has been made more difficult by the sharp rise in population in the past few decades. Despite some progress, the overwhelming mass of household garbage is thrown into landfills in the outlying areas of the cities and left untreated. These unsightly and smelly midden heaps not only emit poisonous gases that are harmful to human health, but also provide a cosy home for the disease carrying vermin, mosquitoes and flies.

The problem is exacerbated during the monsoon season, when cities become submerged for days in a row. Consequently, the storm drains, albeit few and far between, clog and the cities resemble a huge pondfilled with filth and scum.

Finding a clean public toilet anywhere in Bangladesh is next to impossible. Decency dictates that women must suffer, yet allows men to indulge in the malpractice of emptying their bladder by the roadside. The offensive smell of urine, together with malodorous roadside trash, not only makes walking on the sidewalks a horrific experience, it also contributes markedly to odour pollution which, in turn, worsens the already poor quality of air.

As much as the government is battling to tackle this civic problem with signs at strategic points warning of prosecution for infractions, the seemingly endless number of offenders ignore the warning and happily continue to relieve themselves in public. That being so, we have no choice but shame the perpetrators.

Humans are not the only waste producers in Bangladesh. Industries are not far behind. Of the many industries which add hazardous wastes to the load already present from domestic wastes, two stands out conspicuously. They are garment factories and tanneries.

The canals and wetlands of Savar and Ashulia, located near Dhaka and home to hundreds of garment factories, are now effectively retention ponds of untreated waste and effluents produced by these factories. Nearby rivers are so polluted with toxic materials that they run purple, blue and black. Aside from making agricultural land barren and useless, the pollutants are loading the local air with noxious fumes.

Hazaribagh in the heart of Dhaka was once home to a slew of tanneries. Before their relocation to Savar, the tanneries discharged unprocessed liquid waste containing deadly chemicals into the nearby ponds, rivers and canals. These wastes eventually ended up in the Buriganga River whose once pristine blue water now looks like turbid sewage water. Needless to say, the river has suffered irreversible biodiversity loss.

Another plague from which there is virtually no escape, irrespective of where we are—in our homes and gardens, on our streets, inside our cars, parks and in other public places, is noise. Like second-hand smoke, noise has become an unwanted pollutant produced by others and imposed on us without our consent, often against our will. Without question, noise can damage hearing and there is no threshold for ear damage. But more subtly, noise increases tensions already heightened by other stresses of urban life.

Among the many sources of outdoor noise pollution, cacophony produced by the horns of automobiles, trucks and buses are the worst offenders, followed closely by construction equipment. The sound intensity level from these sources oftentimes exceeds 120 decibels, which is the threshold of pain.

Noise is a controllable pollution, but sadly the government has done very little to alleviate the suffering of its citizens from this pestilence. Nevertheless, there is something we can do to stop noise from invading the interior of our house. Within the buildings, we can deaden sound significantly by constructing walls with dead air spaces.

Forests are the lungs of a nation, purifying the air we breathe. However, the increasing demand for land for agriculture, homes and industries caused by population explosion is taking a heavy toll on the forests of Bangladesh. To meet these demands, close to half the forests have been destroyed in the last 20 years or so by indiscriminately cutting down trees. Moreover, once the coal-fired Rampal Power Plant goes into operation, one of the most ecologically sensitive rainforests in the world the Sundarbans will be in its firing line.

Lest we forget, nature not only abhors vacuum; nature abhors human interference, too. A true wilderness should be viewed bio-centrically. The forests should be free to burn, free to be blown away by storms, free to be washed away by floods and free to be attacked by insects. These are natural events to which forests are adapted to respond. The new forests that will emerge may be different from the old ones, but that is the way things change in a natural ecosystem.

The present problems of Bangladesh, alarming no doubt, are not unsolvable. There is every reason to expect that the country can be made liveable. To that end, policymakers need to know how transportation system can be designed to meet the needs of the people; what makes one neighbourhood exciting to live in and another boring; what human needs are not met in present housing; what environmental steps should be taken to improve the quality of air and water, and so on and so forth? The answers to these questions can then be incorporated in any future plans for redesigning old cities or building new ones, so that they not only become liveable but enjoyable, as well.

At the same time, Bangladesh's transformation into a liveable country cannot be achieved overnight. It will perhaps take decades, but before that climate change will leave its indelible mark on the country, thereby making the task of restoring liveability conditions even more arduous, mainly in the low-lying coastal areas.

Bangladesh is Mother Nature's punching bag. The country is experiencing extreme weather phenomena that are growing only more dramatic, more disorienting and more lethal, by the year. Of the many threats from climate change, sea level rise will certainly be amongst the most impactful, making the entire coastline of Bangladesh uninhabitable and potentially displacing tens of millions of people in the coming years.

Preparing for climate change is much more than a technological challenge. It is primarily a problem of mindset and collective action. The way to outsmart breakdown due to climate change is to build climate resilience. We can surely do this by adopting environmentally sound lifestyles, not by reverting to antiquated ways, but by creating a new synthesis a new way of life that utilises modern technology and knowledge to protect the Earth's environment from destruction and foster its renewal.

Finally, grappling with the problems of Bangladesh and keeping the country liveable is a daunting task. Even so, with clear vision and open mind, it can be done. Success will hinge on the courage of the government to make bold moves and resist the temptation of easy fixes. Once we adapt ourselves to the vagaries of climate change, as well as achieve the balance of a liveable environment, life will be worth living for our children and grandchildren.

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