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Set up RT-PCR lab at Dhaka airport urgently

The long delay in doing this is totally unacceptable

T is absolutely unacceptable that migrant workers had to stage a fast-unto-death sit-in in front of the expatriates' welfare ministry on Tuesday to receive an assurance from the minister that an RT-PCR test service would be installed at Hazrat Shahjalal International Airport (HSIA) in Dhaka. The workers have been staging such protests for the past one month, leading to the prime minister, on September 6, directing the relevant authorities to set up an RT-PCR lab at the airport. Why hasn't one been set up even then? More importantly, why hasn't one been set up over the past year and a half of Covid-19, knowing how essential such facilities are for pandemic-time travel?

The fact that we don't have any Covid-19 testing facilities at our largest international airport yet is a disgrace. It shows just how indifferent the relevant authorities are to the plight of the people—and the migrant workers in particular. Even the prime minister's express directive couldn't nudge them into doing what they should have done of their own accord long ago. While this lack of compliance raises serious questions about administrative accountability, it is because of this kind of negligence that Bangladeshi migrant workers have been suffering immensely—and unnecessarily. Around 50,000 Bangladeshis working in the UAE have been stranded in Bangladesh for months now, unable to return to their workplaces as the UAE government has imposed a condition for migrant workers from different countries, including Bangladesh, that they must carry Covid-19 negative certificates based on RT-PCR test within six hours of boarding a plane. In response to that, if India and Pakistan could set up RT-PCR labs at their airports to aid their migrant workers, why couldn't we? The only logical answer is apathy on part of our authorities.

But why should such apathy towards the plight of migrant workers be acceptable? The government often boasts about the economic progress of the country riding on the backs of these migrant workers. But when it comes to providing vital, pro-migrant services, the government mostly seems either silent or reluctant, acting only when

This attitude has to change. The authorities need to prioritise the needs of our migrant workers. Throughout this entire pandemic period, migrant workers have suffered more than most other groups. And during their times of urgency, the government has failed to lend them the needed support. We expect the expatriates' welfare ministry to do much better in supporting our migrant workers. And the government in general needs to do a better job. Setting up an RT-PCR lab urgently at Dhaka airport will be a positive step towards that goal.

Not enough time tor students to register for vaccine

Authorities must conduct vaccination of university students in a more organised way

TE are sceptical about the recent government decision that any university can resume inperson classes if all of its students complete online registration to get the Covid-19 vaccine by September 27. Earlier, the deadline for reopening the universities was set at October 15.

According to a report by The Daily Star, 60 percent of the country's university students are yet to register for the vaccine. Currently, students over the age of 18 years can register using their national ID cards. But for those who do not have NID cards, the University Grants Commission (UGC) has said it will create a link on its website, through which students can register using their birth certificates. The list of students will be forwarded to the health authorities, and students will then be able to register using the Surokkha platform. Once registered, they will be vaccinated on a priority basis, as decided in a meeting between the education ministry officials, the UGC, vice-chancellors of the public universities, and health officials on Tuesday.

However, the mishandling, miscalculations and chaos that we witnessed during the special mass vaccination drives in August and earlier this month (conducted by the city corporations) give us pause as the drives for registration/inoculation of all university students may very well face a similarly chaotic situation.

Even if all students, regardless of their NID status, register for the vaccine by September 27 and begin to attend classes, how does this address the threat of virus transmission in the classrooms in the short term? After all, even if the registration plan goes as expected, the students will only be registered for vaccination at the time of reopening; it may take them weeks to get their schedule for the first dose, and at least a month to get their second dose. There are real concerns about what might happen if the 44.34 lakh or so university students across the country start in-person classes without being fully vaccinated. Will it lead to a surge in Covid-19 infections? When the time for their vaccination comes, will we again see the pandemonium that marked the two special mass vaccination drives? Most importantly, are there enough vaccine doses to inoculate all university students alongside the 2.03 crore citizens who have reportedly registered but have yet to get their first dose?

While we would, of course, like to see the university students return to their classrooms, we hope this will not happen in a haphazard manner, giving way to another wave of Covid-19 infections. We hope the health officials are right about having enough vaccine doses in stock, but we urge the authorities concerned to conduct the vaccination of university students in a more planned and disciplined manner. Otherwise, this much-needed action may cause more chaos than relief.

Here comes the flood

A 'wobble' in the moon's orbit working in tandem with rising sea levels will create record floods in the near future



QUAMRUL HAIDER

industrialisation and increased technological complexity over the last two centuries, we seem to have lost touch with the magnitude of our

effect on our surroundings. Today, our fingerprints on the environment can be found everywhere—the atmosphere, the oceans, and the Earth's surface. Not to be outdone, there is now another player, up in the sky—the moon, whose periodic "wobble" together with rising sea levels on Earth will make high tides even higher in the near future, eventually leading to devastating floods around the world.

the tidal bulge ahead of the moon's orbit, while the moon's gravitational attraction tries to pull it backward. The Earth, therefore, feels a drag force known as tidal friction, which has slowed down its rotational period from five hours almost four billion years ago to 23 hours 56 minutes today.

The moon takes the same time—27.3 days—to rotate once on its axis as it takes to orbit the Earth. This is called synchronous rotation. In other words, the moon is tidally locked with Earth, which means we always see the same side of the moon, irrespective of where the moon is

Additionally, there is an apparent wobbling and nodding of the moon, collectively called "libration." The wobbling is similar to the back-and-forth motion of a simple pendulum. It is an effect of the moon's non-uniform speed

tilted by 1.5 degrees. Furthermore, moon's orbital plane is inclined to Earth's orbital plane by about five degrees. The net effect of these inclinations is an up-and-down wobbling, or nodding, in a north-south

Alongside global warming, lunar wobbling can either exacerbate the severity of tides or counteract them. During one half of the 18.6-year wobbling cycle, high tides are lower than normal and low tides are higher than normal, so the difference between the two is rather small. As a result, it negates the effect of rising seas to some extent. During the other half of the cycle, high tides get bigger and low tides get lower, thereupon increasing the range between the highest and lowest tides. This cycle boosts the effects on the sea level rise.

The moon is now in the tideamplification cycle, but the sea level

The study is the first to take into account all known oceanic and astronomical causes for floods. According to the study, these floods will exceed flooding thresholds in the coastal countries more often—as frequently as every day or every other day. They may even occur in clusters and can last as long as a month or more, depending on the positions of the moon, the Earth and the Sun. "It's the accumulated effect over time that will have an impact," the study warns. However, it also notes that the prediction does not apply uniformly to every coastline everywhere.

Climate change has already increased the frequency and severity of hurricanes, floods and other extreme weather events around the world. This impending threat on the horizon could wreak additional havoc, thereby worsening the already grim predictions of climate change for people living along the coastlines. Some of the biggest cities on the US Atlantic and Gulf coasts, including New York City, Miami and New Orleans, will be hard hit. Osaka in Japan is also a major-risk city; climate models show it could "disappear" with rising tides. Other high-risk cities are Alexandria in Egypt, Rio de Janeiro in Brazil and Shanghai in China.

It took Noah years to build an ark to save him and his family from a godless society that God was going to destroy by sending a catastrophic flood. Unlike Noah, we have 15 years, more or less, to build the ark of mitigation and adaptation necessary to save us from the calamitous effects of climate change. It is thus a race against time, because the flood is coming faster than many once thought. Keeping this in mind, Nasa's Sea Level Change Team is providing crucial information so that we can "plan, protect, and prevent damage to the environment and people's livelihoods affected by flooding." Unfortunately, if poor low-lying countries like Bangladesh become the victims of high tides caused by lunar wobbling, they will suffer immensely because they may not have the technology and/or sufficient fund to implement Nasa's recommendations.

Finally, our moon, until now the quiescent mystical object majestically shining in the sky, has been "faithful to its nature and its power is never diminished.' One of the powers it always flexed (albeit unnoticed by us) and will flex again approximately 15 years from now-but this time working in tandem with climate change—is its ability to create record floods. The floods will perhaps give our leaders, who are not doing enough to combat climate change, an alibi to throw in the towel by blaming the wobbling moon.

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Bangladesh is among the countries that are at a high risk of flooding likely to be caused by the combined effects of rising sea levels and lunar wobbling.

High tides are caused mostly by the gravitational pull exerted by the moon on Earth. But because our planet's lone natural satellite wobbles ever so slowly over a predictable 18.6-year cycle, the power of the pull varies from year to year. Nevertheless, the result is two simultaneous high tides: one on the side of Earth facing the moon, and the other on the opposite side.

Earth rotates on its axis much faster than the moon revolves around it. Our planet's rapid rotation coupled with higher orbital speed about the Sun drags

along its elliptic orbit around Earth. The orbital speed increases as the moon approaches the perigee, which is the point closest to the Earth. It decreases as it recedes from the perigee and approaches the apogee, the point farthest from the Earth. This gradual increase and decrease in the orbital speed causes the moon to wobble back and forth—at least to our eyes—by roughly seven degrees in the east-west direction.

The wobbling motion also arises from the fact that the moon's rotational axis is not perpendicular to its orbital plane; it is

has not risen enough yet due to climate change for the effect to be pronounced. However, a new study by scientists from Nasa and the University of Hawaii published in the peer-reviewed scientific iournal Nature Climate Change, only days before the recent destructive flood in Western Europe, warns that Earth may experience record flooding in the mid-2030s, when the moon's next tideamplification cycle is set to happen. By then, global sea levels will have risen enough to make the already elevated high tides especially troublesome.

PROJECT **■** SYNDICATE

Financing a Sustainable Global Food System



¬HE global food unsustainable While it is worth approximately USD 8 trillion annually, its negative impact is valued at roughly USD 12 trillion.

And this is not the system's only contradiction. Around the world, food systems are both affected by climate change (owing to disruptive weather and rising temperatures) and make significant contributions to it (through greenhouse-gas emissions and biodiversity destruction). The millions of jobs they provide are often low-quality and poorly paid. And, most significantly, they fail in their ultimate purpose of

delivering affordable, healthy food to all. Because the global food system is fundamentally unviable, change is inevitable. But the radical reforms needed to create an inclusive, sustainable sector that produces nourishing food for the world's population may have devastating short-term consequences. If we take the wrong approach, incorporating the true costs of production into food systems could trigger widespread bankruptcy, devastate rural unemployment, drive up prices, and increase poverty.

The best way to achieve a rapid, fair, and safe transition to a sustainable global food system that can deliver affordable, healthy food for all is, however, a matter of heated debate. This is reflected in the strident and largely unproductive discussions taking place in the run-up to the United Nations Food Systems Summit, to be held on September 23 during the UN General Assembly.

From a production standpoint, advocates of regenerative farming vehemently oppose a new generation of soilless food production, such as lab-grown "alternate protein" and vertical farming. But it is tough to scale regenerative farming rapidly. Soilless systems must be a major part of the

solution, given their dramatically reduced carbon footprint and water use, minimal impact on biodiversity, and potential for rapidly delivering cheap, healthy food at

The role of finance in this transition is no less controversial.

There is some merit to complaints about the undue influence of a limited number of private players on decisions that impact the entire global food system. Financialisation—the drive to maximise risk-adjusted financial returns—is increasing across the global food system, and market concentration is growing. For example, just ten companies control half of the world's seed market, and four agribusiness firms account for 90 percent of the global grain trade. Just one percent of agricultural firms own 65 percent of the available farmland.

Financialisation reinforces the unequal distribution of economic returns, squeezing the incomes of small farmers and communities, while supporting business models that under-supply healthy, affordable food, and over-supply foods containing high levels of salt, sugar, fat, and carbohydrates. Moreover, financialisation amplifies corporate lobbying that externalises public health costs, maintains perverse agricultural subsidies, and ensures that the costs to the climate and nature do not adversely affect financial bottom lines.

But private capital is absolutely necessary for financing the global food system's transition. We need to harness the massive financial resources managed on our collective behalf by pension funds, banks, and private equity while mitigating the dangers of financialisation.

In a recent report, Making Finance Work for Food: Financing the Transition to a Sustainable Food System, the Finance for Biodiversity Initiative maps out the role global finance can play in the needed transition. The report, prepared in association with the Food System Economics Commission, describes four ways financial tools can be used to shape future food systems.

For starters, financial policies and

regulation, reinforced by shareholder and public activism, must drive investors' internalisation of the costs to nature and climate in their financing decisions. This change would strand dirty assets, accelerate green-friendly investments, and trigger a shift towards more nutritious food production.

Second, financial innovations, including blended public and private solutions, are needed to accelerate

soilless forms of food production.

Finally, we need to create opportunities to empower citizens, especially by harnessing the power of digitalisation. As consumers, they can make an impact by adopting improved, sustainable diets. As investors, pension policy holders, and taxpayers, they can advocate for better uses of their money.

Delaying the transition to a more inclusive and sustainable global food



'Delaying the transition to a more inclusive and sustainable global food system would jeopardise food security, destroy livelihoods, and prevent us from achieving environmental goals.' PHOTO: PALASH KHAN

investment in healthy food produced by climate- and nature-friendly forms of farming, thereby driving down costs. Such innovations could involve scalable instruments equivalent to the feed-in tariffs that have been used to great effect in catalysing investment in renewable

Third, policies and public finance are needed to protect and retrain those whose livelihoods are eroded during the transition. The goal should be to provide technology, skill development, and capital to enable them to own and operate commercially viable regenerative and

system would jeopardise food security, destroy livelihoods, and prevent us from achieving environmental goals. We need to overcome the resistance not only of those who profit from today's systems but also of those who seek to protect the vulnerable. Resetting global finance and harnessing its benefits is necessary to fund a rapid, sustainable, and equitable

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