

# Food insecurity increases amidst the latest Covid-19 spike



**AN OPEN DIALOGUE**  
**ABDULLAH SHIBLI**

**F**OOD insecurity in Bangladesh during the pandemic is rising. Even in the best of times, millions of people in the country go hungry. The Global Food Security Index 2020 ranked Bangladesh 84th out of 113 countries globally, which was worse than many of its neighbouring countries, such as India, Nepal, Pakistan, and Myanmar. Bangladesh's position among these 113 nations ranked by EIU varies from year to year, but each of the last five years has revealed that there is more food insecurity in Bangladesh compared with its neighbouring countries. So, it is not important if over the years we ranked at 82 or 84—or, even if we improved our position from the previous year—what appears to be true is that, even in normal years, there is a prevalence of moderate to severe food insecurity in many segments of our population.

Undoubtedly, we have made progress on several fronts of the economy, including income, employment, and nutrition intake. However, it is a fair estimate to say that 20 percent of our households live below the poverty level and 25 to 30 percent of the people are hungry and face constant food insecurity. A cataclysmic external shock such as the Covid-19 pandemic and the on-and-off lockdown measures are likely to disrupt the daily balance in food intake that might be expected under normal circumstances. As one study observes, "Despite substantial progress in attaining food self-sufficiency at the aggregate level, a large number of people remain food insecure and hungry in the face of periodic shocks". And, since hunger, starvation, and malnutrition make up the flip side of economic disruption, the role of the government and NGOs is important, and the national government must take proactive measures to stave off long-term damages that a pandemic might leave on the health and physical condition of the poor.

**Has the pandemic increased the number of poor?**

The Food and Agriculture Organization (FAO) indicated that among populations who are

already malnourished, weak, and vulnerable to disease, a "crisis within a crisis" could emerge, in which the current health crisis will be compounded by a hunger crisis. According to an assessment done by the International Fund for Agricultural Development (IFAD), the number of people with severe food insecurity has been rising globally since 2014 and the Covid-19 pandemic will likely reduce food security even further. The current pandemic crisis has been long-lasting, and it is also affecting the food security of households that were not poor prior to the pandemic due to debt, temporary or permanent job loss, or catastrophic illness.

The *Daily Star* reported last week that a sample survey concluded that the pandemic has created 24.5 million new poor, increasing the country's rate of poverty to around 42 percent. The survey was carried out by the Power and Participation Research Centre (PPRC) and the BRAC Institute of Governance and Development (BIGD) before the second wave hit the country. The study found that the majority experienced "significant depletion of household income and fragile recovery from last year's shock". In a nutshell, the recovery from the pandemic, after a year of its onset, has been conditional and weak.

The reaction from our Finance Minister was swift and dismissive, labeling the study as "a distortion of the real position." He played down the significance of the findings, and declared that "the government would accept the data on the number of new poor only from the Bangladesh Bureau of Statistics (BBS), not from any private company." Incidentally, earlier in January, another study released by SANEM showed that "the people living below the poverty line (upper poverty line) almost doubled to 42 percent in 2020 from 21.6 percent in 2018."

One can only hope that the BBS is in the process of collecting data on the incidence of poverty and hunger triggered by the pandemic and will provide the appropriate foundation for government policy and post-pandemic economic measures without much delay.

Coming back to the latest surge of the pandemic, it has been met aggressively by the government with new rounds of lockdown. One can see from the newspaper stories that the new lockdown will most affect the population who are on the extreme end of the hunger spectrum: weak and less well-equipped to fend off the viral infection. For our poor, the



**Food insecurity falls relatively more in the moderate to severe category for households that are primarily farmers and wage labourers.**

PHOTO: SK ENAMUL HAQ

lockdown feels like salt to their wounds.

Mohammed Hossain, a small-scale vendor from the capital's Farmgate area, vented his frustrations to a journalist, "It is very easy to declare a lockdown. But it is people like us who have to face the difficulties that come with the lockdown. Provide us with food first, and then enforce the lockdown."

**What is food insecurity?**

Food insecurity, a condition defined by limited or uncertain access to sufficient, nutritious food for an active, healthy life, disproportionately affects low-income communities and the urban poor. Food insecurity is associated with numerous poor health outcomes in both the short and long term. The unprecedented Covid-19 pandemic, and the associated social and economic response (school closures, stay-at-home orders, business closures and job losses) have the potential to dramatically increase food insecurity and its related health disparities among already at-risk populations. According to a study published in *Nutrients*, a journal affiliated with the US National Institutes of Health, "Households already struggling with food insecurity may find their current situations exacerbated by Covid-19 with fewer resources to comply with social distancing recommendations. Food insecure individuals also may have less flexibility in their jobs to

allow them to earn income while staying home, or may be at higher risk of losing their jobs completely, thereby decreasing (or eliminating) their incomes."

Income loss and food insecurity are strongly correlated across households. According to a study done by researchers affiliated with Monash University of Australia on food insecurity during Covid-19 in rural Bangladesh, households with no changes in income are mostly food-secure, and food insecurity appears to increase with income loss. In terms of occupation, food insecurity falls relatively more in the moderate to severe category for households that are primarily farmers and wage labourers than among households with more stable occupations, such as having public sector jobs or owning businesses.

The primary risks to food security in the aftermath of the pandemic are already manifest and come from higher retail prices, combined with reduced incomes. Many have reduced their purchase of fresh food and vegetables, the reasons including poor availability, higher prices, reduced store trips, and concerns of contamination. These factors mean more and more households are having to cut down on the quantity and quality of their food consumption. Reduced calorie intake and compromised nutrition threaten gains in poverty reduction

and health, and could have lasting impacts on the cognitive development of young children. While levels of extreme poverty are in decline, nearly 32 percent of Bangladeshis still live below the national poverty line, according to the UN World Food Programme (WFP). Approximately 25 percent of the population in Bangladesh remains food-insecure and 36 percent of children younger than five years of age suffer from stunting (a common measure of chronic malnutrition), WFP reports.

According to a World Bank brief published on April 13, 2021, the impacts triggered by the pandemic "have led to severe and widespread increases in global food insecurity, affecting vulnerable households in almost every country, with impacts expected to continue through 2021 and into 2022". This is corroborated by a study published in *Lancet* based on a randomised control study in rural Bangladesh. The authors conclude that the immediate effects of eight weeks of stay-at-home orders are visible on family economic outcomes and food security, and on women's mental health and experiences of intimate partner violence. One survey found 31 percent of the female respondents have lost their jobs in the last one year—"Covid-19 lockdowns present significant economic, psychosocial, and physical risks to the wellbeing of women and their families across economic strata in rural Bangladesh. Beyond supporting only the most socioeconomically deprived, support is needed for all affected families."

**Policy implications**

The policy implications are clear and apply to all aspects of the government. There is a need for adequate food assistance during the Covid-19 pandemic and in any future pandemics, as well as public health messages that promote healthy eating. Our national budgets must reflect the desire to promote inclusive economic growth, with attention to the segments of the population that struggle most with poverty, hunger, and undernutrition. We ought to develop a comprehensive national strategy on nutrition advocacy and communication by aligning advocacy, social mobilisation, and behaviour change in communication interventions.

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## Will Mars ever be habitable?

PROTITI RASNAHA KAMAL

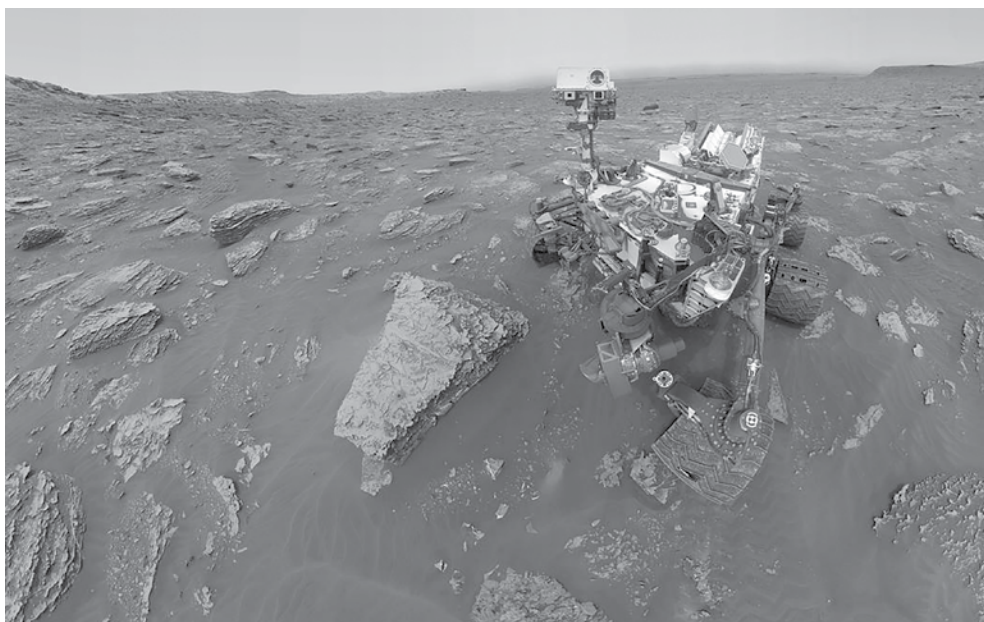
**E**LON Musk's mission to populate Mars seems to be always on trend, even when nobody is particularly talking about it. It's been several years since the announcement of such an endeavour, and in 2020 we've seen some stories about the first space crew for this grand mission (even though nothing has been finalised). Once they will set foot on Mars, there's no turning back—other crews in batches will likely join them, and then colonies, cities and civilisations will be formed on the Red Planet, and it will cease to be one of the lonely occupants of our universe, hanging around through the passage of time.

At least, that's the plan, but as we all might have guessed, landing humans on Mars isn't the only difficult part of the mission. *Living* there is a greater challenge. Mars is not Earth, it has its own identity—the arid world doesn't compare to the bearer of about 75 percent water on its surface. So, the real mission is making Mars habitable for humans.

The first colonisers will be given the task of turning Mars into an environment which can sustain life. Simply put, they need to "terraform" Mars, which means the Martian atmospheric conditions need to be manipulated to make them more like that of Earth, so that humans can live, breathe and reproduce freely.

Surely, that is not going to be an easy undertaking. However, Robert Zubrin, in his celebrated book *The Case for Mars*, is able to put the subject in an optimistic light. His argument is that if Earth could be made into a self-sustainable planet, the same can be done to Mars.

In its infancy, Earth did not have any oxygen and was barren, much like Mars is now.



**A selfie taken on Mars by NASA's Curiosity Mars Rover on Martian Sol 2082 (June 15, 2018 Earth time). The 26 rock samples and six soil samples collected by Curiosity revealed that ancient Mars was indeed suitable for life.**

PHOTO: NASA/JPL-CALTECH

Only due to the presence of photosynthetic organisms, which used carbon dioxide up and gave out oxygen, the composition of Earth's atmosphere had evolved, leading to the evolution of human beings. So, if the atmosphere of Mars can be manipulated to make it denser and warmer, theoretically it could also support life.

We understand what needs to be done, but how exactly can we go about making Mars hospitable to humans? The answer may lie in the reservoir of carbon dioxide present in the ice caps or under the soil surface on

Mars. Carbon dioxide, among other things, is infamous for being a greenhouse gas and contributing to global warming on Earth. We may not want Earth to heat up as a result of global warming more than it has already, but frankly, Mars could use some greenhouse gases. Zubrin points out that the release of carbon dioxide, methane and the production of chlorofluorocarbons or CFCs could lead to a thicker Martian atmosphere, which will be able to trap heat and make Mars warmer.

To accomplish such a feat, Zubrin proposes some innovative solutions. The first, is using

orbiting mirrors to direct heat towards specific areas in Mars' south pole. A temperature rise of five degrees (in Kelvins) would be able to cause the dry ice to evaporate, releasing carbon dioxide. The mirrors could also be used to melt the ice to form liquid water, which can be used in biological reactions. Another far-fetched idea is to build factories which can release halocarbons into the Martian atmosphere. However, setting up factories that can generate a substantial volume of the gases requires a substantial amount of money as well, which is why such a project does not seem feasible to the layman. The third solution is to contaminate Mars with photosynthetic microorganisms such as bacteria. This would lead to the release of ammonia and methane as waste products, which would contribute to the greenhouse effect.

If any of these ideas or even a combination of them can be realised on Mars, it could become less hostile for humans. However, if people dream of walking around Mars without special suits and masks, they need to come up with a plan for oxygenating the atmosphere. For this, simple organisms will not be enough—large volumes of oxygen are required to support advanced life forms. Genetically engineered plants that can carry out photosynthesis in harsh Martian conditions can provide a solution. The idea is to increase the volume of gases in the atmosphere bit by bit, and as it warms up it can support more advanced plant life. This goes on in a cycle that can be continued until the conditions are suitable for humans.

However, this process would take centuries if the plan is to terraform Mars completely. Instead, "Paraterraforming" can provide a solution for the moment. Here, domes can be built to form an enclosed space that humans

can live in. Microbial reactions with the carbon rich Martian soil that can give off oxygen will occur in that restricted region, but out of that enclosed sphere, life would not be supported. The advantage here is that less time and resources will be used. Carrying such a project out is not impossible; in fact, a few years ago, scientists at a company called Techshot had successfully used microbes to create a self-sustaining ecosystem within a localised region that mimics Mars' harsh atmospheric conditions.

Theoretically, everything seems possible, and recent news about the conversion of carbon dioxide on Mars to oxygen by NASA's Perseverance rover is giving us hope that theories can be put to practice. At this point, landing a spacecraft on Mars with humans is a challenge, judging by the sheer amount of time it takes to complete the journey. The first humans to land on Mars will have to build the "biodomes" where further experiments can be carried out and crops can be grown under controlled conditions. Also, resources that are not readily available on Mars need to be made on Earth and imported to Mars. Are we going to be able to devote vast amounts of resources and time to such an endeavour? Will the money required for such a venture be better spent if we were to spend it on Earth? These are some of the questions that could be asked before we take on the challenge of turning Mars into another Earth. We need to keep in mind that the first step a human takes on Mars will be just that—the first step. There is a long way to go from there, and it will be interesting to see how that story unfolds in the near future.

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**QUOTABLE Quote**

**SAINT TERESA OF AVILA**  
 (1515-1582)  
 Saint

*What peace can we hope to find elsewhere if we have none with us?*

**CROSSWORD BY THOMAS JOSEPH**

**ACROSS**

- 1 Dances jazzily
- 5 Unassuming
- 11 Neighbor
- 12 Slow movement
- 13 Rum mixer
- 14 Signify
- 15 Tech's place
- 17 Quarter-back Manning
- 18 Flower part
- 22 Did some programming
- 24 Curaçao's neighbor
- 25 Clumsy one
- 26 Crafty
- 27 Squall
- 30 Grill waste
- 32 First odd prime

**DOWN**

- 1 "St. John Passion" composer
- 2 Clarinet cousin
- 3 Encouraged to succeed
- 4 Paper fastener
- 5 Put together
- 6 Black Sea port
- 7 More moist
- 8 Sense of self
- 9 Take a load off
- 10 Low digit
- 16 Performed
- 19 Advocated
- 20 Skilled
- 21 Puts down
- 22 Price tag info
- 23 Solemn promise
- 28 Cookbook entry
- 29 Scant
- 30 Wisdom bringer
- 31 Capitol group
- 35 Red-ink amount
- 36 Jason's ship
- 37 Flag creator
- 38 Tea cooler
- 39 Signal of approval
- 40 Really liked

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**YESTERDAY'S ANSWERS**

L	A	L	A	W	A	T	E	R	Y	
A	J	A	X	A	V	E	N	U	E	
V	A	S	E	C	O	M	D	E	N	
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**BEETLE BAILEY** BY MORT WALKER

THE SNOW IS SO HIGH, I CAN'T EVEN GET OUT THE DOOR. GO OUT THE WINDOW. WELL, THAT DIDN'T WORK.

**BABY BLUES** BY KIRKMAN & SCOTT

SOMETHING V-E-R-R-Y SUSPICIOUS IS GOING ON IN THERE. SILENCE?