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We need a collective strategy to fight COVID-19

Coordination among private and public initiatives is crucial

S more and more people are testing positive with COVID-19 every day, with the actual number of people infected still unknown to us, fear has gripped the nation. People are worried for all the right reasons—the government still does not have any comprehensive plan to tackle the humanitarian crisis unfolding in the country, our hospitals do not have the capacity or approval to test and treat patients infected with the disease, we do not have the required amount of test kits, our doctors and medical staff have not been provided with enough personal protective equipment (PPE) to treat the suspected COVID-19 patients, and self-isolation or home-quarantine measures have not been found to be successful. However, amid the growing public concern over the government's sloppy preparations to contain the spread of the COVID-19 in the country, initiatives taken by some voluntary and private organisations have offered us a ray of hope.

One of the most encouraging news for us this time has been the testing kit developed by scientists of Gonoshasthaya Kendra. Globally, it has been proved that testing as many suspected cases as possible is the number one thing to do to contain the spread of the virus, apart from quarantine measures and lockdowns. Thus, in order to make testing accessible to all, the government needs to provide Gonoshasthaya all the support it needs to produce the testing kits on a massive scale.

Besides, we have come across some individual and organisational efforts to help the mass people deal with the corona crisis. Amid huge PPE crisis in our hospitals, some private organisations, including Buet alumni association and some garment industries have started producing them, to be distributed among doctors, nurses and medical staff free of cost. It is good to know that the PPEs produced by them have already got the health ministry's approval.

Initiatives taken by Bidyananda Foundation, a voluntary organisation, are underway to fight the spread of the virus. They have been distributing masks and hand sanitisers among people for free and have already set up hand washing facilities in different points of the city. Then there are some student organisations, including Chhatra Union, whose members themselves have been making hand sanitisers and distributing them among the rickshaw-pullers and other vulnerable groups of society. Moreover, many private organisations and hospitals, who are now fully prepared to test patients for COVID-19, are just waiting for the government's approval.

As we have always witnessed, during any national crisis, it is the general people and the private organisations who always show us the way out. And it is no different this time. But all these private initiatives need to be coordinated to have a greater impact and that responsibility falls on the government. We hope the government would be proactive in coordinating among all the private and public initiatives and make a collective plan to fight the pandemic.

Bhakurta's natural water source being drained out

An artificially created water shortage

HILE it is the bounden duty of Dhaka Wasa to provide drinking water to its residents, that cannot be by depriving other areas of drinking and irrigation water. But that is exactly what the Dhaka Wasa has been doing with the water of a natural aquifer in Bhakurta to supply water to the Mirpur residents for the last five years.

The reservoir in Bhakurta, discovered by Wasa about five years ago, was Providential since it was being refilled naturally through an underground channel linked with the Himalayas. What was estimated to last for about 30-40 years has already gone dry because Wasa had been pumping out crores of litres of water from the source with deep tube wells causing severe water crisis not only for the several lakh residents of two unions of Savar, but also of one union in Keraniganj, where the residents have to scrounge for potable water from here and there because even the hand pumps have run dry. The situation has also deprived a vast swathe of land of water for cultivation, that they had benefitted from since 1985, since last one year. The marginal farmers are the worst affected.

Wasa agrees that the situation has been caused primarily by extracting water in excess of its natural replenishment volume. And this is because perhaps no study was done initially to determine the rate of recharge so that the outflow did not outrun the recharge.

While there seems to be no lack of appreciation of the problem, it seems that Wasa and the Local Government Engineering Department are trying to pass the buck on to one another in so far as developing separate network for water distribution for Bhakurta area instead of the current temporary measure. Neither Wasa nor LGED can shirk their responsibility. And there is nothing as "won't do or can't do" for government agencies. They should put their heads and resources together to solve Bhakurta's water problem, and do it quickly.

LETTERS TO THE EDITOR

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Prevent panic buying

The number of people infected with the coronavirus is increasing everyday. People are panicking and purchasing commodities without considering the impact on the market

considering the impact on the market.

During such times, the authorities should take advanced measures to keep the situation under

Malik Muntasir Reza Shyamoli, Dhaka

COVID-19 and Bangladesh's macroeconomic challenges

MIZANUR RAHMAN

HE world economy is now on lockdown because of the global coronavirus pandemic. Governments and their central banks around the world are wasting no time in dealing with the health and economic implications of this crisis.

It is surprising that the Bangladesh government has seemingly accepted the effects of the outbreak on our economy. The real economy is facing unforeseen crises—slump in both aggregate supply and demand. An obvious consequence is contraction in value added and output across industries.

On the supply side, every economic activity will surely contract more or less. This is because supply chain of every product including access to raw materials and intermediate inputs has been substantially disrupted. Labour mobility too has been seriously impeded as physical isolation is one key measure of minimising the health risks. On the demand side, exporters who are left with diminished production capacities will also see markets for their final goods shrink. Local industries that cater to domestic residents are also experiencing rapid decline in the demand for their goods and services. Small and medium enterprises (SMEs) which employ millions of workers and constitute the backbone of the economy appear to be more vulnerable. As SMEs face massive slump in demand, their existential challenge is to remain financially viable.

This unforeseen but truly exogenous COVID-19 shock is now interacting with many prevailing economic woes of Bangladesh. Those include stagnant tax revenue, widening fiscal deficits, prohibitive liquidity and solvency crisis in the country's financial system, a long-depressed stock market, an overvalued exchange rate, and persistent and unsustainable current account deficits in the last few years. How do we deal with these complex economic challenges?

Firstly, businesses faced with falling demand and broken supply chain will find no option but to lay off workers. That will be destabilising and chaotic. The government must try to prevent this using several mechanisms. Given that government borrowing from banks have surged in order to support widening fiscal deficits in recent times, liquidity crisis has become prohibitive in our financial system. We therefore expect no big room for increased budgetary support. The best

course of action for Bangladesh will be an unprecedented monetary expansion targeting lending rate to be in the range of 5-8 percent. To this end, the Bangladesh Bank (BB) can immediately start buying government bonds and treasury bills held by the banks and financial institutions. Other policy options include reduction in cash reserve requirements (CRR) and statutory liquidity ratios (SLRs). BB can also direct cash-rich state-owned banks to increase their advance-deposit ratio (ADR) to an enhanced target level. BB should target repo rate to go down from current 6 percent to 4 percent. Excess liquidity is already evident in the financial system and lending to private sector would pick up once interest rates subside further.

The central bank can make a number of interventions targeting industries

and corporations to avoid imminent bankruptcy. Thirdly, the stock market has long been depressed for a variety of reasons. The outbreak of COVID-19 is now causing another round of panic sale and stock prices have collapsed. A policy guideline of BB is already there whereby a commercial bank can access a five-year Tk 2 billion fund from the central bank to invest in stocks and securities. I will advise the central bank to further lower this borrowing cost to less than 5 percent and let the scheme go into effect without delay. Providing liquidity to households and

Providing liquidity to households and micro, small and medium enterprises (MSMEs) is a critical challenge. To this end, BB can work via microfinance institutions (MFIs). The nationwide network of stateowned and private commercial banks can also be utilised for channelling low-cost

1,900 1,675 1,45 1,22

that are worst hit by the coronavirus pandemic. One key policy directive can be to extend working capital loans at the lowest possible interest rate (or even zero) to industries on the condition that they keep their workers on payroll regardless of their work for at least three months. The assumption is that effective drugs (or vaccination programme) will roll out and normalcy will return by this time. BB can also negotiate with multilateral organisations for floating a Special Fund of Tk 100,000 crore to this end.

Banks and financial institutions can access this low-cost fund and start lending to businesses provided that they meet a few conditions including retaining workers on payroll. Secondly, BB can issue a directive asking lenders to extend a 12-month moratorium on their loans and advances that will fall due in a year. This will provide cushion to firms

loans to households and MSMEs. Brac Bank for example has credible experience of managing large portfolios of loans to MSMEs. Their experience and infrastructure can be of high value.

The government seems to be in deep trouble. Tax revenue is contracting. But the need for giving budgetary support to many sectors is now manifold. Government will have to redouble its spending on public health and medical infrastructure. A public-private partnership can be started incorporating private hospitals and medical colleges. The partnership can involve measures including paying for testing, supplying more test kits and emergency gear to frontline health workers, staffing and providing uninterrupted supplies to health centres.

Food security is an emerging concern around the world as job losses are

mounting. The government will have to increase its budgetary allocation for improving food security for vulnerable people. Millions of households and elderly people live on the financial edge and will require income support through social safety nets to avert falling back into extreme poverty. Government may collaborate with bKash or similar mobile payment systems to provide income support to poor and ultra-poor households. It will have to restate its annual budget discarding avoidable spending plans including developmental projects that are yet to take off.

National Board of Revenue (NBR) may defer collection of taxes for one or two quarters. Household and firms will further demand the lowering of tax rates and a new set of tax incentives. NBR can provide tax relief to firms based on the number of employees working at least 20 hours a week. Indiscriminate use of account freezing of firms may force them to go bankrupt. Tax relief of a certain amount may be granted to firms employing up to 50 workers and on condition that workers continue to be employed during this downturn. Ministry of Finance (MOF) must revisit its tax policy to save our businesses.

The COVID-19 outbreak will further worsen current account imbalance in Bangladesh. As tax revenue will contract this year, we expect government spending to increase faster and fiscal deficits to rapidly widen. On the other hand, net private sector saving will also deteriorate for a variety of reasons. That essentially means we expect doubling of our current account deficit in 2020-21.

That will prove dangerous because it may lead to a crisis in the foreign exchange market. If BB keeps selling its foreign exchange reserves to support an overvalued exchange rate of taka per USD, it will significantly erode monetary policy effectiveness. Liquidity crisis will return to the financial system. We can avoid such a scenario by orchestrating a gradual devaluation of taka against the US dollar. Finally, we must reorganise key state institutions that are governing the financial sector and capital markets. An expansionary monetary policy, as envisaged in this note, will require careful planning, intense monitoring and prudent supervision at every stage.

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Why should you care about the air you breathe?



Quamrul Haider

in Dhaka,
a city that
is perennially
drowned in a sea
of polluted air,
you may think that
a scarlet sunrise
or sunset blazing
across the horizon
is a sight to
behold. However,

there is an ugly story behind this pretty picture. It is air pollution. Indeed, pollutants of any kind in the air will make sunrise and sunset colourful.

Pollutants in the air arise from two major sources: natural and anthropogenic. Globally, the largest sources are natural events: dust storms, forest fires, volcanoes, earthquakes, biological decay and the like. In sheer quantity, natural pollutants often outweigh the anthropogenic pollutants that generally create the most significant long-term threat to the biosphere. Why? Natural pollutants come from widely dispersed sources or infrequent events. As such, they do not substantially raise the ambient pollutant concentration, and thus have little effect on the environment.

Some of the major anthropogenic pollutants in an urban setting are effluents from vehicles, emissions from industries and power plants using fossil fuels. They emit large quantities of harmful pollutants—carbon monoxide, carbon dioxide, sulphur oxides, nitrogen oxides, particulates, hydrocarbons and photochemical oxidants—in restricted areas, making a significant contribution to local air pollution levels. Other sources of pollution are municipal and agricultural waste sites, brick fields, foundries, metal smelters and waste incineration facilities. Refineries, which emit several pollutants, also make a huge impact on the quality of air. All these pollutants are precursors to the formation of smog, a term coined to describe a mixture of smoke and fog. It is the worst form of air pollution.

Smog is produced through a complex set of photochemical reactions involving the above-mentioned pollutants. They react in the presence of sunlight to produce a witch's brew of virulent chemicals. Among some of the worst are formaldehyde, peroxyacyl nitrate (PAN) and acrolein. Furthermore, ozone is formed at the ground-level through chemical reactions involving unburned hydrocarbons in gasoline, volatile organic compounds, various oxides of nitrogen and sunlight. Problematic ozone levels occur often on hot summer afternoons when there is little wind and temperatures soar above 30 degrees Celsius. The net result is a brownish orange shroud called photochemical smog, occurring

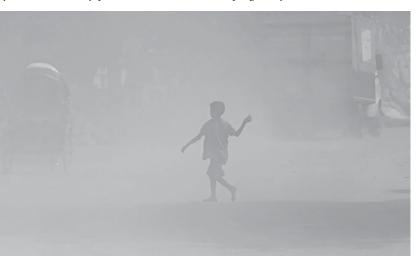
more frequently in large cities with high rise buildings where there is less air circulation and more accumulation of pollutants in the lower atmosphere.

To make a bad situation worse, smog remains under siege for days if it is accompanied by temperature inversion, a phenomenon where air temperature increases with altitude instead of decreasing, resulting in a warm-air lid over cooler air anywhere from ground level up to few thousands of feet into the atmosphere. In an area experiencing inversion, the warmair lid prevents ground-level air from rising. Consequently, pollutants in the cool, stable and quiescent ground air become trapped below the warm layer of air, creating dirty air with dangerous concentrations of noxious pollutants.

The pollutants in the air do not respect international borders and are carried by wind to faraway places. Hence,

Dhaka has the dubious distinction of being one of the 10 most polluted cities in the world, with AQI invariably close to 200. Arguably, these cities are often labelled as "hell with the lid off." According to The Health Effects Institutes' State of Global Air Survey, the entire population of Bangladesh has been consistently exposed to unhealthy levels of pollutants in the air since 1990.

Over the past few decades, researchers have unearthed a wide array of health effects which are caused by exposure to air pollution, particularly smog and ozone. Among them are respiratory diseases—asthma, emphysema, coughing, shortness of breath, changes in lung function and lung cancer. Children are at a greater risk of damage to lungs because their respiratory systems are still in the developmental stage. Cardiovascular diseases, immune system impairment, adverse pregnancy outcomes such as



A child walks along a dusty road in Dhaka.

РНОТО:

anthropogenic air pollution is a global environmental problem instead of regional or local, continuous rather than episodic.

A measure of outdoor air pollution is the Air Quality Index, or AQI, a yardstick that runs from 0 to 500. It rates air conditions across a city/country based on concentrations of five major pollutants: ground-level ozone, particulate matter, carbon monoxide, sulphur dioxide and nitrogen dioxide. The higher the AQI value, the greater the level of air pollution and the greater the health concern. An AQI of 50 represents good air quality with little potential to affect public health. When AQI is above 100, air quality is considered to be unhealthy, at first for certain sensitive groups of people sick, elderly and children, and then for everyone as AQI gets higher. If the AQI is greater than 200, the air is considered hazardous for the entire population.

preterm birth and significant decrease in life expectancy are other health-related effects of air pollution.

Human body has very little defence against the injurious effects—burning sensations in the eyes, nose, and throat, irritation of the skin and nasal passages—of the three pernicious constituents of smog—formaldehyde, PANs and acrolein.

Most fuel contain some toxic mineral contaminants, such as lead and mercury, both highly potent neurotoxin. These nonburnable contaminants may be carried off by hot combustion gases, escaping into the air as particulates. Exposure to these deadly particulates have serious health-related consequences too, primarily neurological disorder, severe disability and muscular tremor.

The effects of human-caused air pollution are not limited to people. Acid rain, for example, is formed when emissions of sulphur dioxide and nitrous

oxide combine with moisture in the air to create sulfuric and nitric acidic precipitation, thereby acidifying lakes with detrimental effects on aquatic biome. It can also cause structural damage to buildings and monuments, especially those made of limestone or marble, as well as destroy plants and crops.

Indoor pollution can be worse than outdoors pollution in some cases. Air pollution inside buildings is accelerated by the toxicity of materials like asbestos, radon, pesticides and tobacco smoke, mildew, mould, mites, dust and pet dander, together with poor ventilation and humidity. Appliances that produce combustion fumes, especially cooking stoves and water heaters, emit carbon monoxide.

Most indoor pollutants, except carbon monoxide, asbestos and radon, are responsible for irritating but non-lethal allergic reactions. Prolonged exposure to air with high levels of carbon monoxide could be lethal, while radon and asbestos can cause lung cancer.

While there is currently no proven link between air pollution and Coronavirus (COVID-19) mortality, one peer-reviewed study into the 2003 SARS outbreak showed that patients in regions with moderate air pollution levels were 80-85 percent more likely to die than those in regions with low air pollution. COVID-19 is similar to SARS and can cause respiratory failure in severe cases.

Satellite images from NASA show a surprising effect of COVID-19 outbreak in China: reduction in air pollution. A "significant decrease" in pollution over Wuhan and the rest of China is attributed in part to an "economic slowdown" resulting from the virus outbreak.

An unexpected consequence of air pollution could be cooling the climate by offsetting some of the global warming that has occurred so far. That is because certain aerosols—sulphate, for instance—can reflect part of the sunlight back into space before it reaches the Earth's surface. Call it unwittingly geoengineering the climate. Nevertheless, even if pollutants reduce global warming, it is not desirable to have them in our lungs.

Finally, because of the vastness of the atmosphere, we felt that it could absorb any conceivable amount of abuse by us. We have, therefore, used the air, and in turn our lungs, as a receptacle for hundreds of noxious pollutants. But with clean air technologies, targeted regulations, effective laws and strict emission standards, it is still possible to go far enough back in time to a period when the air was relatively pure.

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