6 | The Daily Star

# The Paily Star

FOUNDER EDITOR LATE S. M. ALI

**DHAKA THURSDAY JULY 18, 2019, SRABAN 3, 1426 BS** 

### Now, lead-laden milk!

The issue has been brought to a head

T has been finally confirmed that the milk which we are consuming contains lead and cadmium, another L heavy metal with equally dangerous potentials. This goes for both pasteurised and packaged milk being sold in the open market. Six government and non-government organisations with established credentials have carried out the tests and the results we feel are incontestable. We cannot but be concerned at the grave risk that people are being exposed to, children in particular.

There are two issues involved that need serious attention. First is the question of the process of production and the responsibility of the companies involved in it. While we understand that the raw material, the primary one at least, the milk, is obtained from the local farmers and may be contaminated at source, and that in no way do producers add these elements, it is the responsibility of the producers to see that all inputs at the preliminary stage of production are fit for consumption in all respects. They should ascertain the quality of the milk being put in the production chain. And we believe that the output is also supposed to be constantly examined for quality control. Therefore, either the process is faulty or it is inadequate to detect lead or any other heavy material in the milk, as apparent from the fact that marketed products from brand producers have been found to contain heavy metals.

The second issue is related to cow fodder. It is for the government to ascertain the source(s) of the contamination, since it is grass or other varieties of cow fodder, some of which may be imported products, that are ingested by cows. This has to be done quickly since there is very good chance that heavy materials found in cow milk may well find their way into the food chain. The issue has come to a head and brooks no delay.

### Preventable deaths and injuries at rail crossings

Safety must be a priority area for authorities

**7** E have had to witness a spate of deaths and injuries of people in recent times at authorised and unauthorised rail crossings across the country. If we look at the data, there are some 1,412 legal level crossings (approved by Bangladesh Railway) of which only a third is manned. Then we have some 1,085 illegal level crossings and about 87 percent of these are unmanned. Why do we have so many illegal level crossings?

We are informed by Bangladesh Railway authorities that different government bodies set up level crossings without their prior consent, because seeking consent entails a large fee. The government bodies involved in this illegal activity, according to the Accident Research Institute (Buet), range from LGED, union councils, municipalities, to city corporations, contractors, etc.

It is up to the government to streamline the adhoc setting up of illegal level crossings by its various departments and bodies, but the question is: why does Bangladesh Railway have only a third of the guards it needs to man the level crossings? Precisely how can safety be ensured for trains and people crossing these points if there are no guards? Rail fatalities and injuries have reduced on a year-to-year basis, but as we can see, there is little by way of prioritising safety of people and vehicles at

level crossings—both legal and illegal.

Experts fear that fatalities will increase again if things are allowed to continue as they are. The gung-ho approach adopted by government bodies must come to an end and the Bangladesh Railway should be empowered to dismantle unauthorised level crossings and penalise those bodies that are involved in constructing these. The other side of the coin of course is not simply sensitising people about adhering to the law at these crossings, but actually introducing spot fines. It is high time that tough action is taken because every life lost at a level crossing is a preventable death.

#### **LETTERS** TO THE EDITOR

letters@thedailystar.net

#### Preventing adulteration of milk

Recently, the High Court demonstrated concern about food adulteration, especially in milk. Investigations conducted by Bangladesh Food Safety Authority (BFSA) have detected the presence of harmful metal such as lead in milk. The presence of lead in blood, even by a slight amount, is said to cause behavioural problems. It is also associated with all kinds of fatal health risks.

Milk is an ideal source of nourishment for babies, women and the elderly. Unfortunately, most well-known local companies-producing both pasteurised and unpasteurised milk have been involved in such unethical practices. And so, the court's directive that no drug store can sell antibiotics for cattle sans prescription from veterinary doctors is indeed a good sign. Additionally, the court directed BFSA to present a report on the actions the latter will take against the

contamination of milk. As for companies producing and selling adulterated milk, it seems that profit maximisation trumps anything else. Regardless, a proper solution has been suggested by the HC: companies should make it their corporate social responsibility to conduct lab tests on milk and milk products. This should be made mandatory and companies must prioritise the wellbeing of their consumers.

Capt Dr Khairuddin Barkat (Retired) Public Health Specialist

# The toxic truth about the food we consume

SAKIB RAHMAN SIDDIQUE SHUVO

HE ongoing fiasco surrounding the quality of milk should alert us all. Media reports since the beginning of this year have revealed just how adulterated the milk we are regularly consuming is: antibiotics, detergent, bacteria, and even lead have been found in milk being sold in the market.

Professor ABM Faroque, former director of Dhaka University's Biomedical Research Centre, revealed the findings of a recent study whereby traces of antibiotics were found in all 10 samples of pasteurised milk. Professor Faroque, unsurprisingly, reportedly faced criticism and harassment at the hands of some officials of the milk processing companies as well as bureaucrats. His fault? Making public his research findings. Dhaka University denied responsibility of the concerned research study and Professor Faroque was warned of legal action for violating research protocol. By questioning Professor Faroque's methodologies and the standards of the laboratories used, BSTI director criticised his work as well as the study for not

> The government should also take steps to ban the sale of antibiotics for use by cattle without prescription from a veterinary doctor, on which the High Court issued an order on July 16.



revealing the levels of antibiotics found. But thankfully, a number of groups and professors have come forward and lent support to Professor Faroque.

Sometimes antibiotics are used in farms to cure mastitis infections in the animals, which results in antibiotic residues in milk. Needless to say, this milk is not fit for human consumption. Again, such consumption of antibiotics (without doctors' guidance) can make a body bacteria-resistant, which can be fatal.

A certain post that went viral on Facebook goes to show the severity of the situation. A four-day-old infant died because the baby was resistant to 10 antibiotics out of the 12 antibiotics tested. A study on infants in one tertiarycare hospital in New Delhi shows that 52 percent of infants are resistant to the bacteria called "Klebsiella pneumoniae" (bacterial pneumonia). Not only in

India, according to a study conducted by Poribesh Bachao Andolon (POBA) in 2016, about 56 percent of antibiotics prescribed to patients in Dhaka hardly worked, as germs developed antibiotic resistance because of the indiscriminate usage of antibiotics.

Antibiotics consumption in animals is a worldwide trend. According to a Food and Drug Administration (FDA) report, "In 2016, it is estimated that 43 percent of the domestic sales and distribution of medically important antimicrobials was intended for use in cattle, 37 percent intended for use in swine, 9 percent intended for use in turkeys, 6 percent intended for use in chickens, and 4 percent intended for use in other species/ unknown." Antibiotic-resistant bacteria can spread from animals to humans via food.

Research studies found heavy metal contamination in poultry feed in Bangladesh. These metals may lead to

problems in the gastrointestinal system, nervous system, or cardiovascular system. Apart from that, the banning of food products before Ramadan also indicates the severity of the situation and goes to show that it is high time to take steps to implement rules and regulations related to food safety.

The research study conducted by Professor Faroque portrays the horrible state of food safety in the country. The authorities need to begin doing their job properly. They must do their part to stop the use of antibiotics in animal husbandry and poultry farms. Government officials, instead of criticising those who bring to light the harmful substances present in our food, should collaborate in research studies being conducted in universities and should dig deeper into the situation. The government needs to invest in manpower and training so that we can build a strong food management industry and should create awareness-building programmes so that people get to know about the wide use of antibiotics in farms. The government should also take steps to ban the sale of antibiotics for use by cattle without prescription from a veterinary doctor, on which the High Court issued an order on July 16.

BSTI should rethink the way it carries out its tests. No efforts should be spared in ensuring proper tests which include taking into account the appropriate parameters.

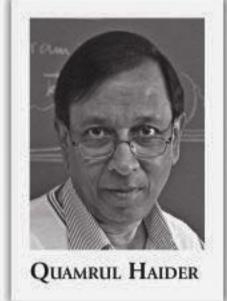
Antibiotic resistance has become a global problem. It was the eminent bacteriologist Sir Alexander Fleming who had warned us about the creation of superbugs from the misuse of antibiotics in his famous speech upon accepting the Nobel Prize in 1945: "There is the danger that the ignorant man may easily underdose himself, and by exposing his microbes to non-lethal quantities of the drug make them resistant."

We clearly failed to heed his words.

Sakib Rahman Siddique Shuvo is a student in the Department of Geography and Environment, Jahan-

CLIMATE CHANGE

## America's 'Last Frontier' is slowly becoming the 'Lost Frontier'



NAMED the "Last Frontier", Alaska is the largest state (in area) of the United States. It is also one of the richest states, thanks to its abundance of natural resources,

such as oil, natural

gas, gold and fish. The state is home to a vast expanse of pristine wilderness, towering mountains, breathtaking glaciers and big game animals.

Alaska may not fit the bill for what most people envision as a vacation spot, but it has been on my family's bucket list for a long time. Finally, our 10-day jaunt started on July 1, 2019 in Anchorage, the largest city in Alaska. We visited three national parks: Denali Wilderness in central Alaska, Tidewater Glaciers on the Prince William Sound and Kenai Fjords near Seward.

We also took a 90-minute flightseeing tour of Mount Denali followed by landing and strolling on a glacier at 1,750 metres. At 6,200 metres, Denali is the highest peak in North America. A panoramic cruise through the Orca Inlet at Cordova allowed us to see the highest concentration of sea otters in the world. We saw the midnight sun at Anchorage and basked in 24 hours of sunshine at Healy, a backwood small town close to the Arctic Circle.

Besides appreciating the awesome natural beauty of Alaska, what struck me most during the trip is how global warming has pushed this Arctic region into an entirely new climate regime, one that is outside the experience of the aboriginals and native wildlife.

Climate change is occurring faster in high-latitude regions--twice as fast as the rest of the world--due to the phenomenon of "Arctic Amplification," which is the self-reinforcing process that warms the Arctic and subarctic regions much faster than the rest of the world. Being located on both sides of the Arctic Circle, effects of climate change in Alaska are no longer yearly anomalies; rather, they are daily occurrences.

Over the past 60 years, the average temperature across Alaska has increased approximately by 1.7 degrees Celsius. Warming in the winter has increased by more than three degrees. Temperature in Anchorage three days after our arrival was 32 degrees.

As Alaska continues to warm, average annual temperatures are estimated to increase by an additional 1-2 degrees by the middle of this century, while precipitation is projected to increase during all seasons by the end of this century. Despite increased precipitation, Alaska is likely to become drier due to

greater evaporation caused by warming temperatures and longer growing seasons.

With rising temperatures, the threat of massive wildfires continues to grow over time across Alaska all the way to the Arctic. During our stay, about 350 wildfires were raging in south and south central Alaska. Smoke from the fires made driving hazardous, particularly through the scenic backroads.

Warmer temperatures have left vegetation more susceptible to parasites and spruce bark beetles. They have killed more than four million acres of trees in Alaska. Indeed, we saw thousands of dead trees in the Denali Wilderness.

Alaska is full of eye-catching glaciers adorning majestic mountains, but most of them are melting at an accelerated rate. The US Geological Survey estimates that Alaska is losing 75 billion tonnes of glacier a year. Melting glaciers have implications for hydropower

production, ocean circulation patterns and global sea-level rise. In addition, glacial meltwater from tidewater glaciers, which are valley glaciers that flow far enough to reach out and calve into the sea, has chemical properties that can exacerbate ocean acidification that is already threatening the fishery industry.

As we cruised on the Prince William Sound, arguably the best place in Alaska to see spectacular tidewater glaciers, we saw fewer glaciers due to warmer temperatures. The largest glacier accessible by car, Matanuska Glacier near Anchorage, is shrinking dramatically at its toe. Furthermore, during the flight-seeing tour of Denali, we saw many mountains with barren slopes and valleys. According to our pilot, they were once packed with glaciers.

Nearly 80 percent of Alaska's surface lies above permafrost—frozen ground

that is typically located a few feet below the soil surface in extremely cold regions and remains frozen year-round. However, as air temperatures are rising, permafrost is thawing in many areas, causing the soil above to sink, resulting in ground subsidence that is damaging highways, railroads, airstrips, homes and other structures. Moreover, shrubs and spruce that previously could not take root on the permafrost now dot the Alaskan landscape, potentially altering the habitat of the native animals.

Because of melting permafrost and subsequent caving of the road, we could not drive from Healy to Valdez via the scenic Denali Highway. Instead, we had to take a 320km detour.

Arctic permafrost acts like a gigantic cap over mineral resources and fossil fuels containing greenhouse gases. But melting permafrost is releasing these gases, particularly methane trapped in ice. Clearly, the loss of permafrost and glaciers is opening new pathways for greenhouse gases, constituting a newly identified, powerful feedback to global warming.

Erosion of Alaska's coastline is increasing due to the decline in sea ice that protects the coast from storms and tidal surges. The coastal areas are now more vulnerable to devastating storms and heavier rainfall.

The ripple effect of ice loss does not stop here. In the sparsely populated areas, where roads are few and far between, frozen rivers are indispensable for transporting goods, visiting family and taking children to school. With the loss of ice, their communication routes are cut off. Additionally, many people in northern Alaska depend on hunting on the ice. They no longer have access to traditional hunting areas, or access is much more dangerous because the ice is less stable.

Although climate change is having deleterious effects on people all over Alaska, those most affected are the Alaska Natives. Since they live so closely with the land and nature, small shifts in the ecosystems can perturb their way of life. Also, they get food mostly through fishing and hunting, including animals like polar bears, walruses and seals. Changing climate has resulted in the habitat destruction of these animals.

In summary, climate change in Alaska is not a distant or abstract concern, as some would like us to believe. It is real—simply because there is water where there was once ice. Hence, with a gloomy,

disaster-prone future, it seems America's "Last Frontier" will eventually become the "Lost Frontier." Quamrul Haider is a Professor of Physics at Fordham PHOTO: QUAMRUL HAIDER University, New York.

