

Transport owners dictating terms

Implement Road Transport Act-2018 without further ado

THE movement by students for safer roads had moved the authorities into action and the Bangladesh Road Transport Act-2018 was enacted last August but it has not been implemented as yet. People are still being killed and maimed on our roads but from what has been revealed by the media, the Act is facing a lot of resistance from transport leaders who are adamant about changing some provisions in the law. One of the sticking points is making all offences under the law "bailable". The fact that the authorities have failed to issue gazette notification merely shows how much power these transport associations wield over government decision-making. That is all too evident by the two-day strike enforced by transport workers at the end of October, 2018 where even people in ambulances weren't allowed to get to hospitals and an infant had died as a consequence.

When will the Act be implemented? We are informed that the committee comprising law, home and railway ministers held its first meeting with transport leaders on July 14, and that several more stakeholders' meetings are scheduled later this year. It appears the authorities are bending over backwards to accommodate the interests of transport associations and their unfit drivers and vehicles. But what about the road safety activist groups and the general public who are at the receiving end of reckless driving—do their voices not count? Safety of the roads and the passengers must not be sacrificed on the altar of the owners' and drivers' parochial interests.

However, in the interests of public safety, can the government actually afford to cave in to some of the more preposterous demands like relaxing rules about minimum educational qualification (Grade 8) and the introduction of a 12-point system—a failure to uphold which could lead to the cancellation of driver's license?

The whole point of the Act was to ensure punishment for breaking traffic laws and making the roads safe for people to travel on. The proposed Act is already diluted at inception, and if the authorities succumb to further pressure, then the law won't be worth the paper it's printed on and it will be another victory for big business over citizens' demands for safer roads.

Mercury contamination a new threat for Bangladesh

Put disposal mechanism in place

THE findings of the first-ever study on the level of mercury pollution in Bangladesh are alarming, to say the least. The one-year-long study, done by the Department of Environment (DoE), has found dangerous levels of mercury in both our air and water. According to it, the total mercury release in Bangladesh is approximately 32,660 kg per year, and 44 percent of the amount comes from waste incineration. What is more frightening is that, in the absence of a proper disposal mechanism, this heavy metal, found in thermometers, makeup items such as mascara and skin whitening creams, and used as a regular dental amalgam, has made its way into our food items.

Apparently, people hardly have any idea as to how to properly dispose of materials such as CFL bulbs, tube lights, switches, paints, medical wastes, etc., which release mercury into both air and water. How would people know when there is, in fact, no disposal mechanism in place?

Mercury can have a wide range of adverse effects on human health, including permanent damage to the nervous system. Children, especially the newborns, and pregnant women are most at risk of being exposed to this heavy metal. And as the World Health Organization has put it, there is no safe level of mercury exposure and everyone is at risk when mercury is released without safeguards.

Under the circumstances, the government needs to formulate specific guidelines regarding the management of mercury in products. It needs to check uncontrolled dumping of medical, industrial, and electronic wastes into the waters and soil as well as uncontrolled coal burning in brick kilns. Being a signatory to the Minamata Convention on Mercury, Bangladesh has some obligations to fulfil. It needs to ban some mercury products and phase out others by 2020. Most of all, the government needs to have a proper disposal mechanism in place to safeguard human health and environment from the anthropogenic emissions and releases of mercury.

Obligations of the Sinking Boatmen



MUHAMMAD MUSTAFA MONOWAR

PHILOSOPHER and ecologist Garrett Hardin was well-known for proposing a notorious solution to climate change. He imagined a lifeboat with rooms for sixty people. Fifty people are already

onboard and more unfortunate people are swimming in the ocean, begging to be saved. Of the available options, he suggested, if those onboard try to save everyone, the boat sinks and everyone drowns, resulting in "complete justice, complete catastrophe." Hardin used this story to point out that poorer nations double much faster than richer populations. If they are to be saved, everyone including the richer population will become extinct in the coming crisis.

The harsh reality of "climate apartheid" is reflected in this metaphorical story. The people in the lifeboat and those swimming for life are divided by their predetermined position on Earth. While Hardin observes that the poor are to be blamed mostly for taking up more of the population space, Stephen M Gardiner argues that richer nations are liable for most of historical and current emissions. He also believes that poorer nations will be the worst sufferers of climate change caused by these emissions.

These facts make climate ethics a very complicated subject to talk about. It deals with all the things we do not like, or want, to hear. Gardiner believes there are many unresolved issues geographically, inter-generationally and theoretically. Yet, even if there is an answer, we may be morally corrupt because of our inability to act or vice versa. We call this climate denial; Gardiner calls it "a perfect moral storm".

A perfect moral storm is essentially moral in nature, because it invokes moral dilemmas where a huge population's life is in question against the lives of larger groups of people, like Hardin's lifeboat metaphor. Climate scientists have been warning us about this for a long time, yet only in recent months the scene has escalated. Ireland, France and Canada have declared Climate Emergency as scorching heat ravages Europe and elsewhere around the globe. Irregular flooding is happening more frequently as the polar ice has been visibly melting in recent years. It is scary to know that most of these were predicted long ago and are now becoming our everyday reality.

The latest prediction to make the headlines is from Philip Alston, a UN

human rights expert, who believes the climate apartheid may soon become widespread, where the rich would have the ability to pay their way through the escalating heat while the rest of the world suffers. This possibility echoes the Hardin's dilemma.

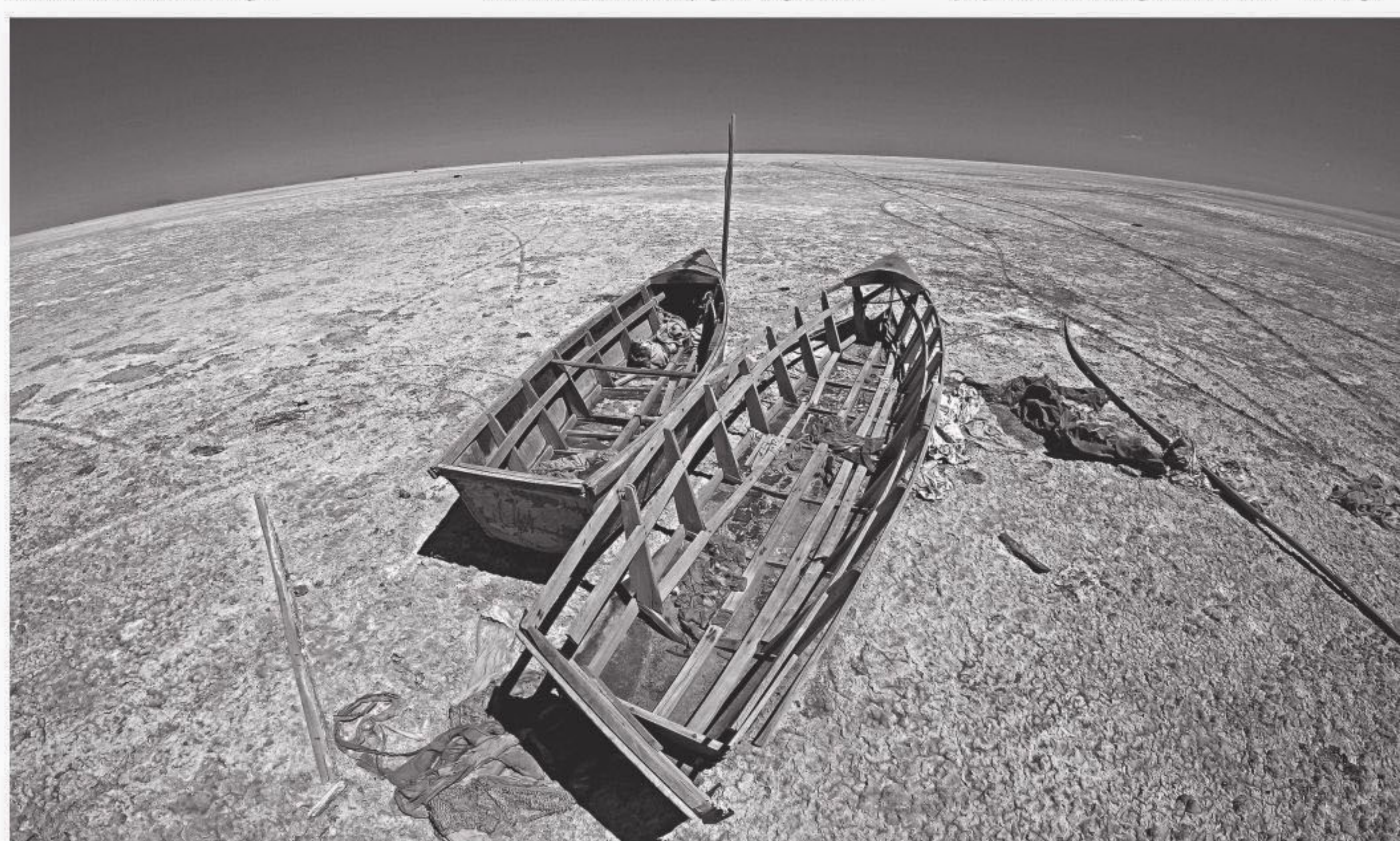
It is not hard to see where this is going. In 2018, the world's richest 1 percent held as much wealth as the world's poorest 45 percent (Credit Suisse, Global Wealth Databook, 2018). In case of catastrophic events, the poor lose all of their subsistence, and the rich only lose part of their wealth. In that sense, the richer population has much greater obligations towards their poorer counterparts when it comes to climate change.

Yet humans have been able to defy this rule, at the cost of many extinct species. Does this mean we will continue to be triumphant?

Professor Albert Bartlett's "bacteria in a bottle" analogy is useful to understand why we might end up destroying the whole planet, not just us. In his example, Bartlett explains that a bacterium grows by division—1 bacterium becomes 2, 2 becomes 4, 4 divides to become 8, and so on. Imagine putting a bacterium in a bottle at 11.00am, and its number grows exponentially in this pace per minute. At which point does the bottle get half-full? Bartlett says, 11.59am. This is mathematically identical to the case of exponentially growing human

even this leads to many dilemmas. Who is going to volunteer? If everyone volunteers, who will stay? If no one volunteers, what will happen? These are not just imaginary questions. These are real problems in which we all become prisoners in dilemma, unable to communicate with others, we act selfishly, and thus everyone ends up acting selfishly. The boat ultimately drowns.

In his novel *Inferno*, Dan Brown sketches an antagonist who creates a vector virus that randomly targets a population with infertility syndromes. The purpose was to save the Earth. While this may be too dramatic for reality, there must be some other ways to reduce population through consensus—through



A sinking boat does not simply sink from a hole; it sinks also from the collective denial and avoidance of due duties by its boatmen.

PHOTO: REUTERS/DAVID MERCADO

Yet Hardin's point may be revisited. Over and over, Hardin has warned us, like many others, that climate change is rushed by exponentially doubling of human population. In nature, there is a rule for this. In a closed ecosystem, when a specific species gets enough food, it increases in number. As a result, food becomes scarce and the population decreases eventually. The food species increase in this phase and again the specific species gets the chance to flourish. This is how one species keeps the other in balance so that none gets extinct.

consumption of finite resources on Earth. Bartlett also asks us: if we were the bacterium, when would we realise that we were running out of resources? I hope like the bacteria, it's not past 11.59 when we realise that we have run out of space, because in the next minute the bottle will be full. And in our case, all the resources will be depleted and the whole population will die without any escape.

All of these pose a very hard challenge for us. If we really valued life on Earth and the survival of the species, we would volunteer to reduce the population. But

the awareness of the impacts we make by making simple decisions.

The climate crisis is expected to become more intense in the coming days. If we think we will sit and wait for the others to take care of everything, may be those who are next to us are thinking the same thing. A sinking boat does not simply sink from a hole; it sinks also from the collective denial and avoidance of due duties by its boatmen.

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Asking for the moon and beyond



PALLAB BHATTACHARYA

IT came as a disappointment after the mega build-up to the launch of India's second mission to the moon on July 15. The launch of Chandrayaan-2 was scrapped by the Indian Space Research Organization (ISRO) about an hour before the lift-off of the country's heaviest rocket Geo-Synchronized Launch Vehicle Mark III carrying the three-module spacecraft, which would have begun a 52-day journey across

384,000 kilometres in the space before making a soft-landing by the lander on September 6.

Chandrayaan-2, India's most ambitious space mission so far, is comprised of three instruments: an orbiter (which is to keep circling the moon at a distance of 100km from lunar surface for about a year, taking pictures of the surface and sending back information on the moon's atmosphere), the lander, and the rover (which will conduct experiments on the moon's surface, studying its rocks and soil for signs of the presence of water below the surface, helium, a key source of power, and other minerals). The objective is to get an insight into the evolution of not only the moon but also of the entire solar system.

distance of 100km, finding traces of water on the lunar surface.

More importantly, Chandrayaan-2 would have landed on the South Pole of the moon, a hitherto unexplored area. All the 28 landings on the moon so far, including the six human ones, have been in its equatorial region. Scientists are of the view that the polar parts of the moon hold out much greater promises of new discovery because it is an extremely cold region, with the temperature in many parts within the range of minus-200 degree centigrade. This is mainly due to the moon's almost erect position around its axis, which prevents sunlight from ever reaching some of the polar regions.

The run-up to India's second moon mission has set off a fresh global interest in lunar expeditions and stepped up the international space race half a century after American astronaut Neil Armstrong set his foot on the moon. China landed its rover Chang'e 4 on the moon in January this year and the United States is trying to conduct another human landing on the moon by 2024 as a stop along the way to the Mars. One cannot but recall the fact that the US put Armstrong on the moon in a bid to overtake the Soviet Union stealing a march on it by making the Sputnik on the lunar surface. Even smaller countries like South Korea and Israel are pursuing moon missions using robots although the Israeli robot had crash-landed on the lunar surface leading to its failure.

For India, reaching the moon would highlight its technological advances and capabilities. Flexing technological muscles, global space ambitions and national pride are stated to be among the motives behind the space race.

motives behind the space race. India's moon mission also signals that. Beginning in early 1960s, India's space programme has gained more prominence under Prime Minister Narendra Modi, who has promoted the space programme as a symbol of the country's growing international standing and a military power in outer space, as was evident in its successful shooting down of one of its satellites earlier this year.

But there are more important considerations behind the race for the moon. If the presence of water in lunar subsurface and the helium can be conclusively proved and harnessed, and if the air in the moon can be breathable, these will be helpful for future human settlements on the moon including a permanent space station there. This will bring up the question of rights over resources in the outer space. There will be a stage when the international community will have to lay down rules for the use of these resources. India would not like to be left behind in shaping these rules. Given that outer space has become such an intrinsic part of human lives on the earth in a range of areas including communications and security that are being done by satellites, the race for space is but natural. Secondly, a foothold on the moon may also give access to explorations deeper into other uncharted areas of the solar system.

Thirdly, India wants to further cement its position as a hub of low-cost space programmes. Its first Mars satellite cost less than the budget of the space movie "Gravity". The USD-140-million budget for Chandrayaan-2 is far less than the USD 25 billion (equivalent of over USD 100 billion in current prices) spent by the United States on its Apollo programme in 1969.

The cost effectiveness came largely due to designing and building almost all components of Chandrayaan-2 domestically. India had prepared its most powerful rocket, the GSLV Mk III, largely following technology denial by the US in 1990s when ties between the two countries were very strained. India built the cryogenic engine of the rocket indigenously partly after Russia gave in under American pressure not to sell the engine to India in 1993, as neither New Delhi nor Moscow was at that time signatory to the Missile Technology Control Regime (MTCR).

India also plans to send a manned space mission by 2022 and land a probe on the Mars. In 2014, India became only the fourth nation to put a satellite into orbit around the Red Planet. China has successfully sent its first manned space mission way back in 2003.

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Spectators leave a viewing gallery after India's second lunar mission, Chandrayaan-2, was called off, in Sriharikota, India, July 15, 2019.

PHOTO: REUTERS/P. RAVIKUMAR

While Chandrayaan-2 would have been India's second shot at the moon, eleven years after its successful first mission in October 2008, it would have been the country's maiden landing of the lander and the rover on the lunar surface, and would put it in the exclusive group of space powers Russia, the US and China that have done so. It would also help India, with its low-cost space programmes, compete in the lucrative and increasingly crowded global commercial space market. Chandrayaan-1, India's first moon mission, did not do the landing on the earth's satellite but orbited the celestial body taking high-resolution photos from a

In any moon mission, it is the landing which is the most challenging task. When the lander and the rover separate from the orbiter running at 6,000km per hour, both have to be slowed down to about 3km an hour for the soft landing. No wonder the ISRO chief K Sivan considers it "the most terrifying moment" of the moon mission.

Why is everyone reaching for the moon? What is behind the new race for the space—the final frontier of human quest for knowledge? For India, reaching the moon would highlight its technological advances and capabilities. Flexing technological muscles, global space ambitions and national pride are stated to be among the

LETTERS TO THE EDITOR

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Monsoon rain should not bring sufferings to people

The torrential monsoon rains, as usual, have led to massive flooding across the country—leaving thousands marooned and displaced. As the houses built on lowland areas got flooded with contaminated water, people living there have been suffering from many water-borne diseases. Even the city life comes to a standstill every time there is a downpour. Due to the poor drainage systems, the major lanes of Dhaka get submerged in knee-to-waist-deep water, making it difficult for the people to commute. The heavy rainfall also leads to chaotic traffic which disrupts all kinds of activities within the capital. The situation has aggravated this time due to multiple ongoing road renovations, with the rickshaw pullers demanding sky-rocketing fares.

Better sewerage systems would have helped with reducing the waterlogging, thereby alleviating the pain of several hours of commuting. City dwellers have, time and again, demanded the drainage system to be fortified, but to no avail. The authorities need to take this seriously to help lessen the sufferings of the people.

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