CPD Working Paper 133

Corona Pandemic and Bangladesh

Health and Economic Risks and Recommendations

CENTRE FOR POLICY DIALOGUE

Corona Pandemic and Bangladesh

Health and Economic Risks
and Recommendations

CPD Working Paper 133

Publisher

Centre for Policy Dialogue (CPD)
House - 6/2 (7th & 8th floors), Block - F
Kazi Nazrul Islam Road, Lalmatia Housing Estate
Dhaka - 1207, Bangladesh
Telephone: (+88 02) 58152779, 9141734, 9141703, 9126402, 9133530
Fax: (+88 02) 48110414
E-mail: info@cpd.org.bd
Website: www.cpd.org.bd

First Published April 2020

Disclaimer: The views expressed in this paper are those of the CPD IRBD 2020 Team alone and do not necessarily reflect the views of the CPD or its partners.

Citation: CPD. (2020). *Corona Pandemic and Bangladesh: Health and Economic Risks and Recommendations*. CPD Working Paper 133. Dhaka: Centre for Policy Dialogue (CPD).

ISSN 2225-8175 (Online)
ISSN 2225-8035 (Print)

Centre for Policy Dialogue (CPD) was established in 1993 as a civil society initiative to promote an ongoing dialogue between the principle partners in the decision-making and implementing process. Over the past more than 25 years, the Centre has emerged as a globally reputed independent think tank, with local roots and global reach. With a view to influencing policies, CPD deploys both research and dialogue which draw synergy from one another.

A key area of CPD's activism is to organise dialogues to address developmental policy issues that are critical to national, regional and global interests, with a view to seeking constructive solutions from major stakeholders. CPD involves all important cross-sections of the society in its dialogue process, including public representatives, government officials, business leaders, activists of grassroots organisations, academics, development partners and other relevant interest groups.

The other key area of CPD's activities is to undertake research programmes on current and strategic issues. Major research themes are: macroeconomic performance analysis; poverty and inequality; agriculture; trade; regional cooperation and global integration; infrastructure; employment, and enterprise development; climate change and environment; development governance; policies and institutions, and the 2030 Agenda for Sustainable Development.

As part of its global networking initiatives, CPD hosts the secretariat of the *LDC IV Monitor*—an independent global partnership for monitoring the outcome of the Fourth UN Conference on the LDCs. CPD was also the initial convener and founding host of the *Southern Voice on Post-MDGs*, a network of 50 think tanks from Africa, Asia and Latin America, which seeks to contribute to the ongoing global discourse on the SDGs. CPD was the Secretariat of Southern Voice during January 2013–June 2019. At present, CPD hosts the office of the Chair of the network. At the national level, CPD hosts the Secretariat of the *Citizen's Platform for SDGs, Bangladesh*—a civil society initiative that include more than 100 Partner organisations, founded with an objective to contribute to the delivery of the SDGs and enhance accountability in its implementation process.

Dissemination of information and knowledge on critical developmental issues is another important component of CPD's activities. Pursuant to this, CPD maintains an active publication programme, both in Bangla and in English. As part of its dissemination programme, CPD has been bringing out **CPD Working Paper Series** on a regular basis. Research work in progress, background papers of dialogues, investigative reports and results of perception surveys which relate to issues of high public interest are published under this series.

The present paper titled *Corona Pandemic and Bangladesh: Health and Economic Risks and Recommendations* has been prepared by the CPD IRBD 2020 Team. For any queries related to the paper, please contact: info@cpd.org.bd

The paper has been prepared under CPD's flagship programme *Independent Review of Bangladesh's Development (IRBD)*, as part of the project titled "Institutional Strengthening to Support Bangladesh's Dual Transition," which is being implemented by CPD, in partnership with the Embassy of Denmark in Bangladesh and the Embassy of the Kingdom of the Netherlands in Bangladesh.

The report was earlier released at a virtual media briefing live streamed from CPD office in Dhaka on 21 March 2020.

Series Editor: *Dr Fahmida Khatun*, Executive Director, CPD.

CPD IRBD 2020 Team

Lead contributions were provided by *Dr Fahmida Khatun,* Executive Director; *Professor Mustafizur Rahman*, Distinguished Fellow; *Dr Khondaker Golam Moazzem*, Research Director; and *Mr Towfiqul Islam Khan*, Senior Research Fellow, CPD. *Mr Towfiqul Islam Khan* was the Coordinator of the CPD IRBD 2020 Team.

Excellent research support was received from

Senior Research Associates	
Mr Mostafa Amir Sabbih	*Mr Muntaseer Kamal*
Mr Md. Al-Hasan	*Mr Syed Yusuf Saadat*
Programme Associates	
Mr Abu Saleh Md. Shamim Alam Shibly	*Ms Nawshin Nawar*
Mr Tamim Ahmed	*Mr Md Jahurul Islam*
Ms Iqra Labiba Qamari	
Interns	
Ms Fariha Islam Munia	*Ms Samanta Islam*

The CPD IRBD 2020 Team would like to register its profound gratitude to *Professor Rehman Sobhan,* Chairman, CPD and *Dr Debapriya Bhattacharya* Distinguished Fellow, CPD for their support and guidance.

The Team gratefully acknowledges the valuable support provided by the Dialogue and Communication Division, CPD in preparing this report. Contribution of the CPD Administration and Finance Division is also highly appreciated. Assistance of *Ms Tahsin Sadia,* Executive Associate is particularly appreciated.

Concerned officials belonging to a number of institutions have extended valuable support to the CPD IRBD Team members. In this connection, the Team would like to register its sincere thanks to Bangladesh Bank, Bangladesh Bureau of Statistics (BBS), Bangladesh Investment Development Authority (BIDA), Dhaka Stock Exchange (DSE), Export Promotion Bureau (EPB), Ministry of Finance (MoF), National Board of Revenue (NBR), and the Planning Commission.

The CPD IRBD 2020 Team alone remains responsible for the analyses, interpretations and conclusions presented in this paper.

Abstract

COVID-19 pandemic is a global health and economic emergency that requires effective immediate actions by governments, the private sector and individuals. Given the nature of the virus, it is difficult to predict at this point the full extent of health implications and economic losses originating from COVID 19. The impact will depend on the duration of the disease and the type of remedial measures taken to tackle the disease and protect the economy. This report looks into the impact of COVID-19 on the Bangladesh economy at two levels: from global to national, and at the national level. While looking into the transmission channels of the impact, the study puts spotlight on five sectors which are critically important for the Bangladesh economy. These are: external sector performance; disruption of supply chains in major economic activities; healthcare; public finance; and monetary policy.

The research suggests that in view of the emergent and the anticipated near-term scenario, Bangladesh's policymakers will need to face the health and economic challenges of COVID-19 through appropriate policies, targetted measures and incentives, and if the situation demands, by putting in place a comprehensive stimulus package.

Contents

List of Tables, Figures, Diagrams and Maps

Tables

Figures

Diagrams

Maps

Acronyms

ADB	Asian Development Bank
ADP	Annual Development Programme
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BoP	Balance of Payments
BPC	Bangladesh Petroleum Corporation
CNY	Chinese Yuan
COVID-19	Coronavirus Disease
CPD	Centre for Policy Dialogue
CRR	Cash Reserve Ratio
DPDC	Dhaka Power Distribution Company
EU	European Union
FDI	Foreign Direct Investment
GBP	British Pound
GDP	Gross Domestic Product
HS (Code)	Harmonized Commodity Description and Coding System
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFC	International Finance Corporation
ILO	International Labour Organization
IMED	Implementation Monitoring and Evaluation Division
IMF	International Monetary Fund
INR	Indian Rupee
IRBD	Independent Review of Bangladesh's Development
JPY	Japanese Yen
KRW	South Korean Won
LFS	Labour Force Survey
L/C	Letter of Credit
MERS-CoV	Middle East Respiratory Syndrome
MICE	Meetings, Incentives, Conferences and Exhibitions
MoF	Ministry of Finance
MT	Metric Ton
NBR	National Board of Revenue
NEC	National Economic Council
NHS	National Health Service (UK)
NPL	Non-Performing Loan
OECD	Organisation for Economic Co-operation and Development
OMS	Open Market Sales
OSH	Occupational Safety and Health
PFDS	Public Food Distribution System
POL	Petroleum, Oil and Lubricants
PPE	Personal Protective Equipment

PPP	Purchasing Power Parity
RADP	Revised ADP
RMG	Readymade Garments
SAR	Saudi Riyal
SARS-CoV	Severe Acute Respiratory Syndrome
SD	Supplementary Duty
SLR	Statutory Liquidity Ratio
SME	Small and Medium Enterprise
TCB	Trading Corporation of Bangladesh
UAE	United Arab Emirates
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
USA	United States of America
USD	United States Dollar
VAT	Value Added Tax
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
WHO	World Health Organization
7FYP	Seventh Five Year Plan

1. INTRODUCTION

In view of the COVID-19 emergency, it is important for Bangladesh to be appropriately ready and to take necessary preparations to deal with both immediate- and medium-term impacts of this outbreak at the earliest. COVID-19 is going to have serious implications both for health sector's preparedness and macroeconomic management of Bangladesh. This has important ramifications for reprioritisation, resource reallocation, fiscal–monetary policies and measures to be pursued by Bangladesh in near and medium terms. As Bangladesh prepares for the upcoming budget for FY2020-21, it is important to understand the extent of resource requirement for healthcare and economic management. To this end, the Centre for Policy Dialogue (CPD) has undertaken the current exercise which mainly addresses two broad issues: (i) what are the transmission channels of the COVID-19 outbreak that may have impacts on the economy? (ii) what can the policymakers do to overcome the challenges of COVID-19?

According to World Health Organization (WHO), coronaviruses are a large family of viruses that causes illness. Such illness ranges from the common cold to more severe diseases, such as the Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Coronavirus disease (COVID-19) is a new strain that was discovered in 2019. Coronaviruses are zoonotic, meaning they are transmitted between animals and people. Although there have been many virus-stemmed pandemics throughout human history, most of those were region specific. They were also found mostly in less advanced countries. This newly originated coronavirus has hit all countries, irrespective of their economic or developmental condition. Thus, coronavirus is found to be one of the most dangerous and disruptive diseases so far for mankind.

On 8 December 2019, there was onset of symptoms in the first known case of pneumonia with unknown etiology in Wuhan City, Hubei Province, China. On 31 December 2019, China reported a cluster of cases of pneumonia with unknown etiology in Wuhan to the WHO. China reported 27 cases and zero deaths at that point in time. On 7 January 2020, Chinese scientists identified the pathogen as a novel coronavirus. On 30 January 2020, WHO declared a "public health emergency of international concern." At that time, China reported 7,736 confirmed cases and 170 deaths. Outside China, 82 confirmed cases were found, but no deaths. Since then, the coronavirus, also known as COVID-19, has spread at a rapid speed. As of 20 March 2020, the coronavirus has affected 178 countries and territories around the world with 244,282 coronavirus cases, 10,006 deaths and 87,407 recovered cases. WHO announced COVID-19 outbreak a pandemic on 12 March 2020.

COVID-19 pandemic is apprehended to have serious health and economic implications. This is considered to a global health and societal emergency that requires effective immediate actions by governments, the private sector and individuals. In Bangladesh, 20 cases were detected, one death and three recovered cases as of 20 March 2020. Given the nature of the disease, it is not yet predictable as to what will be the nature and extent of health and economic losses. International organisations have made preliminary estimations on economic losses. However, the impact will depend on the duration of the disease and the type of remedial measures taken to tackle the disease and protect the economy.

The present paper looks into the impact of COVID-19 on the Bangladesh economy at two levels: from global to national, and at the national level. While looking into the transmission channels of the impact, focus was given on five critically important sectors for Bangladesh economy. These are: (i) external sector performance; (ii) disruption of supply chains in major economic activities; (iii) healthcare; (iv) public finance; and (v) monetary policy. In view of the emergent scenario, CPD has proposed a set of policy initiatives and measures to address the attendant implications.

2. STATE OF THE GLOBAL ECONOMY IN THE TIME OF CORONAVIRUS CRISIS

2.1 Global Economic Scenario

The impact of COVID-19 is apprehended to be unprecedented, and will surely have lasting damage on the global economy. Before the COVID-19 outbreak in January 2020, it was predicted that the global economy will grow at 2.7 per (UNCTAD, 2020b). International Monetary Fund (IMF) earlier in October 2019 had projected that global economic growth was expected to rise from 3 per cent in 2019 to 3.3 per cent in 2020 and 3.4 per cent in 2021 (IMF, 2019). These numbers have now been revised downward. In January 2020, IMF lowered their earlier estimations by 0.1 percentage point for 2019, 1.7 percentage points for 2020 and 0.2 percentage points for 2021 (Table 1), compared to those predicted in October 2019 (IMF, 2020).

As the Table shows, some large economies may experience declining economic growth. Countries such as the United States of America (USA) could face a declining growth rate of 0.7 per cent from the earlier prediction of 2.4 per cent growth in October 2019. Significant decline will occur in the economic growth of Japan (from 0.9 per cent to (-) 0.4 per cent), Italy (from 0 per cent to (-) 1.6 per cent), Germany (from 0.5 per cent to (-) 0.3 per cent) and United Kingdom (UK) (from 1.2 per cent to 0.3 per cent), as per the IMF projection of January 2020 (IMF, 2020).

Table 1: Economic outlook of selected countries (GDP year-on-year growth)

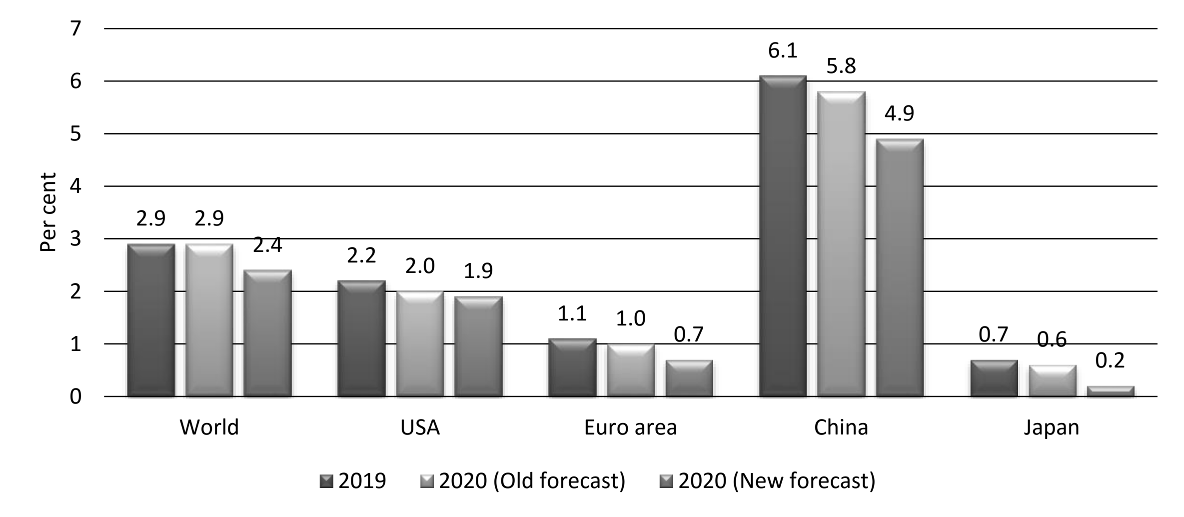
(in Per cent)

Region	Growth forecasts based on October 2019			Growth forecasts based on January 2020		
	2019	2020	2021	2019	2020	2021
World	3.0	3.3	3.4	2.9	1.6	3.2
USA	2.4	2.0	1.7	2.3	0.7	0.9
Euro zone	1.2	1.3	1.4	1.2	-0.1	1.2
- Germany	0.5	1.1	1.4	0.6	-0.3	1.1
- France	1.2	1.3	1.3	1.3	0.3	1.4
- Italy	0.0	0.5	0.7	0.2	-1.6	0.7
- Spain	2.2	1.6	1.6	2.0	0.7	1.1
UK	1.2	1.4	1.5	1.4	0.3	-0.3
China	6.1	5.8	5.8	6.1	2.4	5.9
Japan	0.9	0.5	0.5	0.8	-0.4	1.3
India	6.1	7.0	6.5	5.3	5.3	6.4
Brazil	0.9	2.0	2.3	1.2	1.8	2.4
Australia	1.6	1.6	1.6	1.8	1.2	2.3

Source: Compilation by the author based on IMF (2019, 2020).
Note: GDP: Gross domestic product.

Due to the uncertain nature of this outbreak, various organisations have made revisions in their earlier growth forecast. Among these, the Organisation for Economic Co-operation and Development (OECD) has downgraded its real gross domestic product (GDP) growth predictions for 2020 for the major economies. The global economy is expected to grow at 2.4 per cent in 2020, down from the 2.9 per cent estimated earlier by the OECD (Figure 1). Soon after the outbreak happened in China, its GDP growth witnessed the largest slowdown in terms of both scale and magnitude. The Chinese economy is now expected to grow at 4.9 per cent in 2020, which is slower than the earlier projection of 5.8 per cent. The Euro area is expected to grow at 0.7 per cent this year, down from the earlier forecast of 1 per cent (Figure 1). This indicates that the outbreak has already impacted the global economies in terms of achieving their targetted GDP growth.

Figure 1: Global economic growth projection by the OECD (real GDP growth)



Source: OECD (2020).

Several organisations, such as the United Nations Conference on Trade and Development (UNCTAD), OECD, Asian Development Bank (ADB) and IMF, have forecasted the loss in global growth and global trade due to COVID-19. The following are their projections of the comparative scenarios of the possible economic losses in view of the present pandemic situation. It is clear that the outbreak of the disease has caused havoc to global trade and growth, as the world economy is closely intertwined in many aspects. The global supply chain is already experiencing major interruption with a trade uncertainty seen in the manufacturing sectors of the most economies. The world trade loss could be ranging from 0.3 per cent to 1 per cent, depending on the possible scenario, whereas the loss in the global economic growth could be ranging from 0.2 per cent to as high as 2.4 per cent, predicted by the OECD (Table 2). The European economies could also face a severe loss in terms of GDP growth and trade. The loss in GDP could range from 0.1 per cent to 0.7 per cent and trade loss could be 0.3 per cent to 0.7 per cent of GDP. Since this outbreak has just started to have impact on Asian economies, the organisations are yet to come up with concrete forecasts for this region.

Table 2: Comparative scenario predicted by different organisations on possible economic losses due to COVID-19

(in Per cent)

Organisation	World		Europe		Asia	
	GDP loss	Trade loss	GDP loss	Trade loss	GDP loss	Trade loss
UNCTAD	1.7	0.6	0.4	0.3	0.2	N/A
OECD	2.4	1.0	0.7	0.3	0.3	N/A
ADB	0.2	0.4	0.6	0.5	0.1	N/A
IMF	1.6	0.3	0.1	0.7	0.2	N/A

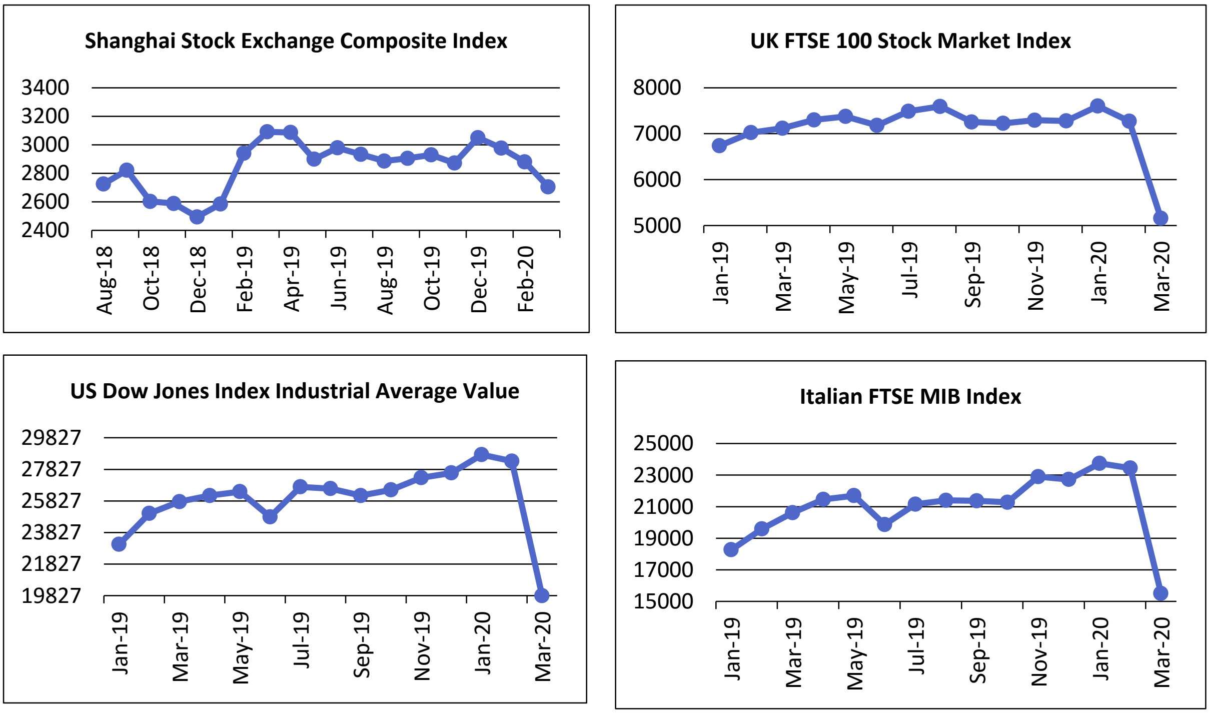
Source: Compiled by the author from the latest published reports of the mentioned organisations (UNCTAD, 2020a; OECD, 2020; ADB, 2020; IMF, 2020).

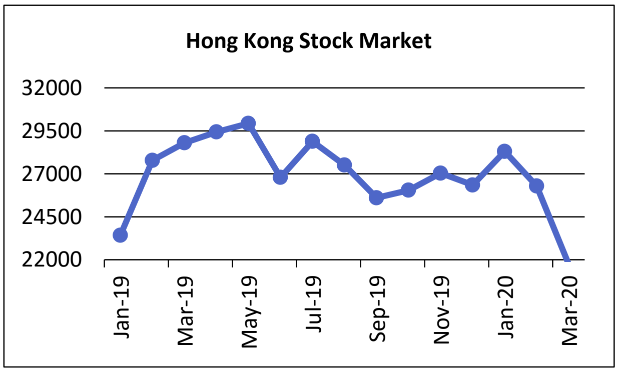
Note: GDP loss is accounted in per cent; trade loss is accounted in per cent of GDP.

2.2 Global Stock Market Scenario

The fear of the corona outbreak has already impacted the world financial market and most of the international indices are falling at a record low level as before since the world financial crisis 2008. Figure 2 presents the major global capital market scenario in the face of the pandemic. It shows that, although the composite index of Shanghai Stock Exchange was at a moderate level and performing well in the last year, as soon as the outbreak appeared at the beginning of the December 2019, the indices started to decrease from 3050 points to 2976 points (74 point) or 2.48 per cent; and from January to March, the index decreased 271 point (almost 10 per cent). The UK FTSE 100 stock market index also decreased 2414 points or 32 per cent since the beginning of 2020. Due to the uncertainty in the fiscal stimulus and the severity of the virus, the stock market suffered its worst level. The Dow Jones Industrial Average index plummeted to 19827 points (as of 19 March 2020) from 28346 points in February. Italian FTSE MIB index also witnessed a drastic fall after February 2020, and lost 7940 point (51 per cent). Hong Kong stock market also plummeted to a record low point (4500 point). Therefore, the impact will be worse if corona virus stays longer.

Figure 2: Global stock market crash due to the corona pandemic





Source: Trading Economics (n.d.).

2.3 Economic Impacts of COVID-19

It is apprehended that the impact of COVID-19 and the global economy can be severe and the global economy may fall into recession through the following channels:

Direct impact on production

When there is a slowdown in the growth of the Chinese economy, this will have an impact on exporters to China. Since China largely imports from Japan, Korea and other Asian economies, therefore, due to these disruptions, these countries will also face the slowdown in their growth until the market stability returns (Bachman, 2020).

Supply chain and market disruption

Most of the manufacturing firms are highly dependent on the imported intermediary inputs from China. Many large companies rely on sales in China to achieve their financial targets. Due to these spillover effects, the disruption will be diverse across various economies. For instance; a 2-per-cent reduction of Chinese exports in intermediary inputs can cause USD 16 million trade loss to Bangladesh; whereas for India, the loss would amount to USD 348 million (UNCTAD, 2020a).

Financial impact on firms and financial markets

When there is a disruption in supply of inputs and production, some firms may feel pressure, particularly, the companies with inadequate liquidity will be under stress. Some firms might reduce their engagement in the equity and corporate bond market due to the uncertainties happened by the outbreak (Bachman, 2020).

Major areas of impact

A number of sectors will sustain major negative impacts due to this outbreak. These are—tourism sector, as people will avoid travel to reduce the chances of contamination; retail sector, where there will be disruption due to the decline in consumption demand; e-commerce may boost, but telecom and technology sector will witness interruptions in its supply chain. Automotive production might get stalled; the energy sector will be vulnerable; and although a windfall may happen in the pharmaceuticals industry, difficult challenges will need to be resolved.

Introduction of a vaccine for the treatment of this pandemic is still in the process, as much of this virus is yet to be explored. Moreover, the full impact of this outbreak is still not estimable, as situations are still uncertain and evolving continuously, with more and more cases are found in more and more countries. Besides, the impact will depend on the duration of the outbreak, the number of affected people and countries, and the lethality of the outbreak.

As of 21 March 2020, the virus has already spread to 188 countries around the world. Therefore, the global community must act for coordinated policy actions to address the ramifications of COVID-19. Initiatives such as the World Economic Forum COVID-19 Action Platform are expected to be beneficial to enhance business support and protect the livelihoods of people in such crisis time.

2.4 Relief Packages of Different Countries in Reaction to COVID-19

China

Government stimulus measures are being implemented in order to provide help to the crisis-affected entities. The People's Bank of China has announced cut on minimum requirement needed for bank reserves. The cut is also expected to encourage the financial markets. This step was taken to inject USD 79 billion into the economy. This expansion in liquidity, if executed correctly, can facilitate the recovery of the economy. This would cushion companies and employees to tackle the economic crisis. Moreover, the central bank is encouraging all banks to provide more loans to small companies who might be more vulnerable to this economic blowout. The government has also introduced other fiscal measures in order to subsidise firms, give tax reliefs and fight the virus (Reuters, 2020a).

Italy

An economic support package of EUR 285 billion has been prepared in order to subdue the effects of the crisis in Italy. Extra funding will also be allocated to the healthcare system. It will help increase in unemployment benefits, tax freeze and loan payments to help workers, businesses and families. The decree also includes loan and mortgage repayment suspensions in order to show more lenience at this time of crisis. The package also includes an allowance of up to EUR 660 to self-employed and seasonal employees, increased leaves for workers, and parents being able to claim up to EUR 600 for babysitting (The Local, 2020). The government hopes that such an injection would help circulate up to EUR 430 billion in the economy (Reuters, 2020b).

Spain

The Prime Minister of Spain announced a relief package of EUR 200 billion in response to the COVID-19. The amount makes up 20 per cent of the country's GDP, of which EUR 117 billion would be contributed from the government, and the rest from private companies (Reuters, 2020d). EUR 100 billion of it is to be allocated for state-backed credit guarantees and liquidity lines for businesses; and the remaining 17 billion would be injected to keep businesses afloat during the economic lockdown.

The government will also ensure the functioning of utilities and telecommunication services, and approximately EUR 600 million would be injected for basic social services (Bloomberg, 2020).

South Korea

The government has announced a USD 9.8 billion of emergency funding to shield the impact of the crisis on the economy. The budget, which is yet to get approval from the parliament, will pump extra fund into "healthcare, childcare and outdoor markets." The budget will especially cater to small- and medium-sized businesses and self-employed people. Additional funds will be provided in the form of treasury bonds and limitations have also been imposed on short-selling transactions. The budget will also increase allocation for the purposes of compensating for revenue deficit, medical establishments and the proper finding of quarantine facilitation. Loans will be allowed on more lenient terms and conditions, in view of the difficulties faced by borrowers in repaying (Reuters, 2020c).

France

In order to tackle the COVID-19-induced recession, and in response to the prediction that the French economy will contract by 1 per cent, a total of EUR 45 billion has been approved to aid companies and employees (Radio France Internationale, 2020). The government is also being lenient towards companies in terms of social charges and taxes as the package would also support deferral of these repayments. State-subsidised work schemes are being implemented temporarily, including state payments to workers who are being laid off in this time of crisis. A 'Solidarity Fund' of EUR 1 billion would be raised to help small and independent businesses. The government has assured that there will be no dearth of food supplies and cash reserves, and advised against panic-buying (France 24, 2020a).

Germany

The government in Berlin has decided to compose a stimulus package worth of EUR 550 billion and offer unlimited credit to cushion companies against any backlash. No upper limit will be imposed on the credit offered for companies to sustain during the economic slowdown. Steps around taxation will be taken to ensure liquidity for companies (Deutsche Welle, 2020). The country's public health establishment, Robert Koch Institute, will also receive financial support from the government. Ministry of Education and Research, which is working on a vaccine, will also be provided with funds. An amount of EUR 50 million has been kept separately in order to repatriate German tourists who are stranded across the globe (France 24, 2020b).

Iran

The Iran government has asked IMF for USD 5 billion as emergency funding and a concrete relief package catering to containing the crisis is yet to be announced. USA has still not offered sanction relief to Iran, which is falling heavy on its economic preparations to fight the crisis (Macias, 2020). It has been the first time in its 41-year history that it turned to IMF for an emergency funding. The USD 5 billion would not have been a bid deal back in 2012, when Iran exported USD 120 billion worth of oil; however now—when only USD 10 billion worth of oil are exported—even this amount will make a difference for them (Salehi-Isfahani, 2020).

USA

The US Senate has already rolled out a package of USD 104 billion, which would also ensure paid sick leaves and free testing. Policies surrounding tax payment are being relaxed. Grants to support the small businesses are being seriously considered to be incorporated in the stimulus package. Currently, the administration of the President is in talks with lawmakers and policymakers to implement relief package of USD 2 trillion, which is set to become the largest relief package in the country's history. USD 350 billion is to be allocated to vulnerable businesses, especially the airlines industry. The package would also constitute cash payments to Americans with low income. Progressive activists are pushing for more funding towards small-time workers and healthcare (Hughes and Tau, 2020).

UK

The Government of UK has assembled a package of GBP 300 billion to offer state-backed loans to businesses. Small entities operating in retail, hospitality and leisure would be able to apply for cash grants of up to GBP 25,000. Officials have also announced another GBP 30 billion of emergency spending (11 March) that would go to National Health Service (NHS), sick-pay for employees, etc. The government has also given assurance of containing the incidence of layoffs and covering 80 per cent of the employees' wages, allowing GBP 2,500 for each worker, monthly. Colossal measures are being taken to prevent the economy from facing a backlash during the crisis (Oh, 2020).

References

ADB. (2020, 6 March). *The Economic Impact of the COVID-19 Outbreak on Developing Asia*. ADB Brief No. 128. Manila: Asian Development Bank (ADB). Available at: https://www.adb.org/sites/default/files/publication/571536/adb-brief-128-economic-impact-covid19-developing-asia.pdf [accessed: 14 March 2020].

Bachman, D. (2020, 3 March). The economic impact of COVID-19 (novel coronavirus). *Deloitte Insights*. Available at: https://www2.deloitte.com/us/en/insights/economy/covid-19/economic-impact-covid-19.html [accessed: 12 March 2020].

Bloomberg. (2020, 17 March). Spain to allocate as much as $219 billion in virus aid. Available at: https://www.bloomberg.com/news/articles/2020-03-17/spain-to-allocate-as-much-as-200-billion-euros-in-virus-aid [accessed: 19 March 2020].

Deutsche Welle. (2020, 19 March). Coronavirus: What countries are doing to minimize economic damage. Available at: https://www.dw.com/en/coronavirus-what-countries-are-doing-to-minimize-economic-damage/a-52816921 [accessed: 20 March 2020].

France 24. (2020a, 18 March). Fearing coronavirus recession, France announces €45 billion in business aid. Available at: https://www.france24.com/en/20200318-fearing-a-recession-sparked-by-coronavirus-france-announces-45-billion-euros-in-business-aid [accessed: 20 March 2020].

France 24. (2020b, 13 March). Germany unleashes biggest post-war aid package against virus. Available at: https://www.france24.com/en/20200313-germany-unleashes-biggest-post-war-aid-package-against-virus [accessed: 15 March 2020].

Hughes, S. and Tau, B. (2020, 21 March). Coronavirus rescue bill moving toward a final senate vote Monday. *The Wall Street Journal*. Available at: https://www.wsj.com/articles/kudlow-estimates-coronavirus-package-could-be-about-2-trillion-11584803333 [accessed: 25 March 2020].

IMF. (2019, October). *World Economic Outlook: Global Manufacturing Downturn, Rising Trade Barriers*. Washington, D. C.: International Monetary Fund (IMF). Available at: https://www.imf.org/en/Publications/WEO/Issues/2019/10/01/world-economic-outlook-october-2019 [accessed: 15 March 2020].

IMF. (2020, January). *World Economic Outlook Update: Tentative Stabilization, Sluggish Recovery?* Washington, D. C.: International Monetary Fund (IMF). Available at: https://www.imf.org/en/Publications/WEO/Issues/2020/01/20/weo-update-january2020 [accessed: 16 March 2020].

Macias, A. (2020, 20 March). Trump will not offer Iran sanctions relief as coronavirus spreads rapidly in the country. *CNBC*. Available at: https://www.cnbc.com/2020/03/20/coronavirus-response-trump-will-not-give-iran-sanctions-relief.html [accessed: 21 March 2020].

OECD. (2020, 2 March). *Coronavirus: The World Economy at Risk*. OECD Interim Economic Assessment. Paris: Organisation for Economic Co-operation and Development (OECD). Available at: https://www.oecd.org/berlin/publikationen/Interim-Economic-Assessment-2-March-2020.pdf [accessed: 15 March 2020].

Oh, I. (2020, 20 March). The UK's coronavirus wage relief plan gets it bang on. *Mother Jones*. Available at: https://www.motherjones.com/coronavirus-updates/2020/03/uk-coronavirus-wage-relief/ [accessed: 21 March 2020].

Radio France Internationale. (2020, 18 March). France promises €45 billion to save companies hit by coronavirus. Available at: http://www.rfi.fr/en/france/20200318-france-promises-45-billion-euros-to-save-companies-hit-by-coronavirus-economy-nationalisation-lockdown-covid-19 [accessed: 20 March 2020].

Reuters. (2020a, 13 March). China pumps USD 79 billion into economy with bank cash reserve cut. Available at: https://www.reuters.com/article/us-china-economy-rrr-cut/china-pumps-79-billion-into-economy-with-bank-cash-reserve-cut-idUSKBN2101B3 [accessed: 13 March 2020].

Reuters. (2020b, 16 March). Italy supports coronavirus-hit economy, PM hails 'Italian model'. Available at: https://www.reuters.com/article/us-health-coronavirus-italy-economy/italy-supports-coronavirus-hit-economy-pm-hails-italian-model-idUSKBN21329U [accessed: 16 March 2020].

Reuters. (2020c, 4 March). South Korea unveils $9.8 billion stimulus to fight coronavirus. Available at: https://www.reuters.com/article/us-southkorea-economy-budget/south-korea-unveils-9-8-billion-stimulus-to-fight-coronavirus-idUSKBN20R046 [accessed: 14 March 2020].

Reuters. (2020d, 17 March). Spain approves 200 billion euro aid package for coronavirus crisis: PM. Available at: https://www.reuters.com/article/us-health-coronavirus-spain-aid/spain-approves-200-billion-euro-aid-package-for-coronavirus-crisis-pm-idUSKBN2142Q4 [accessed: 18 March 2020].

Salehi-Isfahani, D. (2020, 18 March). The coronavirus is Iran's perfect storm: Tehran now needs the public trust and professional expertise it has squandered. *Foreign Affairs*, March-April 2020. Available at: https://www.foreignaffairs.com/articles/iran/2020-03-18/coronavirus-irans-perfect-storm [accessed: 19 March 2020].

The Local. (2020, 16 March). The 25-billion-euro plan to rescue Italy's economy from coronavirus crisis. Available at: https://www.thelocal.it/20200316/cura-italia-the-25-billion-euro-plan-to-rescue-italy-economy-from-coronavirus-crisis [accessed: 19 March 2020].

Trading Economics. (n.d.). *Stock Market*. Available at: https://tradingeconomics.com/ [accessed: 21 March 2020].

UNCTAD. (2020a, 4 March). *Global Trade Impact of the Coronavirus (COVID-19) Epidemic*. Trade and Development Report Update. UNCTAD/DITC/INF/2020/1. Geneva: United Nations Conference on Trade and Development (UNCTAD). Available at: https://unctad.org/en/PublicationsLibrary/ditcinf2020d1.pdf [accessed: 15 March 2020].

UNCTAD. (2020b, 9 March). *The economic impact of COVID-19: Can policy makers avert a multi-trillion dollar crisis?* UNCTAD/PRESS/PR/2020/003. Geneva: United Nations Conference on Trade and Development (UNCTAD). Available at: https://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=548 [accessed: 17 March 2020].

3. TRANSMISSION CHANNELS FOR THE BANGLADESH ECONOMY

The coronavirus pandemic is predominantly a public health crisis at an unprecedented scale which is gradually transforming into a substantial economic threat. The severity of the disruption, both in terms of human suffering and economic loss, is so high, that the possibility of a global economic recession within 15 years of the global financial crisis in 2007–08 does not appear too distant. However, the actual magnitude of the economic impact will depend upon the duration of the pandemic, how it evolves and what remedial measures will be taken.

There are a number of channels through which the adverse effects of the coronavirus pandemic may transmit into the economy of a country. Keeping the Bangladesh context in hindsight, this section will attempt to visualise the said transmission channels using two broad clusters. The first cluster will discuss how the altered dynamics of the global economy stemming from the pandemic will affect Bangladesh economy. The second cluster will illustrate how the dynamics within the Bangladesh economy will be affected due to the contagion. However, it must be taken into cognisance that, this exercise is very much hypothetical in nature, and may serve as an analytical tool to identify possible pathways of impact on the economy.

3.1 Transmission from Global Level

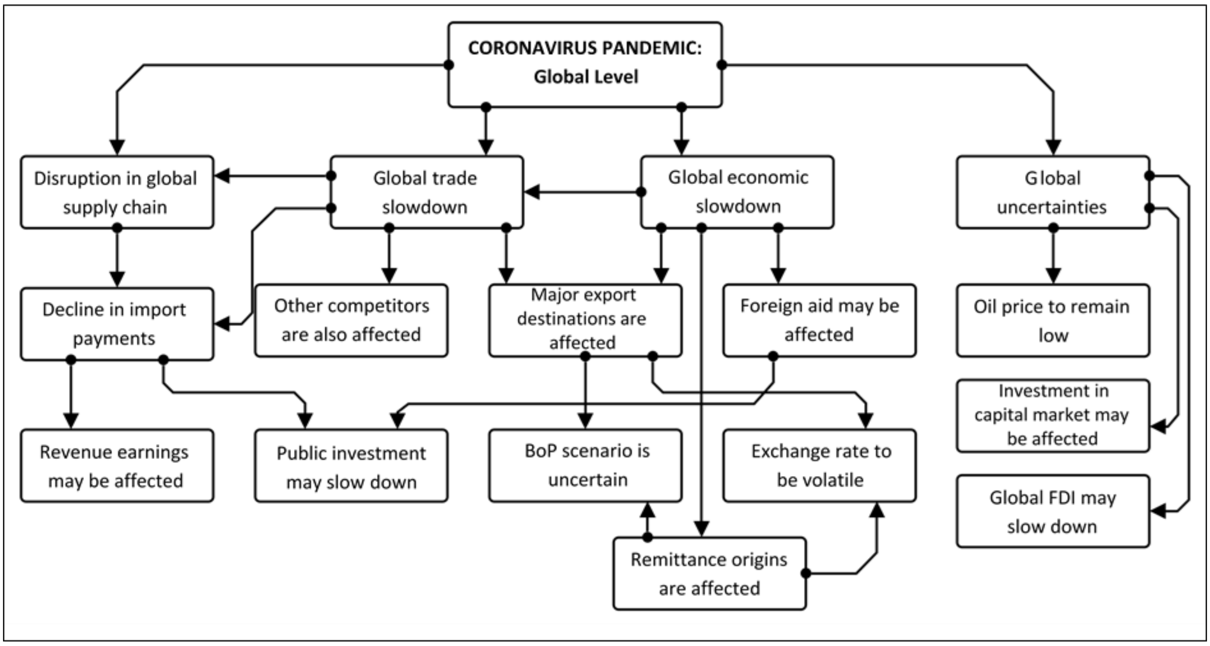
As can be observed from Diagram 1, disruption in the global supply chain originating from forced closure/interruption of business activities alongside inability of the workers to get to work, border closures, travel bans and other restrictions placed upon the movements of people and commodities may lead to a decline in import payments via both price and quantity effect. Consequently, the revenue mobilised at the import stage may be affected in view of reduction of import payments and export receipts. With likely interruption of imports of necessary raw materials and intermediate inputs, public investment may also be adversely affected.

The global trade scenario was already subdued given the trade war between USA and China. The coronavirus pandemic might exacerbate the situation by slowing down global trade further. This may affect Bangladesh's major export destinations, which in turn, creates pressure on the balance of payments (BoP) and disturbs exchange rate stability. Global trade slowdown may directly lead to disruption of the global supply chain and decline in import, and might also affect Bangladesh's competitor countries.

Apart from affecting elements of international trade, a global economic slowdown may have an adverse effect on the availability of foreign aid. Consequently, public investment—where project aid is a crucial component—may suffer. Pervasive economic slowdown, especially in oil-rich Gulf countries, may hamper the remittance inflow to Bangladesh. This may in turn add to the BoP pressure, and may consequently cause exchange rate volatility.

In view of the prevailing uncertainties as regards the extent and duration of the pandemic, investment in the capital market may take a downturn. At the same time, foreign direct investment (FDI) may take a pause as there are apprehensions as regards the return from said investment. Fall in the global prices of oil may add to the list of uncertainties.

Diagram 1: Transmission channels for the Bangladesh economy: Global level



Source: Author's elaboration.

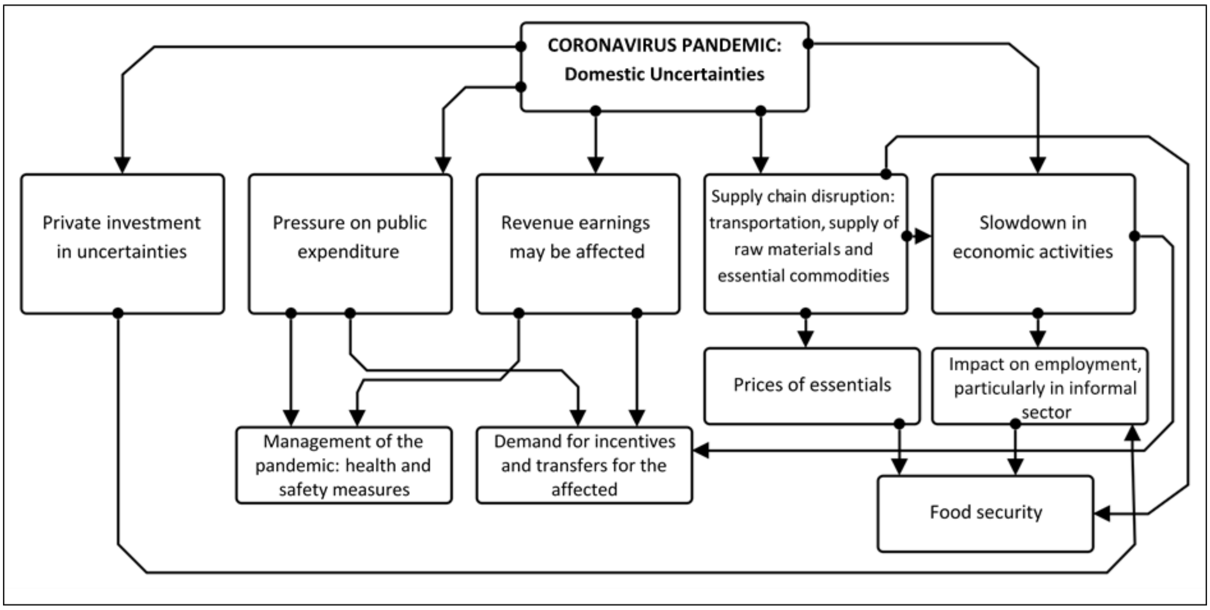
3.2 Domestic Uncertainties

Within the Bangladesh economy, slowdown in private investment appears to be a very real possibility. Businesses may halt further investment, given the subdued consumer demand and because of the unpredictability associated with the coronavirus crisis. Lack of private investment may have a negative impact on employment (Diagram 2).

Both components of the fiscal framework will face intense pressure in view of the coronavirus outbreak. On one hand, public expenditure pressure will increase significantly to manage the pandemic, especially to ensure health- and safety-related measures throughout the country. Also, the demand for incentives and transfers for the affected is likely to increase in the backdrop of a sluggish local economy. On the other hand, pressure to mobilise additional resources in order to finance the aforesaid expenditures will pile up. However, in the backdrop of subdued trade and other economic activities, to what extent revenue mobilisation can be accelerated, remains a critical question.

Disruption in the supply chain will directly hamper economic activities, which in turn, would affect the employment scenario, particularly in the informal sector. Moreover, slowdown in economic activities will increase the demand for incentives and transfers. Food security might be compromised if the prices and the supplies of essential commodities are adversely impacted via supply chain interruptions. Deteriorating employment situation, particularly that of the informal sector, is likely to exacerbate the state of affairs.

Diagram 2: Transmission channels for the Bangladesh economy: Domestic uncertainties



Source: Author's elaboration.

The interconnected nature of the transmission channels is important to take cognisance of while devising strategies to address the economic challenges of the ongoing pandemic. As can be evinced from the above, the intertwined and multi-directional characteristics of the considered transmission channels do not allow for a very transparent picture of possible impact pathways. This also highlights the necessity of timely, cogent and coherent policy-making in view of the severity of the situation.

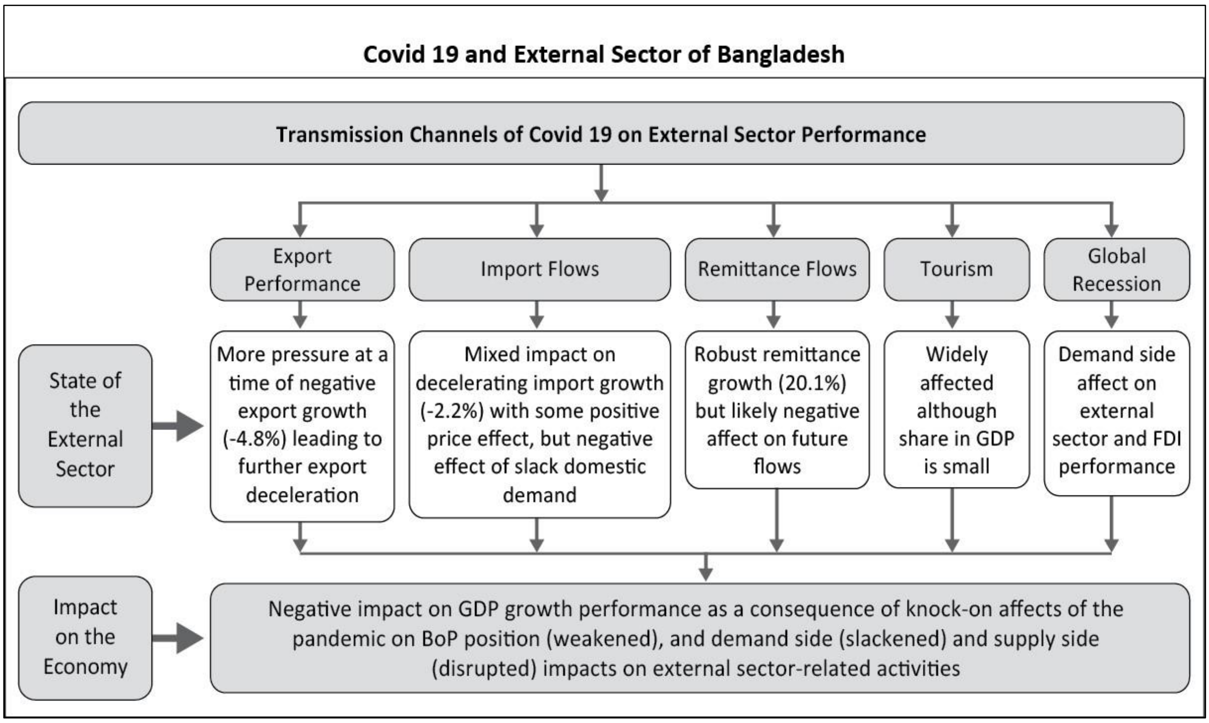
4. CURRENT STATE OF BANGLADESH ECONOMY IN VIEW OF THE CORONAVIRUS CRISIS

4.1 Navigating COVID-19 Impacts on Bangladesh's External Sector

COVID-19 transmission channels

The transmission channels through which the emergent global scenario in view of the COVID-19 pandemic are impacting on the increasingly globalising economy of Bangladesh are diverse in nature (see Diagram 3). Export outflows are getting disrupted; import inflows are facing delays; outmigration has ground to a halt; tourist arrivals are virtually non-existent; business contacts are getting delinked; investment flows are facing growing uncertainties. The early signs of the likely adverse implications of the COVID-19-afflicted external developments are already being felt in the Bangladesh economy, at the levels of financial transactions and on the real economy, as well as on business, commerce and consumers at the levels of enterprises, entrepreneurs and workers.

Diagram 3: Bangladesh external sector and COVID-19 impact transmission channels



Source: Conceptualisation by the author.

State of key external sector variables

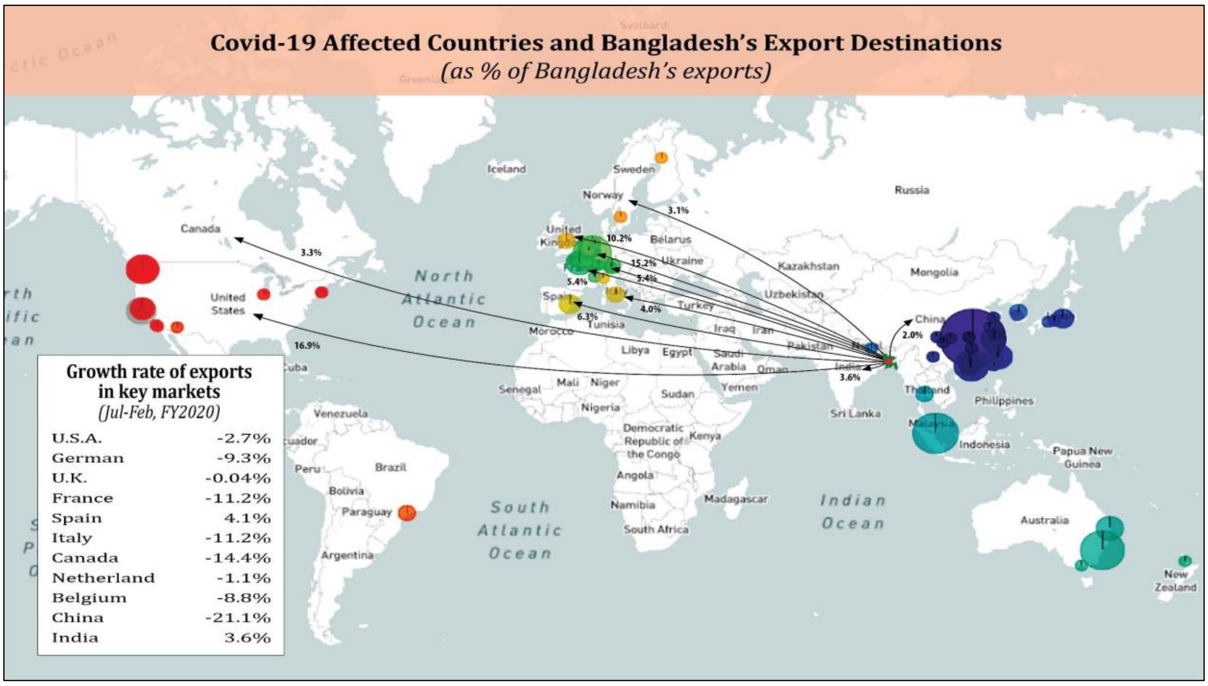
What is worrying and disturbing is that the virus-inflicted injuries are hurting the economy at a time when the external sector of Bangladesh was already under stress on several fronts. Growth of export earnings over the first eight months of FY2019-20 had been negative ((-) 4.8 per cent growth over the corresponding period of FY2018-19). Bangladesh's flagship export sector, the readymade garments (RMG), posted a negative growth over the first eight months of FY2019-20 ((-) 5.5. per cent) compared to the corresponding period of the previous year. Indeed, barring jute and jute goods, all key items of export have experienced negative growth in the first eight months of FY2019-20. It is already evident that the ambitious export growth target of 12 per cent for FY2019-20 will not be achieved, and actual export earnings this fiscal year will possibly be less than that of FY2018-19 (USD 40.5 billion). Growth in import payments has also been in the negative terrain ((-) 2.2 per cent growth in the first seven months of FY2019-20). Indeed, performance of the import sector is indicative of an economy experiencing demand depression, with likely adverse implications for growth performance in FY2019-20. Important import sub-components, such as intermediate inputs ((-) 2.1 per cent) and capital goods ((-) 8.3 per cent), including capital machineries ((-) 22 per cent), have posted negative growth in terms of import payments in the first half of FY2019-20 over the corresponding period of FY2018-19. The higher reduction in export earnings compared to the fall in import payments meant that trade deficit in the first six months of FY2019-20 rose to (-) USD 8.2 billion compared to (-) USD 7.8 billion for the corresponding period of FY2018-19. A welcome relief is that the remittance sector has registered robust growth (21.5 per cent) in the first eight months of FY2019-20. However, to note, growth in the number of workers going abroad has slowed down perceptibly (4.2 per cent growth in the first eight months).

The higher remittance flow has helped to reduce the deficit in the current account balance: the figure at the end of December 2019 was (-) USD 1.4 billion, an improvement over the matched figure of a year back, when it was (-) USD 3.4 billion. Over the first six months of FY2019-20, no discernible change, however, was visible with respect to flow of FDI to Bangladesh—the net FDI figure was USD 1.36 billion in FY2019-20, compared to USD 1.32 billion in FY2018-19, a growth of a mere 2.6 per cent. To recall, the Seventh Five Year Plan (7FYP) target for net FDI flow for FY2019-20 was set at the highly aspirational levels of USD 9.9 billion (against another ambitious target of USD 7.4 billion for FY2018-19, when the actual net FDI flow was a lowly USD 2.8 billion). The cumulative impact of the movement of the various components of the BoP was that, the overall BoP position remained rather weak on the eve of COVID-19, in early January 2020, when the virus made its presence known as a global emergency—USD 27 million in December 2019, as against (-) USD 513 million a year earlier.

COVID-19 impacts on the external sector

If the identified transmission channels are examined in conjunction with Bangladesh's overseas partner countries, it will become quite evident that COVID-19 will have important implications for Bangladesh's external sector performance over the coming months of FY2019-20, and most likely also beyond. This is clearly borne out by Map 1. Indeed, some of the repercussions are already becoming increasingly visible. On the export side, Bangladesh's major export destinations are some of the most highly COVID-19-affected countries in the world—USA (accounting for 16.9 per cent of Bangladesh total exports); Germany (15.2 per cent); UK (10.2 per cent); and Spain (6.3 per cent).

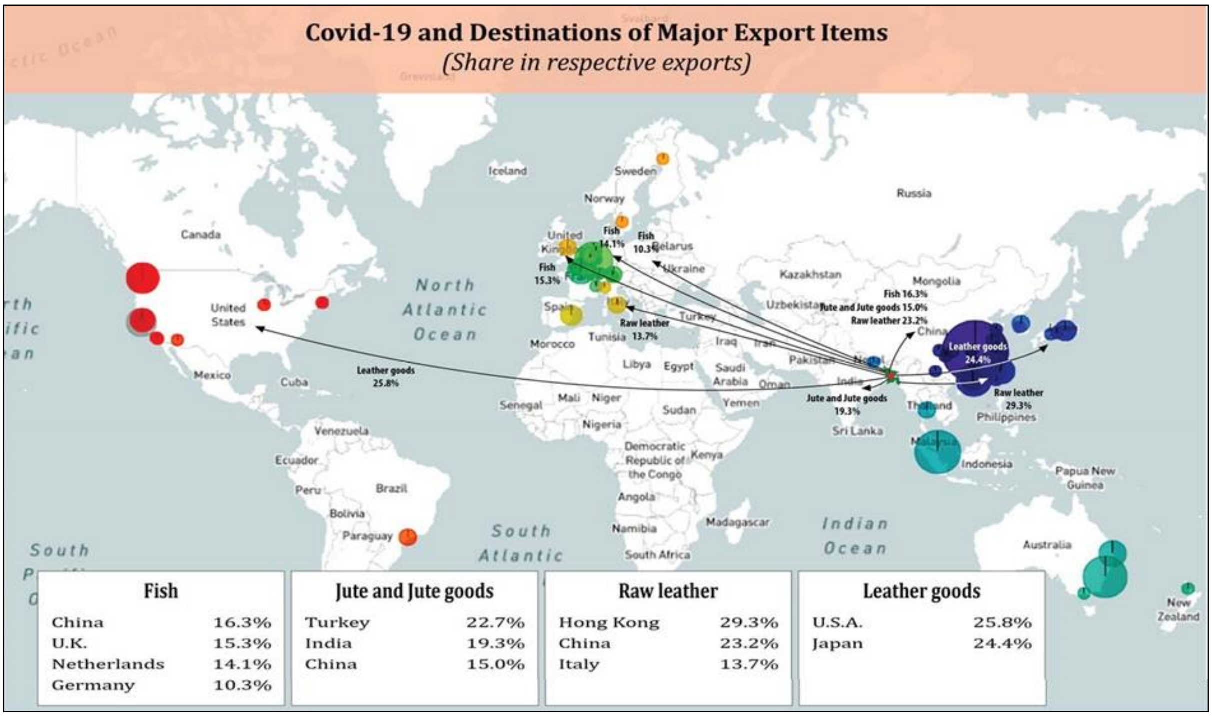
Map 1: COVID-19 and direction of Bangladesh's key exports



Source: Prepared by the author based on Nextstrain (n.d.) and EPB (n.d.).

The apprehension about the overall export performance is primarily dictated by the direction of apparels export, although this observation holds for other export items as well (Map 2). For example, for raw leather, Hong Kong and China together amount for more than half of the export; for leather goods, USA (25.8 per cent) and Japan (24.4 per cent) are major markets; for jute and jute goods, Turkey is a key market (22.7 per cent of export of the item); for exports of fish, China (16.3 per cent) and UK (15.3 per cent) are the most important destinations.

Map 2: Destinations of major export items from Bangladesh

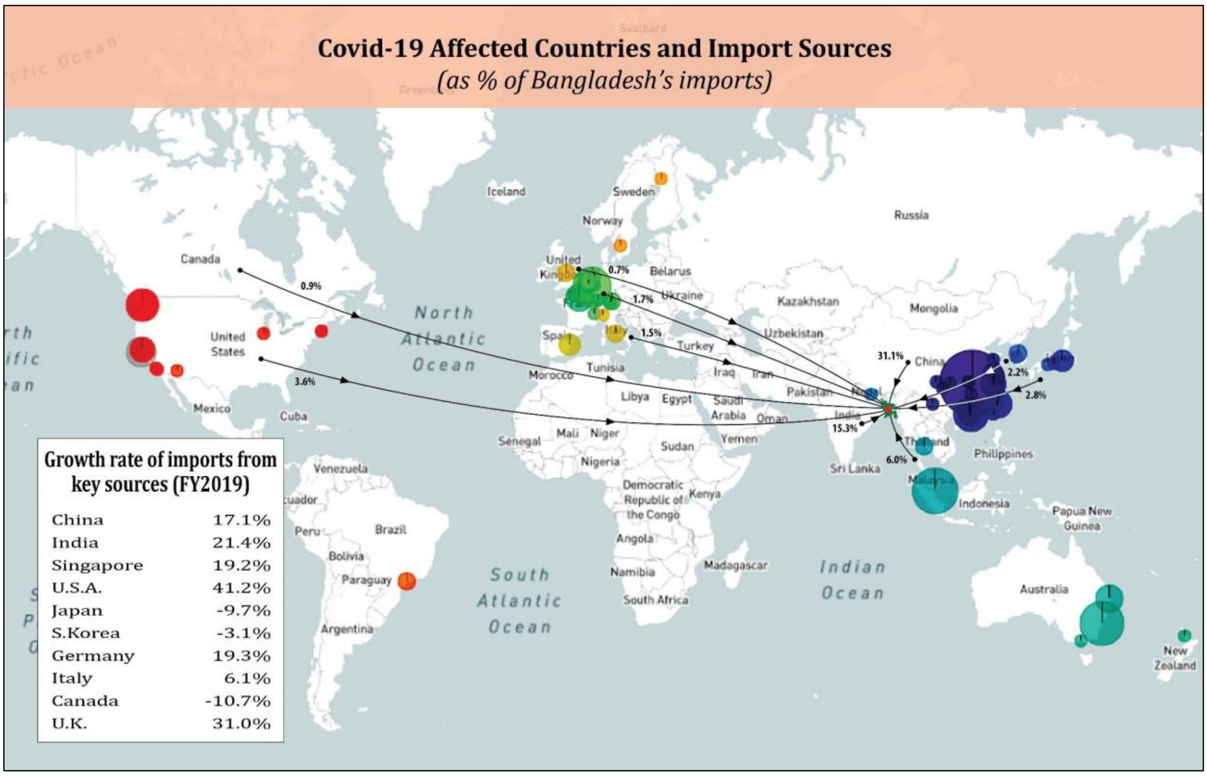


Source: Prepared by the author based on Nextstrain (n.d.) and EPB (n.d.).

Already exporters are experiencing delays in shipment of goods. RMG entrepreneurs are experiencing deferment of orders and delays in delivery as also disruption in imports of machineries and equipment, primary and secondary inputs and accessories. Major brands are sending cautionary signals as regards possible cancellation of orders in view of the protracted shutdown of borders in the European Union (EU) and North America, and the likely slowdown of the economies of importing countries. Bangladesh Garment Manufacturers and Exporters Association (BGMEA) has come up with evidence of this happening already.

As far as the import channels were concerned, there has been significant disruptions in the supply chains of a large part of the external market-dependent segment of Bangladesh's domestic economy (Map 3)—export-oriented industries for importing inputs; domestic import-substituting industries for importing raw materials and capital machineries; assembling plants for importing components and parts; import of consumption goods and final products. This is particularly true in case of China, which accounts for about one-fifth of Bangladesh's global imports. A large part of these imports included raw material items for export-oriented apparels sector, for which China is the primary source—yarn (HS52: more than half of total import of the item); man-made filaments (HS54: about 70 per cent); fabrics (HS60: about three-fourths). This is also true for a number of other items, such as electric equipment (HS85: more than half and footwear) and inputs for footwear (HS64: about three-fourths).

Map 3: COVID-19 and sources of Bangladesh's import

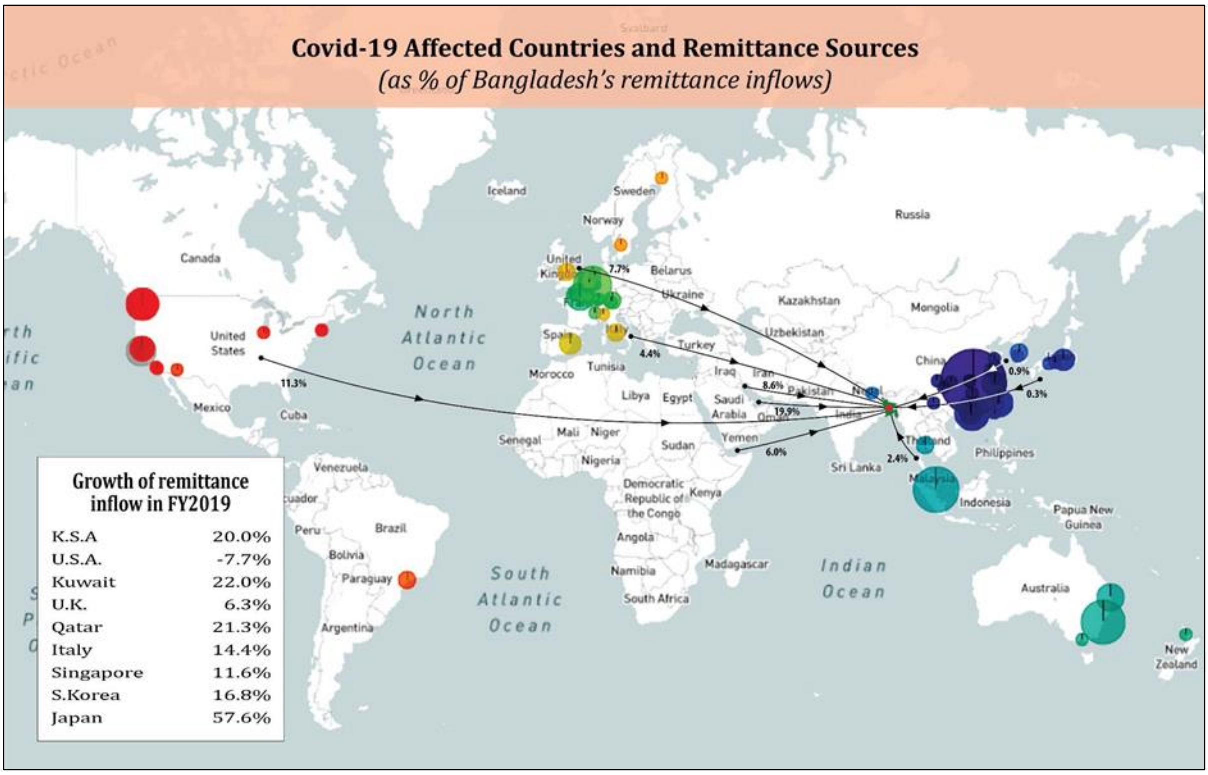


Source: Prepared by the author based on Nextstrain (n.d.) and ITC (n.d.).

While shipment from China is expected to hopefully pick up in the coming weeks, exporters and producers whose inventory drawdowns have already reached the limits are facing difficulties in keeping their production process going. Diversifying import sources, away from China, can only be a medium-term solution, which, however, has tangible cost implications. China's increasing dominance as an import source of Bangladesh originated in the first place from the competitive price it is able to offer to Bangladeshi importers and enterprises.

Also, as may be noted, some of the countries that are already among the hardest hit by the coronavirus are those where many Bangladeshi citizens live and work. This is revealed by the information in Map 4. The pandemic is likely to have a dampening impact on the robust remittance flows of the past several months. The already lower number of workers going abroad in recent times could fall further. The Middle-East, which accounts for about two-thirds of the remittance flows, is having to deal with the dual challenges of the pandemic and the falling oil prices. Projections are that oil-dependent developing countries could expect their oil and gas revenues to be slashed by up to 85 per cent.

Map 4: COVID-19 and sources of Bangladesh's remittances



Source: Prepared by the author based on Nextstrain (n.d.) and Bangladesh Bank (n.d.).

There is widespread apprehension that the havoc caused by COVID-19 on the global economy could lead to a global recession of the type seen in 2007–08 in the aftermath of the economic and financial crises (ADB, 2020). The stock markets and futures markets which have seen significant erosion of market values in the recent past, transmit an ominous sign as regards such a possibility. The coronavirus has destroyed USD 23 trillion in global market value since mid-February *according* to the Economist. As a matter of fact, the IMF (2020), UNCTAD (2020) and the OECD (2020) are all projecting significant economic losses in 2020, the decline being to the tune of about 1.6 per cent, 1.7 per cent and 2.4 per cent of global GDP, respectively (see Table 2). The International Labour Organization (ILO) has warned that the pandemic may trigger a global economic crisis, which could destroy up to 25 million jobs worldwide if governments fail to take coordinated efforts. As a consequence, there is likely to be demand-side repercussions for Bangladesh's key export markets. A global recession will also have negative impact on the flow of aid and FDI to Bangladesh. Thus, the adverse impacts of a global recession will further accentuate the challenges faced by Bangladesh's external sector, which, as was noted earlier, is already facing pressure on various fronts.

References

ADB. (2020, 6 March). *The Economic Impact of the COVID-19 Outbreak on Developing Asia*. ADB Brief No. 128. Manila: Asian Development Bank (ADB). Available at: https://www.adb.org/sites/default/files/publication/571536/adb-brief-128-economic-impact-covid19-developing-asia.pdf [accessed: 14 March 2020].

Bangladesh Bank. (n.d.). *Monthly Data of Wage Earner's Remittance*. Dhaka: Bangladesh Bank. Available at: https://bb.org.bd/econdata/wageremitance.php [accessed: 16 March 2020].

EPB. (n.d.). *Export Data*. Dhaka: Export Promotion Bureau (EPB), Government of Bangladesh (GoB). Accessed from http://epb.gov.bd/site/view/epb_export_data/- [accessed: 14 March 2020].

IMF. (2020, January). *World Economic Outlook Update: Tentative Stabilization, Sluggish Recovery?* Washington, D. C.: International Monetary Fund (IMF) Available at: https://www.imf.org/en/Publications/WEO/Issues/2020/01/20/weo-update-january2020 [accessed: 14 March 2020].

ITC. (n.d.). *Trade Map*. Geneva: International Trade Centre (ITC). Available at: https://www.trademap.org/Index.aspx [accessed: 14 March 2020].

Nextstrain. (n.d.). *Genomic Epidemiology of Novel Coronavirus*. Available at: https://nextstrain.org/ncov [accessed: 14 March 2020].

OECD. (2020, 2 March). *Coronavirus: The World Economy at Risk*. OECD Interim Economic Assessment. Paris: Organisation for Economic Co-operation and Development (OECD). Available at: https://www.oecd.org/berlin/publikationen/Interim-Economic-Assessment-2-March-2020.pdf [accessed: 14 March 2020].

UNCTAD. (2020, 4 March). *Global Trade Impact of the Coronavirus (COVID-19) Epidemic*. Trade and Development Report Update. UNCTAD/DITC/INF/2020/1. Geneva: United Nations Conference on Trade and Development (UNCTAD). Available at: https://unctad.org/en/PublicationsLibrary/ditcinf2020d1.pdf [accessed: 16 March 2020].

4.2 Addressing Disruptions of Supply Chains in Major Economic Activities

The outbreak of COVID-19 worldwide is the latest example of 'act of nature', which thus far has caused a considerable level of disorder in the global supply chains. The risks associated with such global systemic concerns have multiple dimensions, which are related with the process, control, supply, demand and business environment. Bangladesh economy, likewise elsewhere, has become exposed to a number of these risks due to the snowballing nature of the adverse impact of this crisis. According to ADB (2020b), global GDP growth may reduce by 0.1–0.4 per cent, while about 25 million jobs could be lost (ILO, 2020); Bangladesh's GDP may get shrunk by 0.01 per cent (ADB, 2020b).

This section reviews the immediate impact on supply chains of major economic activities in Bangladesh as reported in newspapers, analyses possible transmission channels of supply chain disruptions, and puts forward suggestions for managing the related risks.

Immediate impact on domestic supply chains: Newspaper reports

As part of the current exercise, the CPD IRBD team has scanned local dailies since late December 2019 to understand the implications of the epidemic on domestic supply chains. The published news reflected the impact on three major sectors and associated sub-sectors: (a) agriculture; (b) industries/manufacturing; and (c) services. A brief sectoral review is presented below.

Impact on agriculture supply chains

According to the newspaper reports, major agricultural products that experienced adverse disruption in supply chains include—onion, garlic and ginger (in domestic supply); lentil, sugar and palm oil, and spices such as pepper, turmeric (in retail price); and crab and eel (in exports). Supply of products that are largely dependent on import from/export to China has confronted a slack period, when trade was suspended with them for a few months, after the mass outbreak of coronavirus there. Even though the suspension is over now, instability is still observed in the markets of essential agricultural products in terms of supply and price, owing to unusual rise in demand instigated by panic buying by consumers, as well as newly imposed suspension of trade with other countries.

Impact on manufacturing supply chains

Major manufacturing industries and related activities on which corona-impact was reported include—leather and finished leather products, live and chilled food and jute spinning (in export of goods); garments accessories and packaging, plastic, pharmaceuticals and cosmetics and toiletries (in import of goods and raw materials); woven and knit products (in import of intermediate products); and computer and accessories, medical instruments and hospital equipment, eyeglass and electronics (in import of goods). Again, suspension of trade with China made an adverse impact on the supply of raw materials, intermediate products and capital machineries in the domestic market of most of these industries. The export of manufactured products, particularly in 'non-China' destinations, such as in European countries, has also been affected by the outbreak of coronavirus.

Impact on services sector supply chains

Among all of its sub-sectors, the travel and tourism sector is likely to face the most negative impact due to the outbreak of COVID-19. Although the sector's share in GDP is minuscule in Bangladesh compared to other countries, yet the blow in the sector has hurt associate activities of the supply chain very severely. These include domestic airlines, tour operators, hotels, restaurants, MICE (meetings, incentives, conferences and exhibitions) activities, shops and other services in tourist places, cargo and shipping. A large part of this disruption is associated with in- and out-bound tourists from China. The outbreak has caused a severe impact on the wholesale and retail trade, petty trading, shops, different types of contractual services and informal activities.

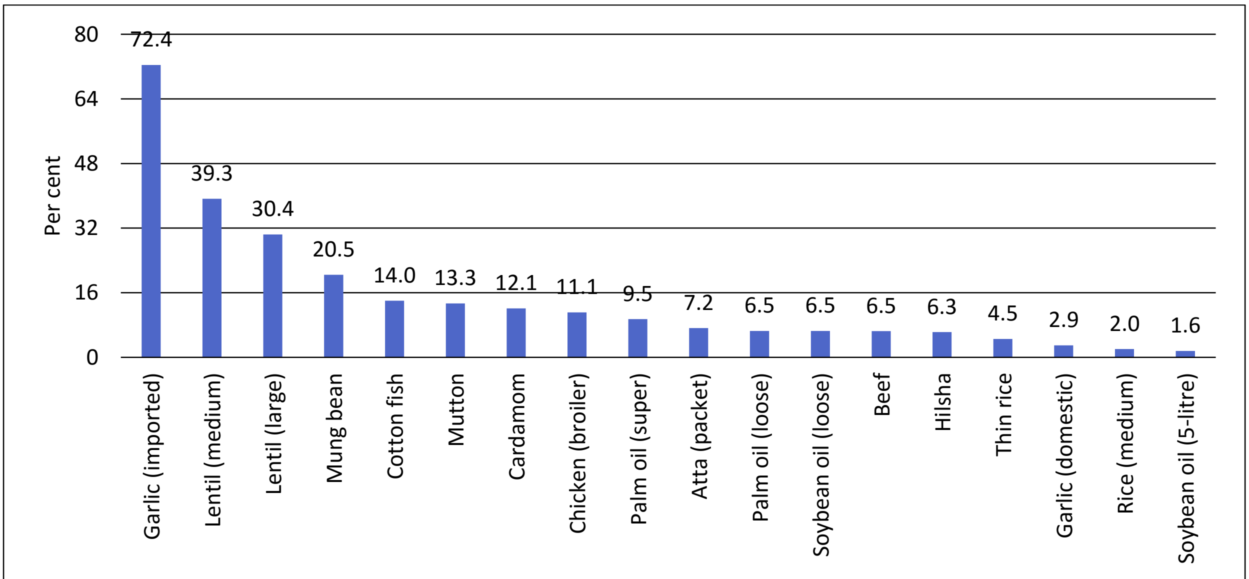
Main transmission channels of supply chain disruptions

Domestic supply chains for agriculture, manufacturing and services sectors have been affected through seven major channels. These are—(a) price of agricultural products; (b) import of agricultural products; (c) import of raw materials, intermediate goods and capital machineries; (d) domestic production of agricultural products; (e) public food stock; (f) domestic businesses; and (g) employment.

Price of agricultural products

According to the Trading Corporation of Bangladesh (TCB), changes in retail prices of food products in Dhaka city during December 2019 and March 2020 have experienced two opposite trends (Figures 3 and 4). One group of products has experienced a rise in prices (between 1–72 per cent), while another group of products has experienced a decline in prices (between (-) 2 to (-) 55 per cent). Products that experienced major rise in prices include—garlic (70 per cent), lentil (39 per cent), fish (14 per cent), mutton (13 per cent), chicken (11 per cent), palm oil (9.5 per cent), rice (7 per cent), packed atta (7 per cent) and soybean oil (6.5 per cent) (see Figure 3). Slowdown of import (particularly from China and other sources) and/or low level of supply of domestic production may have caused this rise.

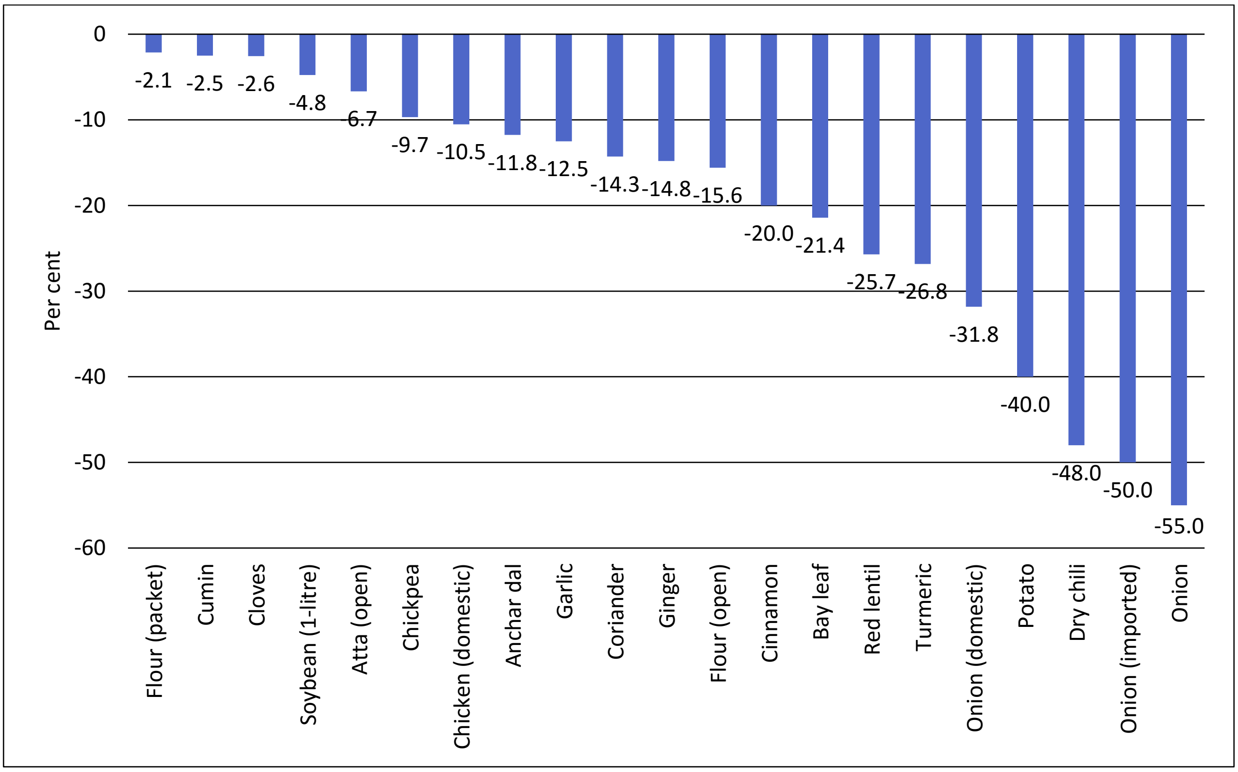
Figure 3: Rise in retail prices of different items in Dhaka city between 15 December 2019 to 14 March 2020



Source: Author's calculations based on TCB (n.d.).

On the other hand, major decline in retail prices have been observed in case of onion ((-) 55 per cent), dry chili ((-) 48 per cent), potato ((-) 40 per cent), turmeric ((-) 26 per cent) and ginger ((-) 14 per cent) (see Figure 4). Rise in the supply of domestic production and import from different sources (China-plus) is likely to contribute in slowing down of the retail prices of these items.

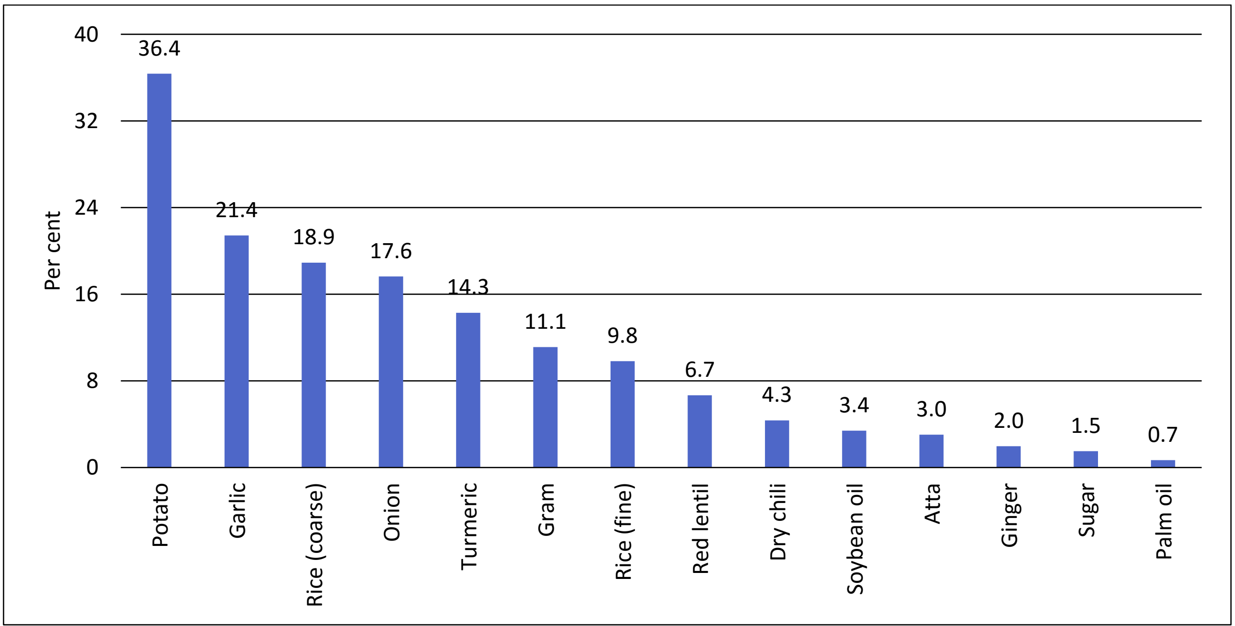
Figure 4: Decrease in retail prices of different items in Dhaka city between 15 December 2019 to 14 March 2020



Source: Author's calculations based on TCB (n.d.).

The retail price has experienced a new trend after 15 March 2020, owing to panic buying with the rumor of 'nationwide lockdown' to prevent the outbreak of coronavirus at the community level (Figure 5). The majority of essential food products, irrespective of their supply and price situation during the last three months, have experienced rise in retail prices in one-week time (16–23 March, 2020). The highest weekly rise in retail prices took place in case of potato (36 per cent), garlic (21 per cent), coarse rice (19 per cent), onion (18 per cent), turmeric (14 per cent) and gram (11 per cent). Prices of lentil/dal, dry chili, flour, soybean oil have followed similar trend in price hike. However, rising trend in retail prices may continue in the coming weeks in case domestic supply chains are disrupted due to restrictions in the movement of goods-laden transports, as well as restrictions in cross-border trade, particularly with India and Myanmar.

Figure 5: Rise in prices of essential foods in one week (16–23 March 2020)



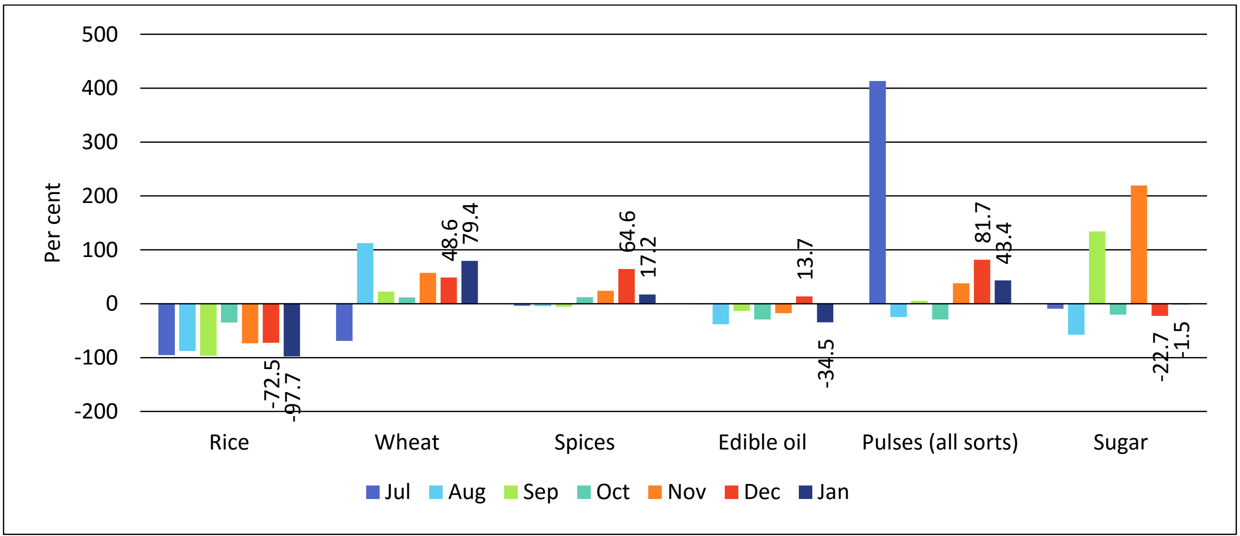
Source: Author's calculations based on TCB (n.d.).

Import of agricultural products

Domestic supply of import-dependent agricultural products (irrespective of the import source) have experienced diverse impact owing to restrictions in trade with China and other countries. Available data allows a comparison of month-on-month (m-o-m) changes in import of major food products during July 2019 to January 2020. It shows that in January 2020 (first month after corona outbreak), changes were in similar direction to that of December 2019 (Figure 6). For example, in case of rice, the m-o-m changes in import during December 2019 and January 2020 were (-) 73 per cent and (-) 98 per cent, respectively; for spices, 65 per cent and 17 per cent, respectively; for pulses, 82 per cent and 43 per cent, respectively. However, an opposite directional trend was observed in case of edible oil during these two months—13 per cent and (-) 35 per cent, respectively. In other words, a moderate level of variation was experienced in case of importing major food items.

Such limited-scale variation in the import of major agricultural products during this global-scale pandemic crisis is partly linked with sources of imports—since China is not the major source of import of agricultural products for Bangladesh. Table 3 presents the major import sources of selected agricultural products. For example, cereals, which include rice and wheat, is mainly sourced from India, Russia, Canada and Brazil; spices are mainly sourced from India, followed by China and Guatemala; edible vegetables, which include pulses, are sourced mostly from Australia, Canada, India, followed by China. The same is true in case of most other agricultural products, such as edible vegetables, oil seeds, vegetable fats, sugar, etc. However, the import from 'non-China' sources may also suffer disruption in the coming months, since many of these sourcing countries have been affected by the coronavirus, and have temporarily suspended their cross-border trade.

Figure 6: Changes in import of selected food products (m-o-m) during FY2018-19 and FY2019-20 (July–January)



Source: Bangladesh Bank (n.d.).

Table 3: Major import sources of Bangladesh for selected agricultural products

(in Per cent)

Product codes					
07	**09**	**10**	**12**	**15**	**17**
Australia (47.50)	India (33.71)	India (23.92)	USA (72.56)	Indonesia (49.30)	Brazil (90.86)
Canada (18.10)	China (20.90)	Russia (21.12)	Canada (6.89)	Argentina (25.44)	India (3.83)
India (13.80)	Guatemala (17.31)	Canada (11.76)	Brazil (5.17)	Malaysia (12.00)	China (2.02)
China (6.60)	Singapore (8.00)	Brazil (11.15)	India (2.65)	Brazil (7.51)	Germany (0.41)
Russia (3.20)	Vietnam (5.74)	Ukraine (10.15)	Russia (1.75)	Paraguay (4.50)	Malaysia (0.38)
Myanmar (3.20)	Myanmar (3.92)	USA (6.81)	Australia (1.74)	China (0.21)	Australia (0.37)

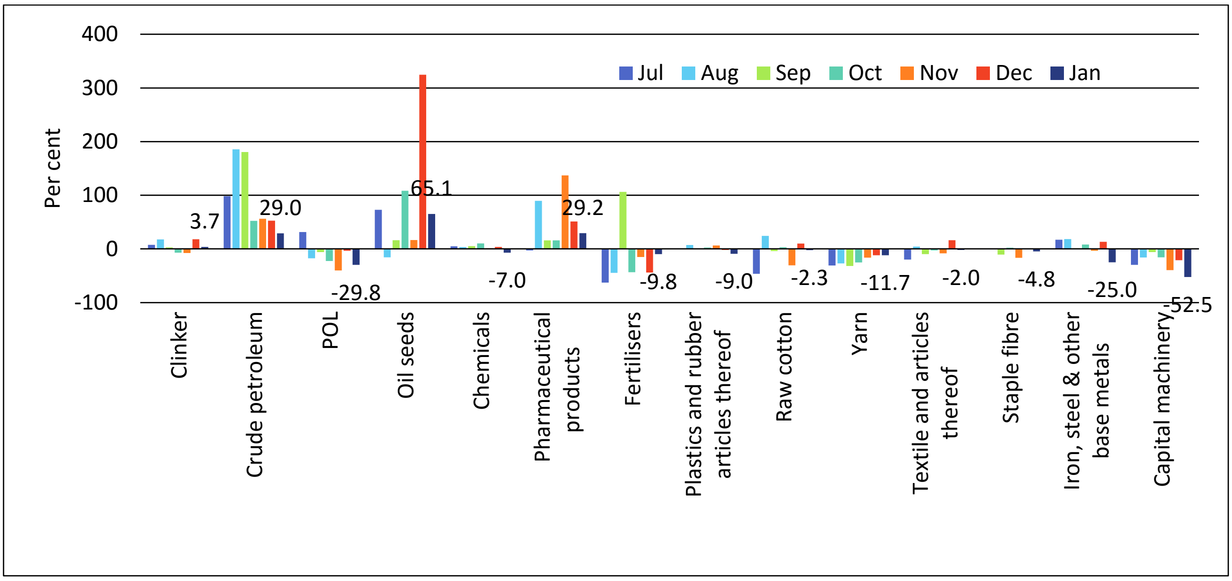
Source: ITC (n.d.).

Note: Code-specific products are: ***07:*** Edible vegetables and certain roots and tubers; ***09:*** Coffee, tea, maté and spices; ***10:*** Cereals; ***12:*** Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruits; industrial or medicinal ...; ***15:*** Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal ...; ***17:*** Sugars and sugar confectionery.

Import of raw materials, intermediate products and capital machineries

In contrast to agricultural products, Bangladesh's domestic supply of raw materials, intermediate products and capital machineries is overwhelmingly dependent on import from China. With the outbreak of coronavirus there, import of these materials has been affected immediately, which is clearly reflected in the figures of import in January 2020, vis-à-vis that in December 2019. Changes in m-o-m import during December 2019 and January 2020 in most of the products experienced opposite directional trend (Figure 7). For example, in case of chemicals, changes in import during these two months were 3.6 per cent and (-) 7 per cent, respectively; for raw cotton, this was 9.8 per cent and **(-)** 2.3 per cent, respectively; textiles 16 per cent and (-) 2.3 per cent; changes in import of iron and steel were 13.2 per cent and (-) 25 per cent, respectively. In a number of cases, decline in import was already observed in December 2019, which further aggravated in January 2020; these include plastics, yarn, staple fiber and capital machineries. Overall, the variation is high, and there is a downward trend in import of raw materials, intermediate products and machineries.

Figure 7: Changes in import of selected raw materials, intermediate products and capital machineries (m-o-m) during FY2018-19 and FY2019-20 (July–January)



Source: Bangladesh Bank (n.d.).
Note: POL: Petroleum, oil and lubricants.

According to Table 4, China is the major source of import for most of the raw materials, intermediate products and capital machineries (e.g. cotton, machinery, mechanical appliances, electrical machinery and equipment, iron and steel, plastics, manmade staple fibres, etc.). However, Bangladesh imports these materials from a number of other sources, such as India, Pakistan, Australia, Singapore, Malaysia, Indonesia, United Arab Emirates (UAE), Taiwan, etc. In other words, Bangladesh has the scope to import from 'non-China' sources in case import restriction from China continues, and provided cross-border trade is not prohibited in those countries.

Table 4: Major import sources of Bangladesh for selected raw materials, intermediate products and machineries

(in Per cent)

Product codes									
52	**84**	**85**	**27**	**10**	**72**	**39**	**87**	**55**	**15**
China (38.00)	China (34.70)	China (43.80)	Singapore (29.70)	India (17.80)	China (22.50)	China (20.90)	India (48.00)	China (61.60)	Indonesia (50.20)
India (27.80)	Italy (9.00)	Hong Kong (14.90)	China (28.70)	Russia (14.30)	Japan (21.40)	Taipei (13.70)	Japan (23.20)	India (16.00)	Argentina (24.30)
Pakistan (8.80)	India (9.00)	Singapore (8.10)	Malaysia (18.20)	Ukraine (14.10)	India (12.30)	Saudi Arabia (12.50)	China (18.40)	Indonesia (6.30)	Malaysia (11.60)
Australia (4.80)	Singapore (8.60)	India (7.30)	India (12.30)	Canada (13.90)	USA (8.80)	India (10.20)	Singapore (2.30)	Thailand (5.10)	Paraguay (6.70)
USA (4.60)	Japan (6.90)	Germany (3.00)	Indonesia (5.10)	Thailand (9.60)	Korea, Rep. of (7.00)	Thailand (7.70)	Thailand (1.70)	Korea, Rep. of (1.90)	Brazil (5.10)

Product codes									
52	**84**	**85**	**27**	**10**	**72**	**39**	**87**	**55**	**15**
Brazil (2.30)	Germany (6.40)	Finland (3.00)	UAE (1.60)	Brazil (7.00)	UK (4.20)	Korea, Rep. of (7.40)	Korea, Rep. of (1.20)	Austria (1.80)	Korea, Rep. of (0.40)
Hong Kong (1.90)	Malaysia (2.90)	Vietnam (2.20)	Iran (1.00)	Argentina (5.60)	Brazil (2.80)	Malaysia (4.90)	UAE (1.00)	Malaysia (1.40)	Ukraine (0.40)
Benin (1.40)	Korea, Rep. of (2.70)	Russia (2.10)	South Africa (0.80)	Vietnam (4.60)	Taipei (2.70)	UAE (4.10)	Turkey (0.90)	Taipei (1.20)	China (0.20)

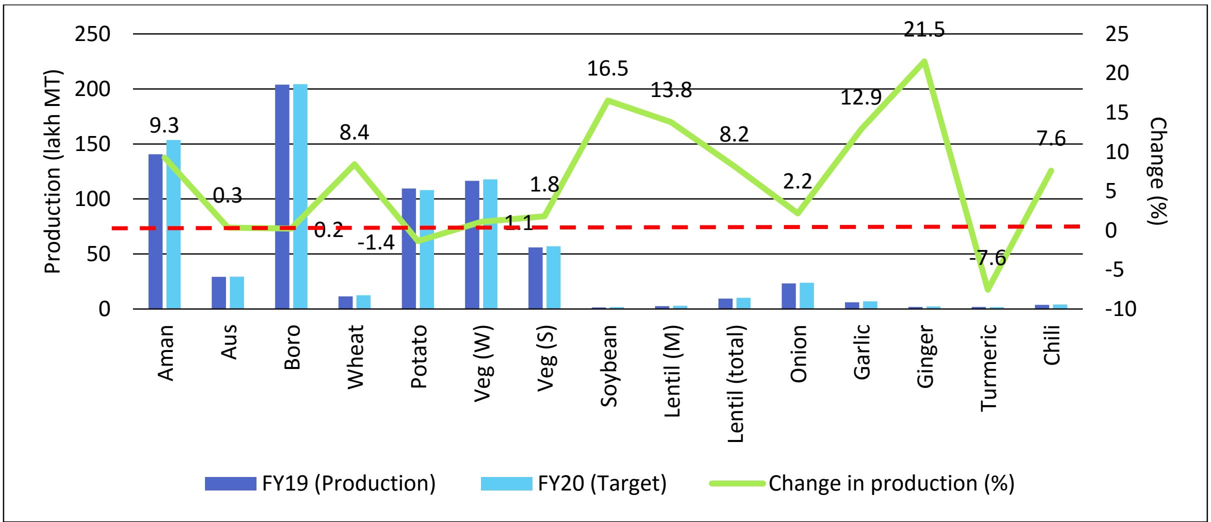
Source: ITC (n.d.).

Note: Code-specific products are: ***52:*** Cotton; ***84:*** Machinery, mechanical appliances, nuclear reactors, boilers and parts thereof; ***85:*** Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...; ***27:*** Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral ...; ***10:*** Cereals; ***72:*** Iron and steel; ***39:*** Plastics and articles thereof; ***87:*** Vehicles other than railway or tramway rolling stock, and parts and accessories thereof; ***55:*** Manmade staple fibres; ***15:*** Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal ....

Domestic production of agricultural products

Disruption in domestic production of agricultural products caused due to coronavirus outbreak will have adverse effect on the supply chain of food stock of Bangladesh. According to DAE (2020), production of major agricultural products during FY2019-20 is likely to be higher compared to that of the last year (FY2018-19). This target has been set for all types of rice, wheat, vegetables, soybean, lentil, onion, garlic and chili (Figure 8). Few products, such as potato ((-) 1.4 per cent) and turmeric ((-) 7.6 per cent), may fall short in production than last year. Overall, domestic agricultural production in the current year will have significant contribution in mitigating the disruption predicted in the country's food supply in view of the corona outbreak.

Figure 8: Domestic production and percentage change in production of agricultural products



Source: DAE (2020).

Note: MT: Metric tonnes.

Public food stock

The food reserve for the public food distribution system (PFDS) is higher in FY2019-20 compared to that in FY2018-19. As on 15 March 2020, the government has the reserves of foodgrains, especially of rice and wheat, to the tune of about 17.62 lakh metric tonnes (MT), which is about 1.85 lakh MT higher compared to the same period of the last year. According to the Minister for Food, public food stock contained 14.29 lakh MT of rice and 3.22 lakh MT of wheat, as on 18 March 2020. A part of this food stock is based on imported rice and wheat—till 12 March 2020, about 51.79 lakh MT of food has been imported, of which wheat was 51.74 MT and rice was 4,000 MT (The Business Standard, 2020).

Taking into consideration of extra demand for some of the food items during the Ramadan season (to be started at the end of April 2020), the government has taken preparation to ensure available supply of those products. Unlike the previous year, import of such some specific items has already increased. For example, during July–February, 2020, the import of chickpea through Chattogram Port has been estimated to be 199,471 tonnes (Bonik Barta, 2020). Such additional import of selected products will help to contain the demand for food during the time of trade restriction which may extend for months.

Domestic businesses

Different economic establishments related to manufacturing, services and agro-based activities are likely to be adversely affected due to outbreak of coronavirus. More importantly, impact would be higher for small-scale enterprises/establishments compared to that in the large-scale enterprises/establishments. According to the official statistics, about 97 per cent of Bangladesh's establishments are small-scaled in size, of which 61 per cent are involved in wholesale and retail trade, 14 per cent in different kinds of community services and 6.8 per cent in hotels and restaurants. In other words, about 82 per cent of small enterprises are involved in services sector-related activities, which are in vulnerable state due to the COVID-19 situation, since these enterprises have almost no financial capacity for mitigating such unforeseen risk.

Employment

The employment will face new challenges due to the ongoing coronavirus crisis. In the case of a lockdown, workers involved in wholesale and retail trading, as well as in other different formal and informal services, will fall in deep crisis as they live on daily earnings. It is important to note that about 40 per cent non-agricultural workers are working in the wholesale and retail trading, who are among the most affected. Therefore, aggregate employment situation will be under immense pressure. Moreover, a huge loss in the businesses could result in a cut in the employment, particularly in the RMG industry. According to ADB (2020a), about 2.3 lakh people in the manufacturing and 2.9 lakh people in the business sector may lose their jobs in Bangladesh, including in the financial sector, trade and public services; besides about 4.9 lakh people in agriculture, 55,000 people in tourism and 82,000 people in the transport sector may also become unemployed.

Job security situation in Bangladesh is very weak in most of the economic establishments, since the major portion of employment is in the informal sector. According to the Labour Force Survey (LFS) 2017, 82.6 per cent of employment in Bangladesh is in the informal sector (BBS, 2018), under which workers do not get legal protection for retaining jobs, benefits in case of leave and termination and other entitled dues. Hence, it will be important to take special measures for these workers.

Cross-country experiences to manage risks in different economic activities

Different countries have undertaken different initiatives to manage the risks of supply chain disruptions. These initiatives can be categorised into following groups: (a) monetary policy support; (b) targetted support measures for the corporate sector; (c) measures to support small and medium enterprises (SMEs); (d) targetted support measures for workers; and (e) financial packages announced by multilateral agencies. Besides, different development partners and multilateral agencies have announced packages targetting different health and economy-wide concerns of developing countries. Such initiatives and measures would, directly and indirectly, contribute to developing Bangladesh's stimulus package to address the health and economy-wide adversities.

Monetary policy support

Several countries are adopting fiscal stimulus to abate the probable adverse impact on their economies. The central banks of the USA, the Euro Zone, Canada, UK, Japan and Switzerland have agreed to offer three-month credit in United States Dollar (USD) on a regular basis, and at a rate cheaper than usual (Nikkei Asian Review, 2020). Moreover, the US Federal Reserve slashed rates back to near-zero, restarted bond buying, and encouraged banks to use the trillions of dollars in equity and liquid assets built up as capital buffers (The Japan Times, 2020). On the other hand, the Bank of Canada lowered its benchmark overnight rate to 1.25 per cent from 1.75 per cent in response to the epidemic, prompting money markets to price in a better-than-even chance of another reduction next month (The Daily Star, 2020). East Asian country South Korea announced a stimulus package of KRW 11.7 trillion (USD 13.7 billion) (Reuters, 2020b).

Targetted support measures for the corporate sector

For supporting the corporate sectors, many initiatives have been taken by a large number of countries. China has announced incentives for corporations in the form of tax deduction and exemption, lowering lending rates, tapping capital market financing, stepping up insurance support, improving capacity and imports of emergency supplies, tariff exemption, green channel at customs, and funds to aid product innovation. Another Asian giant economy, Dubai, announced a package that includes a freeze on the 2.5 per cent market fees for all facilities operating in Dubai, including tourism, retail, external trade and logistics services (The National, 2020). There will also be a refund of 20 per cent on the customs fees imposed on imported products sold locally. A 10-per-cent cut to water and electricity bills for citizens, expatriate residents and businesses will be brought in for three months to reduce living and operating costs. The deposit paid for water and electricity connections will be reduced by 50 per cent. In Europe, most of the countries are offering a huge amount of loans with a minimum interest rate. For example, the Government of France has guaranteed hundreds of billions worth of loans, delayed tax payments and suspended rent and utility bills for smaller firms. On the other hand, Italian Government has planned economic support package is of about EUR 25 billion (USD 28 billion). Company's payments on mortgages will also be suspended. Germany, the largest European economy, is mobilising at least EUR 500 billion (USD 550 billion) in loan guarantees and has pledged to provide unlimited liquidity to companies affected by the pandemic (WhoIs Best Broker, 2020). The country will also make it easier for companies to access loans made by the state development bank and delay tax payments for struggling businesses. UK, which recently came out of EU, announced an initial GBP 330 billion (USD 400 billion) in loans for companies (CNBC, 2020). Mortgage-providers have agreed to delay payments for three months for people affected by the coronavirus. On the other hand, the US Treasury Department will defer tax payments without interest or penalties for certain individuals and businesses negatively impacted, aiming to provide more than USD 200 billion of additional liquidity to the economy (Reuters, 2020a).

Measures to support SMEs

Unlike European countries, most Asian countries have taken initiatives to provide support to their SMEs. South Korea has granted USD 29 billion for SMEs struggling to pay wages to their workers, and childcare subsidies. In Shanghai, China, enterprises will get reduced rental, tax, fee burden on enterprises, rental waiver or reduction, delaying tax declaration, preferential tax policies for corporates and individuals, tax waiver for sole traders, and lower guarantee deposit for travel agencies. Financial supports to companies that are severely impacted include lower borrowing rates, working capital support and financing guarantee support. On the other hand, the Japanese Government has announced a second package of measures worth about USD 4 billion in spending, focusing on support to small and mid-sized firms, as concerns mount. Saudi Arab's central bank has prepared a SAR 50 billion (USD 13 billion) package to help their SMEs. The funding from the Saudi Arabian Monetary Authority is aimed at granting SMEs six-month deferrals on bank payments, concessional financing and exemptions from the costs of a loan guarantee programme. The only non-Asian country which has taken initiative for the support of SMEs so far, is the USA, where the Small Business Administration will provide capital and liquidity to firms affected due to coronavirus crisis.

Targetted support measures for workers

To support the workers in the current situation, two Asian countries South Korea and China, have taken different initiatives. South Korea will provide loans on relaxed terms to people who have lost their jobs with re-training; whereas in Shanghai, China, support will be provided to stabilise employment through the return of unemployment insurance premiums, delaying social insurance collection, extending social insurance payment period, subsidies for online training and lower medical insurance premium rate.

Financial packages announced by multilateral agencies

Along with the countries, various international organisations are taking measures. World Bank's USD 12 billion will support the efforts of developing countries to strengthen health systems and to minimise the harm to people and the economy (World Bank, 2020). Of the total amount, USD 8 billion is to be implemented on a fast track basis. This comprises up to USD 2.7 billion new financings from the International Bank for Reconstruction and Development (IBRD); USD 1.3 billion from the International Development Association (IDA), complemented by reprioritisation of USD 2 billion of the Bank's existing portfolio; and USD 6 billion from the International Finance Corporation (IFC), including USD 2 billion for existing trade facilities. It will also include policy advice and technical assistance, drawing on global expertise and country-level knowledge. On the other hand, ADB and IMF have announced USD 6.5 and USD 50 billion packages, respectively, for its member countries (The Financial Express, 2020; IMF, 2020).

Managing the risks for disruptions of the domestic supply chain in Bangladesh

It is found from the above discussion that the domestic supply chains in Bangladesh are at different levels of risks at the current state of coronavirus outbreak. However, levels of risks will rise cumulatively across all sectors in case the virus outbreak intensifies.

Most of the supply chains in the agriculture sector are at a stable state with minor volatility in supplies and prices due to panic buying. Most of the domestic market-oriented manufacturing supply chains are partially affected, both in supplies and prices, due to disruption in the import of raw materials from China. RMG, country's main export-oriented manufacturing supply chain, has been gradually affected at higher levels with withholding/lowering/withdrawing orders at different levels, and finally, at the risk of closing down of factories. Other export-oriented industries/products (e.g. leather, pharmaceuticals and agro-processed products) are also affected to various extents.

Services sector and related activities is apparently the hardest-hit sector, both at present, and possibly in the future. Tourism/travel will be the most-affected business, which includes airlines, hotels, restaurants, MICE and tour operators. Other trades of the services sector that are being affected at different levels include wholesale/retail trading, shops and transport.

Overall, the key adverse impact can be expected in the form of supply shock of raw materials, intermediate products, machineries, demand shock, discontinuity of businesses, temporary shutdown of operation and closing down of factories/businesses, loss of jobs, limited social protection for workers and their families, and possible health hazards to workers.

Crisis management recommendations

In order to prepare a mitigation plan, the government ought to make an early assessment of the immediate-, short- and medium-term impact of the coronavirus outbreak on domestic supply chains for major economic activities. The key areas of focus of that assessment should be: extent of impact on domestic and external economic activities; natures and extent of impact on production, imports, exports and employment in different sectors; and level of sustained losses in different sectors in different time spans.

On the other hand, managing risks for disruptions of the domestic supply chains will depend on six critical aspects: (i) how efficiently the coronavirus outbreak situation will be managed in the coming days; (ii) what would be the resource requirement; (iii) how much resources would be available from different sources (public, private and global) to manage the multidimensional risks; (iv) what will be the coping strategies and how the enterprises will manage the risks (partially/fully) to address the adversity with their own capacities; (v) what scopes will be available to share the losses (partially/fully) with buyers/brands/retailers; and (vi) how proactive the development partners will be in order to address health and economic adversities of developing countries like Bangladesh.

A major area of strategic focus of government initiatives should be easing the disruptions in the supply chains and ensuring their smooth operation both within and outside the country in the coming days. The agriculture sector will face the challenge of meeting the increased pressure of demand stemmed from a supply shortage due to recent panic buying, as well as the usual higher demand during Ramadan season. Both government and the private sector will need to be proactive in meeting these exceptional seasonal demands. In this context, possible measures which can be taken are:

- Review the stock of essential products and key raw materials for domestic production on a weekly basis by the respective ministries, including Food, Agriculture and Commerce;
- Ministry of Commerce should be transparent about the supply situation with regular update of information on production, import, stock and export;
- Open Market Sales (OMS) operation may need to be introduced in major industrial clusters in Dhaka, Gazipur, Narayanganj, Chattogram, Bogra, Rajshahi, Khulna, Sirajganj and Cumilla;
- Private sector should be encouraged to import food, raw materials, intermediate products and machineries from different sources beyond China only (China-plus), in case there are risks of shortage within the next 3–4 months;
- Taking the precedence of other developing countries (e.g. India) to maintain a steady domestic supply, the government may consider imposing short-term partial restrictions on export for essential food, drugs and other products. Such measures will help to address any possible constriction in domestic supply in case of falling imports of these essential items.

Export-oriented sectors, such as the RMG, will need cash flow support to retain workers, deferment of letter of credit (L/C) payment, interest payment support to banks and low-cost credit support from development partners. Possible measures which can be taken in this regard are:

- In order to ensure smooth cash flow to the factories to meet essential costs, including the labourers' salaries/wages, government may consider deferment of paying public utility bills, such as gas, electricity and water, for a period of 3–6 months;
- Given the slowdown of export, which is anticipated to continue for several months, the fund allocated for cash incentives to different sectors for a period of 4–6 months could be directed to factories as low-interest credit facility to meet the essential costs;
- Importers should continue import of raw materials, intermediate products and capital machineries both from China and other countries;
- Suppliers, including the relevant trade bodies, should discuss with their brands/retailers about possible cooperation in order to share revenue losses incurred for cancellation/deferment/withdrawal of orders;
- Government should discuss with development partners as well as multilateral development agencies regarding possibility of cooperation targetting businesses and employment;

Some of the service-oriented sectors will need immediate support, which includes travel and tourism, related activities and SMEs. Possible measures which can be taken in this regard are:

- Special refinancing credit facility for the SMEs at low interest to continue their businesses, including to maintain day-to day expenses, and pay wages of the staffs and workers;
- Special credit facility for travel and tourism, and related activities, including hotels, restaurants, tour operators, programme organisers, also those involved in MICE-related activities;
- Workers of the informal sector will need special support in the form of food rationing facility; skills training will also be beneficial for them in the long-run.

The government may consider introducing programmes for workers, which may include protection of workers under occupational safety and health (OSH) programme, adapting their working time and ensuring access to health-related facilities. Measures in this regard may include:

- Supporting employment and income (i.e. extending social protection, employment retention, tax relief for SMEs);
- OMS operation may need to be introduced in major industrial clusters;
- Cash transfer for targetted beneficiary groups under social protection scheme.

References

ADB. (2020a). *COVID-19 Economic Impact Assessment Template*. Manila: Asian Development Bank (ADB). Available at: https://data.adb.org/dataset/covid-19-economic-impact-assessment-template [accessed: 3 April 2020].

ADB. (2020b, 6 March). *The Economic Impact of the COVID-19 Outbreak on Developing Asia*. ADB Brief No. 128. Manila: Asian Development Bank (ADB). Available at: https://www.adb.org/sites/default/files/publication/571536/adb-brief-128-economic-impact-covid19-developing-asia.pdf [accessed: 19 March 2020].

Bangladesh Bank. (n.d.). *Commodity-wise Import Statistics Recorded by Customs [Monthly]*. Dhaka: Bangladesh Bank. Available at: https://www.bb.org.bd/econdata/bop/imp_pay_marchandise.php [accessed: 14 March 2020].

BBS. (2018). *Bangladesh Labour Force Survey 2016-17*. Dhaka: Bangladesh Bureau of Statistics (BBS), Government of Bangladesh (GoB). Available at: http://203.112.218.65:8008/WebTestApplication/userfiles/Image/LatestReports/LFS_2016-17.pdf [accessed: 10 March 2020].

Bonik Barta. (2020, 18 March). নিত্যপণ্যের মজুদ পর্যাপ্ত, আমদানিও হচ্ছে (Nittoponner mojud porjapto, amdanio hochchhe). Available at: https://bit.ly/3e1pcBE [accessed: 18 March 2020].

CNBC. (2020, 17 March). 'Whatever it takes': UK pledges almost $400 billion to help businesses through coronavirus. Available at: https://www.cnbc.com/2020/03/17/uk-announces-massive-aid-package-for-coronavirus-hit-industries.html [accessed: 3 April 2020].

DAE. (2020). *Crop Production*. Dhaka: Department of Agriculture Extension (DAE), Government of Bangladesh (GoB). Available at: http://www.dae.gov.bd/ [accessed: 6 March 2020].

ILO. (2020, 18 March). *COVID-19 and the World of Work: Impact and Policy Responses*. ILO Note. Geneva: International Labour Organization (ILO). Available at: https://www.ilo.org/global/topics/coronavirus/impacts-and-responses/lang--en/index.htm [accessed: 21 March 2020].

IMF. (2020, 4 March). IMF makes available $50 billion to help address coronavirus. Available at: https://www.imf.org/en/News/Articles/2020/03/04/sp030420-imf-makes-available-50-billion-to-help-address-coronavirus [accessed: 3 April 2020].

ITC. (n.d.). *Trade Map*. Geneva: International Trade Centre (ITC). Available at: https://www.trademap.org/In)ex.aspx [accessed: 1 March 2020].

Nikkei Asian Review. (2020, 16 March). World's top central banks offer three-month dollar credit to calm market. Available at: https://asia.nikkei.com/Business/Finance/World-s-top-central-banks-offer-three-month-dollar-credit-to-calm-market [accessed: 3 April 2020].

Reuters. (2020a, 16 March). Factbox: The economic remedies for the coronavirus. Available at: https://www.reuters.com/article/us-health-coronavirus-economy-policy-fac/factbox-the-economic-remedies-for-the-coronavirus-idUSKBN2121C4 [accessed: 3 April 2020].

Reuters. (2020b, 4 March). South Korea unveils $9.8 billion stimulus to fight coronavirus. Available at: https://www.reuters.com/article/us-southkorea-economy-budget/south-korea-unveils-98-billion-stimulus-to-fight-coronavirus-idUSKBN20R046 [accessed: 3 April 2020].

TCB. (n.d.). *Latest Retail Market Price of Dhaka City (January 2020)*. Dhaka: Trading Corporation Bangladesh (TCB), Government of Bangladesh (GoB). Available at: http://www.tcb.gov.bd/ [accessed: 30 March 2020].

The Business Standard. (2020, 18 March). Minister's assurance ignored, panic buying spree continues. Available at: https://tbsnews.net/bangladesh/govt-urges-people-not-hoard-enough-food-country-58204 [accessed: 4 April 2020].

The Daily Star. (2020, 15 March). The economic remedies for the virus. Available at: https://www.thedailystar.net/business/news/the-economic-remedies-the-virus-1880869 [accessed: 3 April 2020].

The Financial Express. (2020, 18 March). ADB announces $6.5b package to prevent coronavirus. Available at: https://thefinancialexpress.com.bd/health/adb-announces-65b-package-to-prevent-coronavirus-1584531666 [accessed: 3 April 2020].

The Japan Times. (2020, 16 March). Fed slashes rates and central banks pull out stops to cushion coronavirus blow. Available at: https://www.japantimes.co.jp/news/2020/03/16/business/fed-slashes-rates-central-banks-pull-stops-cushion-coronavirus-blow/#.Xoc0ANwzbIV [accessed: 3 April 2020].

The National. (2020, 28 March). Coronavirus: Dubai Free Zones Council announces economic relief package. Available at: https://www.thenational.ae/business/economy/coronavirus-dubai-free-zones-council-announces-economic-relief-package-1.998366 [accessed 3 April 2020].

WhoIs Best Broker. (2020, 18 March). Countries are willing to save their economies at any cost. Available at: https://www.wibestbroker.com/countries-are-willing-to-save-their-economies-at-any-cost/ [accessed: 3 April 2020].

World Bank. (2020, 3 March). World Bank Group announces up to $12 billion immediate support for COVID-19 country response. Available at: https://www.worldbank.org/en/news/press-release/2020/03/03/world-bank-group-announces-up-to-12-billion-immediate-support-for-covid-19-country-response [accessed: 3 April 2020].

4.3 Reshaping Healthcare System to Deal with the Corona Pandemic

Initial response to COVID-19 by the government

Since the middle of March, the government began to take a number of measures to prevent the spread of COVID-19. Passengers returning from countries that are highly affected by COVID-19, were being screened using thermometer or thermal scanner. However, some returning Bangladeshis have raised concerns about the slack screening at the Dhaka airport, mentioning that such a procedure involved merely checking body temperature, filling out an extra form and receiving a small health information card (Dhaka Tribune, 2020a). Due to a serious shortage of testing kits (New Age, 2020), all passengers suspected of being potentially affected with COVID-19 could not be tested. Only passengers who were displaying known symptoms of COVID-19 were being isolated in hospitals. Those who were not showing any signs of the disease were being advised to 'self-quarantine' for two weeks (IEDCR, 2020). Unfortunately, it could not be assessed if the returning passengers were taking such advice seriously since there was no monitoring or enforcement mechanism. In fact, COVID-19 entered Bangladesh through returning migrant workers from Italy (The Business Standard, 2020a), and then started spreading exponentially (UNB, 2020b). Moreover, in the initial stages of the disease, COVID-19 can be present inside a person's body without showing any visible signs (WHO, 2020c).

Since maintaining social distancing is advised as the key to preventing the spread of COVID-19 (WHO, 2020a), the Hon'ble Prime Minister requested the general public of Bangladesh to avoid mass gatherings (Dhaka Tribune, 2020c). Despite such an advice from the premier, only a week later on 18 March 2020, approximately 30,000 people gathered in Raipur town of Lakshmipur district in a mass prayer to save themselves from COVID-19 (BBC, 2020a). The experience of countries such as Malaysia and South Korea has shown that religious gatherings facilitate rapid and large-scale spread of COVID-19 (Al Jazeera, 2020a; Mahbubani, 2020). Therefore, the concerned authorities should not have allowed such a massive gathering of people in Raipur town to take place under any circumstances.

As the epicenter of the COVID-19 pandemic was shifting from China to Italy, the government made an attempt to quarantine 142 Bangladeshis returning from Rome at Ashkona Hajj Camp (The Business Standard, 2020b). Unfortunately, Ashkona Hajj Camp had not been prepared in advance for such a process, and after protests regarding lack of food, all 142 Italy returnees were released with the claim that they were all tested negative for COVID-19 (Perera, 2020). Following this failure to hold returning travelers in quarantine, the government handed over control of Ashkona Hajj Camp and Rajuk Apartment Project to the army, in order to run them as quarantine centres (The Daily Star, 2020a). The government also decided to prepare Tongi Ijtema Ground as another quarantine centre to be operated by the army (The Daily Star, 2020b).

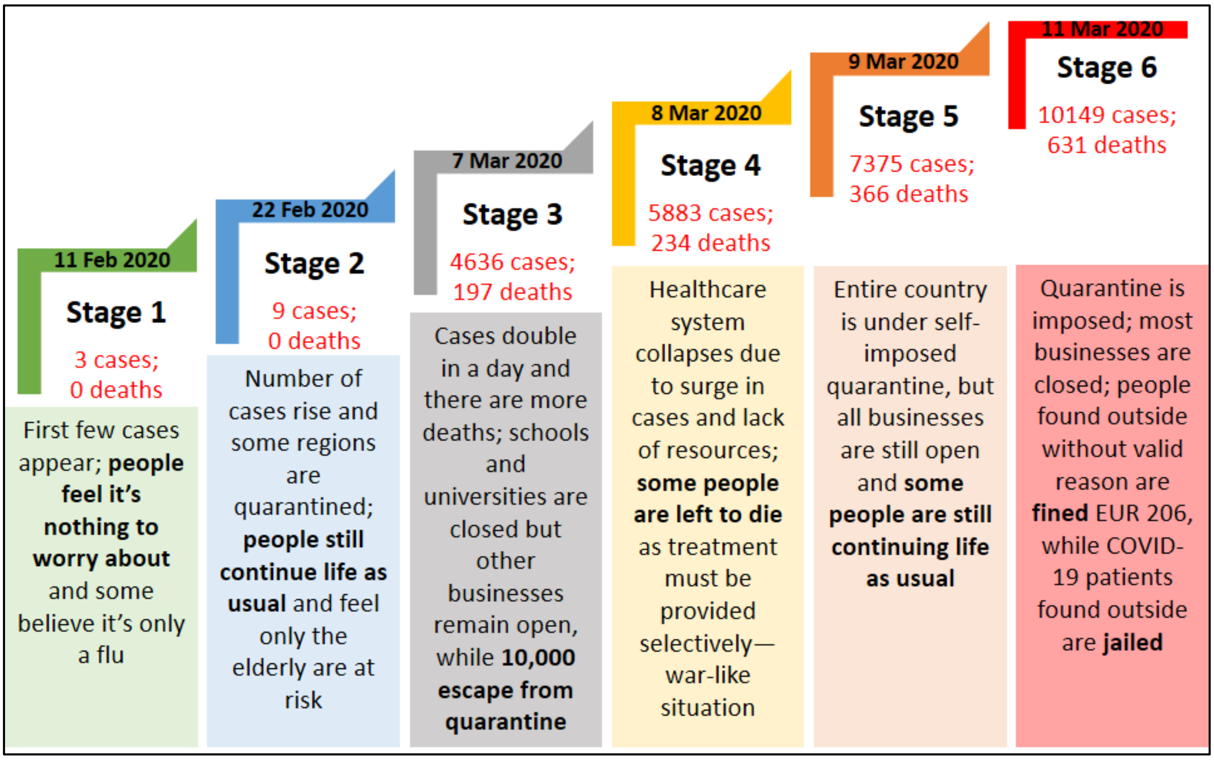
In the midst of the growing COVID-19 crisis, the Education Minister declared on 16 March 2020, that all educational institutions, including schools, colleges, universities and coaching centres, would remain closed till 31 March 2020 (UNB, 2020a). On 19 March 2020, senior government officials held a meeting of the National Economic Council (NEC) to discuss the next steps that would be taken in order to contain the spread of COVID-19 in Bangladesh (The Daily Star, 2020b). One of the decisions from this meeting was to ban all political, cultural and religious gatherings in the country until further notice (The Daily Star, 2020b). Despite such a decision, only two days later on 21 March 2020, by-elections were held in Dhaka-10, Gaibandha-3, and Bagerhat-4 constituencies (Dhaka Tribune, 2020b). History has proved that holding elections during pandemics does more harm than good. When the American mid-term elections were held during the influenza pandemic of 1918, the number of cases and deaths spiked immediately afterwards (The New York Times, 2020).

As of 20 March 2020, leaves of all officials working under the Health Ministry were cancelled; BDT 200 crore was allocated to the Health Ministry to fight COVID-19; all bus services between Dhaka and Rajshahi were suspended; and Shibpur upazila of Madaripur district was designated as a vulnerable area with restrictions on public transport. Nevertheless, there was widespread fear that these measures taken by the government may be too little or too late. Simulation models have shown that in the absence of intervention, 133,015,165 people may be infected with COVID-19 in Bangladesh; with 89,120,161 having symptomatic infections; 3,037,393 requiring hospitaliation; 696,595 requiring intensive care; and 507,442 dying (Mridha et al., 2020).

Immediate measures taken by other countries

Throughout the world, governments of various countries are taking extraordinary measures to deal with the desperate crisis created by the COVID-19 pandemic. Cross-country evidence shows that governments which adopted the most extreme measures most promptly, were the most successful in reducing the number of new cases and deaths. China, which had the highest number of confirmed cases in the world as of 21 March 2020 (WHO, 2020b), adopted aggressive quarantine, public monitoring and citywide lockdowns to battle against COVID-19 (Kuo, 2020). Iran cancelled Friday prayers in major cities (Al Jazeera, 2020b); Spain nationalised all private hospitals (Payne, 2020); South Korea set up drive through testing of COVID-19 (Yoon and Martin, 2020); France deployed its military and police to enforce countrywide lockdown (Amaro, 2020); Germany gave tax-relief to firms (Marcus, 2020); and UK closed schools and cancelled exams (BBC, 2020b). Italy was slow to react to COVID-19 in the beginning, and now has the highest number of COVID-19-related deaths in the world, as of 21 March 2020 (WHO, 2020b). Eventually, the Italian Government was forced to enforce a countrywide lockdown (Reuters, 2020b) and prevent people from trying to travel to the island of Sicily (Reuters, 2020a). Figure 9 shows how the COVID-19 situation in Italy escalated rapidly in the matter of only five days.

Figure 9: Rapid escalation of COVID-19 in Italy in 5 days



Source: Author's illustration based on Grinevičius and Keturka (2020); and data from WHO (n.d.a).

Condition of health sector in Bangladesh

The scale of the pandemic has proved in country after country that there is no way to contain the spread of COVID-19 without social distancing. Of course, the importance of improved healthcare facility cannot be denied. Unfortunately, the health sector in Bangladesh has always been neglected by the policymakers. The existing healthcare infrastructure and the available medical equipment could hardly be thought of as adequate even in ordinary circumstances, let alone during a pandemic. As of 2017, there was one hospital bed for every 1,196 individuals in the country (BBS, 2019). Among the healthcare facilities in Bangladesh, 5.1 per cent had emergency transport, 21.5 per cent had alcohol-based disinfectants, 27.5 per cent had medical masks, 28 per cent had all basic equipment, 34.5 per cent had lab facilities, 43.1 per cent had regular electricity, 55.1 per cent had soap and water, 83.7 per cent had paracetamol oral suspension, 86.3 per cent had thermometer and 90.1 per cent had improved water source, as of 2017 (NIPORT, ACPR and ICF, 2018).

Apart from the lack of infrastructure and equipment, healthcare facilities in Bangladesh were also not staffed with adequate numbers of healthcare service-providers. As of 2018, there was one registered physician for every 1,581 individuals in the country (BBS, 2019). Among the healthcare facilities in

Bangladesh, 28 per cent had specialists[1], 59.1 per cent had general practitioners[2] and 79.7 per cent had nurses, as of 2017 (NIPORT, ACPR and ICF, 2018).

The level of awareness about healthcare among the general population was also found to be very low in Bangladesh. For example, WHO recommends washing hands frequently and thoroughly with soap and water in order to kill viruses, such as COVID-19, that may be on people's hands (WHO, 2020a). Unfortunately, according to Bangladesh's National Hygiene Survey 2018, only 15 per cent people were aware of need for washing hand using soap and water before feeding baby, 36 per cent people were aware of need for washing hand using soap and water before preparing or serving food, 40 per cent people were aware of need for washing hand using soap and water before eating and 55 per cent people were aware of need for washing hand using soap and water after defecation (BBS, 2020).

The health sector of Bangladesh has been plagued with many longstanding problems, such as low budget allocation for health, high out-of-pocket healthcare expenditure and poor utilisation of health budget. Total allocation of the budget for health sector in FY2019-20 was BDT 25,733 crore, which has increased by 15.2 per cent over that of revised budget of FY2018-19 (MoF, 2019). The allocation for health as share of total budget has fallen (from 5.1 per cent in budget of FY2018-19 to 4.9 per cent in the budget of FY2019-20) (MoF, 2019). Since 2017, the share of health budget as percentage of GDP has remained at 0.9 per cent (MoF, 2019). Bangladesh's budget for health (as a share of GDP) is considerably lower than the target of 1.12 per cent of GDP stipulated in the 7FYP (GED, 2015). The per capita allocation for health sector (in nominal terms) has slightly increased (from BDT 1,349 in the revised budget of FY2018-19 to BDT 1,537 in the budget of FY2019-20), but the rise is much lower in real terms (less than BDT 100) (MoF, 2019).

The health system of Bangladesh relies heavily on the government for financing and setting overall policies and service delivery mechanisms. Although the health system is faced with many intractable challenges, it seems to receive little priority in terms of national resource allocation. The health system faces multifaceted challenges, which include lack of public health facilities, scarcity of skilled workforce, inadequate financial resource allocation and political instability. As of 2015, out-of-pocket expenditure on healthcare in Bangladesh was the highest in South Asia (Table 5).

Utilisation of the overall health budget has been decelerating in recent years and it was lowest in FY2017-18 (83.7 per cent) during the last 10 fiscal years (MoF, 2019). A detailed description on different activities of the health sector is mentioned in the budget documents, and it shows that most of the projects are behind schedule in terms of level of implementation.

[1] Specialist (consultant) medicine [including cardiology], specialist (consultant) general surgery, specialist (consultant) obstetrics/gynecology, specialist (consultant) pediatrics, specialist (consultant) psychiatry, specialist (consultant) anesthesia or any other specialist not listed above.

[2] Medical officer (MBBS) (any non-specialist doctor, including assistant surgeon, emergency medical officer (EMO), indoor medical officer (IMO), maternal and child health/family planning medical officer (MCH/FP), residential medical officer (RMO), regardless of designation or title) or medical officer—anesthetist or dental surgeon.

Table 5: Out-of-pocket health expenditure in South Asian countries

Indicator	2008	2009	2015	2015				
	Bangladesh			India	Pakistan	Sri Lanka	Nepal	Bhutan
Out-of-pocket expenditure (percentage of current health expenditure)	67.2	67.2	71.8	65.1	66.5	38.4	60.4	19.8
Out-of-pocket expenditure, per capita PPP (current international USD)	36.2	39.0	63.2	143.4	88.9	226.9	91.1	56.9

Source: WHO (n.d.b).

Note: Out-of-pocket expenditure per capita, PPP (current international USD) is defined as health expenditure through out-of-pocket payments per capita in international dollars at purchasing power parity (PPP).

Immediate health measures to tackle COVID-19

In order to address the health emergency posed by COVID-19, a number of policies are recommended for immediate consideration by the government:

- Budget allocation for COVID-19-related areas should be increased in a focused and targetted way, for production, supply and distribution of medicine, improvement of health services availability of medical instruments and support to health professionals;
- New financial channels should be opened to support health-related actions with flexible procurement system using domestic and available foreign finances;
- Taxes on all medical supplies (e.g. medicine, equipment, protective gears) required for confronting the coronavirus challenge should be exempted;
- In case the situation demands, the government should be prepared to take urgent and drastic steps such as wider lockdowns with appropriate preparatory measures;
- Necessary make-shift healthcare facilities should be arranged at district and upazila levels;
- All medical colleges, nursing institutions, other health establishments and voluntary organisations should be mobilised towards addressing the COVID-19 emergency;
- Health professionals should be adequately provided with personal protective equipment (PPE) support;
- Public health awareness messages must be communicated more clearly and frequently;
- Adequate policy support and budgetary allocations should be made for the health sector in the upcoming budget for FY2020-21.

References

Al Jazeera. (2020a, 18 March). Made in Malaysia: How mosque event spread virus to SE Asia. Available at: https://www.aljazeera.com/news/2020/03/malaysia-mosque-event-virus-hotspot-se-asia-200318021302367.html [accessed: 22 March 2020].

Al Jazeera. (2020b, 13 March). Prayers restricted across Middle East amid coronavirus fears. Available at: https://www.aljazeera.com/news/2020/03/prayers-restricted-middle-east-coronavirus-fears-200313113106897.html [accessed: 23 March 2020].

Amaro, S. (2020, 17 March). Macron warns 'we are at war' as France unveils USD 50 billion in coronavirus measures. *CNBC*. Available at: https://www.cnbc.com/2020/03/17/coronavirus-france-president-macron-warns-we-are-at-war.html [accessed: 23 March 2020].

BBC. (2020a, 19 March). Coronavirus: Bangladesh mass prayer event prompts alarm. Available at: https://www.bbc.com/news/world-asia-51956510 [accessed: 22 March 2020].

BBC. (2020b, 19 March). Coronavirus: What measures are countries taking to stop it? Available at: https://www.bbc.com/news/world-51737226 [accessed: 23 March 2020].

BBS. (2019). *Statistical Yearbook of Bangladesh 2018*. Dhaka: Bangladesh Bureau of Statistics (BBS), Government of Bangladesh (GoB).

BBS. (2020). *Key Findings of National Hygiene Survey 2018*. Dhaka: Bangladesh Bureau of Statistics (BBS), Government of Bangladesh (GoB).

Dhaka Tribune. (2020a, 18 March). Coronavirus screening at Dhaka airport falls short, says returning Bangladeshi. Available at: https://www.dhakatribune.com/bangladesh/dhaka/2020/03/18/coronavirus-screening-at-dhaka-airport-falls-short-says-returning-bangladeshi [accessed: 22 March 2020].

Dhaka Tribune. (2020b, 21 March). Dhaka 10 by-polls: PM casts vote at Dhaka City College centre. Available at: https://www.dhakatribune.com/bangladesh/election/2020/03/21/dhaka-10-by-polls-pm-casts-vote-at-dhaka-city-college-centre [accessed: 22 March 2020].

Dhaka Tribune. (2020c, 10 March). Tackling coronavirus: Government taking preventive measures. Available at: https://www.dhakatribune.com/bangladesh/2020/03/10/tackling-coronavirus-government-taking-preventive-measures [accessed: 22 March 2020].

GED. (2015). *Seventh Five Year Plan (FY2016 - FY2020): Accelerating Growth, Empowering Citizens*. Dhaka: General Economics Division (GED), Planning Commission, Government of Bangladesh (GoB). Available at: http://plancomm.portal.gov.bd/sites/default/files/files/plancomm.portal.gov.bd/files/aee61c03_3c11_4e89_9f30_d79639595c67/7th_FYP_18_02_2016.pdf [accessed: 11 March 2020].

Grinevičius, J. and Keturka, J. (2020, 17 March). "To The Rest Of The World, You Have No Idea What's Coming": Man Lists 6 Stages Italy Has Gone Through. Posted on *Bored Panda*. Available at: https://www.boredpanda.com/coronavirus-outbreak-stages-italy-jason-yanowitz/?utm_source=google&utm_medium=organic&utm_campaign=organic [accessed: 23 March 2020].

IEDCR. (2020, 10 March). *Health Information Card*. Dhaka: Institute of Epidemiology, Disease Control and Research (IEDCR) and Directorate General of Health Services (DGHS), Ministry of Health and

Family Welfare (MoHFW), Government of Bangladesh (GoB). Available at: https://www.iedcr.gov.bd/images/files/nCoV/Helth_card_10032020.jpg [accessed: 22 March 2020].

Kuo, L. (2020, 9 March). How did China get to grips with its coronavirus outbreak? *The Guardian*. Available at: https://www.theguardian.com/world/2020/mar/09/how-did-china-get-grips-with-coronavirus-outbreak [accessed: 23 March 2020].

Mahbubani, R. (2020, 25 February). An official leading South Korea's battle against COVID-19 says he's a member of a doomsday 'cult' where a virus 'super-spreader' event occurred. *Business Insider*. Available at: https://www.businessinsider.com/south-korean-official-tests-positive-coronavirus-doomsday-church-cult-2020-2 [accessed: 22 March 2020].

Marcus, I. (2020, 18 March). Coronavirus: Germany is high risk country. *The Berlin Spectator*. Available at: https://berlinspectator.com/2020/03/18/coronavirus-germany-is-high-risk-country/ [accessed: 23 March 2020].

MoF. (2019). *Budget in Brief*. Dhaka: Ministry of Finance (MoF), Government of Bangladesh (GoB). Available at: https://mof.gov.bd/site/page/f9aab5cd-f644-47bb-bb94-a70cb64c15ce [accessed: 13 March 2020].

Mridha, M. K., Mitra, D. K., Labrique, A., Zhu, Y. and Paul, R. R. (2020). *COVID-19: Cases, hospitalization need, critical care need and mortality projections for Bangladesh*. A report prepared for the Government of Bangladesh (GoB). Dhaka. Mimeo.

New Age. (2020, 18 March). Bangladesh lacks preparation for tests, treatment for coronavirus. Available at: https://www.newagebd.net/article/102531/bangladesh-lacks-preparation-for-tests-treatment-for-coronavirus [accessed: 22 March 2020].

NIPORT, ACPR and ICF. (2018). *Bangladesh Health Facility Survey 2017*. Dhaka: National Institute of Population Research and Training (NIPORT), Associates for Community and Population Research (ACPR) and ICF.

Payne, A. (2020, 16 March). Spain has nationalized all of its private hospitals as the country goes into coronavirus lockdown. *Business Insider*. Available at: https://www.businessinsider.com/coronavirus-spain-nationalises-private-hospitals-emergency-covid-19-lockdown-2020-3 [accessed: 23 March 2020].

Perera, W. (2020, 16 March). Bangladesh government downplays COVID-19 threat as job losses mount. *World Socialist Web Site (WSWS)*. Available at: https://www.wsws.org/en/articles/2020/03/16/bang-m16.html [accessed: 22 March 2020].

Reuters. (2020a, 17 March). Italy pumps cash into coronavirus-hit economy as death toll passes 2,000. Available at: https://www.reuters.com/article/us-health-coronavirus-italy/italy-pumps-cash-into-coronavirus-hit-economy-as-death-toll-passes-2000-idUSKBN2133DN [accessed: 23 March 2020].

Reuters. (2020b, 16 March). Italy supports coronavirus-hit economy, PM hails 'Italian model'. Available at: https://www.reuters.com/article/us-health-coronavirus-italy-economy/italy-supports-coronavirus-hit-economy-pm-hails-italian-model-idUSKBN21329U [accessed: 23 March 2020].

The Business Standard. (2020a, 8 March). First coronavirus cases detected in Bangladesh. Available at: https://tbsnews.net/bangladesh/health/3-tested-positive-coronavirus-bangladesh-iedcr-53476 [accessed: 22 March 2020].

The Business Standard. (2020b, 12 March). 142 Italy returnees quarantined at Ashkona Hajj camp. Available at: https://tbsnews.net/bangladesh/italy-returnee-be-quarantined-ashkona-hajj-camp-56047 [accessed: 22 March 2020].

The Daily Star. (2020a, 20 March). Army given charge of quarantine. Available at: https://www.thedailystar.net/frontpage/news/dghs-moves-get-1-lakh-test-kits-1883074 [accessed: 22 March 2020].

The Daily Star. (2020b, 20 March). Fighting coronavirus outbreak: Govt mulls lockdown of vulnerable areas. Available at: https://www.thedailystar.net/frontpage/news/fighting-coronavirus-outbreak-govt-mulls-lockdown-vulnerable-areas-1883077 [accessed: 22 March 2020].

The New York Times. (2020, 21 March). The lessons of the elections of 1918. Available at: https://www.nytimes.com/2020/03/21/us/politics/1918-flu-pandemic-elections.html [accessed: 22 March 2020].

UNB. (2020a, 16 March). All educational institutions to remain closed till March 31: Dipu Moni. Available at: https://unb.com.bd/category/Bangladesh/coronavirus-bangladesh-shuts-down-educational-institutions/47157 [accessed: 22 March 2020].

UNB. (2020b, 21 March). Bangladesh confirms second coronavirus death. Available at: https://unb.com.bd/category/Bangladesh/bangladesh-confirms-second-coronavirus-death/47599 [accessed: 22 March 2020].

WHO. (2020a, 18 March). *Coronavirus Disease (COVID-19): Advice for the Public*. Geneva: World Health Organization (WHO). Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public [accessed: 22 March 2020].

WHO. (2020b, 21 March). *Coronavirus Disease 2019 (COVID-19)*. Situation Report - 61. Geneva: World Health Organization (WHO). Available at: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200321-sitrep-61-covid-19.pdf?sfvrsn=f201f85c_2 [accessed: 22 March 2020].

WHO. (2020c, 9 March). *Q&A on Coronaviruses (COVID-19)*. Geneva: World Health Organization (WHO). Available at: https://www.who.int/news-room/q-a-detail/q-a-coronaviruses [accessed: 22 March 2020].

WHO. (n.d.a). *Coronavirus Disease (COVID-2019) Situation Reports (21 March 2020 update)*. Geneva: World Health Organization (WHO). Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/ [accessed: 23 March 2020].

WHO. (n.d.b). *WHO Global Health Expenditure Database (20 March 2020 update)*. Geneva: World Health Organization (WHO). Available at: http://apps.who.int/nha/database [accessed: 23 March 2020].

Yoon, D. and Martin, T. W. (2020, 16 March). How South Korea put into place the world's most aggressive coronavirus test program. *The Wall Street Journal*. Available at: https://www.wsj.com/articles/how-south-korea-put-into-place-the-worlds-most-aggressive-coronavirus-testing-11584377217 [accessed: 23 March 2020].

4.4 Public Finance Management in the Time of Coronavirus

Inability to deliver on the planned budgetary allocations in an efficient way highlights the weakening state of macroeconomic management in recent years; this has continued in FY2019-20.[3] The progress of the first six months (July–December) of FY2019-20, as evinced by the public finance data which is available in the public domain, indicates that apart from the Annual Development Programme (ADP), majority of the fiscal parameters will fall well-short of their respective targets. Revenue collection will need to grow by 87.5 per cent over the remaining six months of FY2019-20 to reach the targets of the budget for FY2019-20 (Table 6).

Table 6: Fiscal framework (growth)

(in Per cent)

Component	Growth				
	Target FY19	**Actual FY19**	**Target FY20**	**Actual FY20 (Jul–Dec)**	**Required FY20 (Jan–Jun)**
a. Total revenue	**56.7**	**16.3**	**50.0**	**5.6**	**87.5**
a.1 Tax revenue	57.4	16.3	50.5	5.6	86.9
a.1.1 NBR tax	58.3	16.8	48.9	5.9	83.5
a.1.2 Non-NBR tax	34.7	1.6	97.5	-1.5	198.8
a.2 Non-tax revenue	50.0	16.6	45.5	5.4	94.4
b. Total expenditure	**44.3**	**21.7**	**33.6**	**16.5**	**41.7**
b.1 ADP expenditure	44.7	23.3	37.5	32.4	38.8
b.2 Non-ADP expenditure	44.1	20.8	31.2	11.6	44.0
c. Overall deficit (excl. grants)	**19.0**	**32.8**	**4.0**	**128.3**	**-7.0**

Source: Author's calculations based on the data from the Ministry of Finance (MoF).
Note: NBR: National Board of Revenue.

Revenue mobilisation

CPD, in its previous state of the economy exercise, had identified revenue mobilisation as one of the four major stress points in the macroeconomic framework which require immediate policy attention. Latest available figures of FY2018-19 and early trends of the ongoing FY2019-20 do not provide many reasons to be optimistic as regards a change in the prevailing scenario.

Total revenue–GDP ratio in FY2018-19 was merely 9.9 per cent, with the tax–GDP ratio being 8.9 per cent. Although that is a marginal improvement from FY2017-18, it is still considerably lower than the level achieved in FY2011-12 (Table 7). Given the current scenario, the possibility of attaining government's own development aspirations, i.e. budgetary or the 7FYP targets appear quite distant.

Revenue shortfall, i.e. gap between the target set for revenue mobilisation in the budget and actual attainment was BDT 87,402 crore in FY2018-19. To this end, it must be mentioned that CPD (2019) forecasted the revenue shortfall in FY2018-19 to be BDT 85,000 crore. Tax revenue constituted 91.5 per cent of the shortfall in FY2018-19, with the remainder originating from non-tax revenue. Among

[3] According to data of the Ministry of Finance (MoF), during FY2014-15 to FY2018-19 period, the average discrepancy between originally approved budget and the actual expenditure was 19.3 per cent and stood at 15.7 per cent in FY2018-19. This discrepancy is higher for development component compared to the non-development component of public expenditure.

the elements of tax revenue, income tax, value added tax (VAT), supplementary duty (SD) and import duty accounted for 38.2 per cent, 29.2 per cent, 11.8 per cent and 9.5 per cent of the total shortfall, respectively. In FY2018-19, revenue mobilised by the National Board of Revenue (NBR) was BDT 77,584 crore lower than the originally targetted amount (which was 88.8 per cent of the total shortfall).

Table 7: Revenue–GDP ratio

(in Per cent)

Source	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20 (B)
a. Total revenue	9.2	9.5	10.2	10.9	10.7	10.4	9.6	10.0	10.2	9.6	9.9	13.1
a.1 Tax revenue	7.5	7.8	8.7	9.0	9.0	8.6	8.5	8.8	9.0	8.6	8.9	11.8
a.1.1 NBR tax	7.1	7.5	8.3	8.7	8.6	8.3	8.2	8.4	8.7	8.3	8.6	11.3
a.1.2 Non-NBR tax	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
a.2 Non-tax revenue	1.7	1.7	1.5	1.8	1.7	1.8	1.1	1.2	1.2	1.0	1.0	1.3

Source: Author's calculations based on the data from the Ministry of Finance (MoF) and Bangladesh Bureau of Statistics (BBS).
Note: 1. For FY2008-09 to FY2017-18, data used in this analysis was compiled from MoF's *Budget in Brief* documents for the FY2010-11 to FY2019-20 period. Data for FY2018-19 was taken from MoF's *Monthly Fiscal Report*.
2. 'B' denotes target set during budget.

As per the Ministry of Finance (MoF) data, the early trends of revenue mobilisation in FY2019-20 do not appear too promising. During the July–December period of FY2019-20, total revenue collection growth was only 5.6 per cent compared to the corresponding timeframe of FY2018-19. As the relevant growth target for the entire fiscal year was set at 50 per cent, total revenue collection would have to increase by an unprecedented 87.5 per cent during the remainder of FY2019-20 to meet the annual collection target. As can be evinced from Table 6, none of the components of the revenue mobilisation framework are in a position to reach their respective annual targets.

According to MoF data, NBR tax, which accounts for 86.2 per cent of the total revenue mobilisation target, recorded a 5.9 per cent growth during the July–December period of FY2019-20. However, NBR data for the same indicator of the same period exhibits a 7.4 per cent growth. Data from the same source for up to January FY2019-20 displays an 8.5 per cent growth, thus requiring an 85.7 per cent growth for the remaining months of FY2019-20. Among the components of NBR tax, duties at import and export stage, VAT at local level and income tax will have to increase by 107.4 per cent, 61.3 per cent and 96.8 per cent, respectively, during February–June of FY2019-20 to reach their respective annual targets.

If the ongoing trend in revenue mobilisation is maintained, based on the projection using MoF data, the total revenue shortfall in FY2019-20 may reach to BDT 100,000 crore. Uncertainty in the global economy in view of COVID-19 and consequent repercussions for Bangladesh economy may create added pressure on revenue mobilisation during the remainder of FY2019-20 and beyond. Downturn in trade, particularly that of import payments (both price and quantity effect), may result in considerably lower collection of revenue from customs duty, VAT and SD at the import stage. In view of the added uncertainty and increased medical expenditure in case of a massive outbreak and job loss and lower income, particularly in the informal sector, households may also spend less. Indeed, a prolonged epidemic may result in a slump in business activities, which in turn, could trigger lower collection of VAT, SD and income (both corporate and personal) taxes at the local stage as well.

Public expenditure

According to MoF (2020), non-development expenditure during July–December of FY2019-20 was characterised by a moderate growth in subsidies (45.8 per cent), pension and gratuities (37.5 per cent), and foreign interest payments (27.4 per cent). Subsidies and incentives started skyrocketing from October 2019 (365 per cent growth in October FY2019-20 over the same month of FY2018-19). Introduction of 1 per cent cash incentive for the RMGs export and 2 per cent cash incentive for remittance senders contributed to this strong growth in subsidies (both were effective from October 2019). Bangladesh Bank (2020b) in a recent circular further extended 2 per cent cash incentive on remittances sent by Bangladeshis working at the United Nations (UN), other global agencies and foreign missions, and Bangladeshi mariners and aircraft pilots working at the shipping and airline companies abroad owned by Bangladeshi or foreigners (except for Bangladesh Government or Bangladeshi state-owned enterprises). It may raise subsidy burden further.

After eight months of FY2019-20, government should have at least about BDT 1,900 crore at hand from its subsidy amount, even if it had exhausted all of its promised allocation of BDT 2,825 crore and BDT 3,060 crore for export and remittance cash incentives, respectively. Following the declining trend of RMG export growth and speculative decline of remittances in the coming months due to COVID-19, Bangladesh Government may have some fiscal cushion from the subsidy allocation for these sectors during the next four months of FY2019-20 compared to the programmed amount.

Falling oil prices in the international market in the aftermath of COVID-19 and oil-war between Saudi Arab and Russia has provided opportunity to the Bangladesh Petroleum Corporation (BPC) to make hefty profits, which may provide some fiscal cushion to the government. BPC made a profit of BDT 10,741 crore during FY2015-16 and FY2016-17 oil price slump, which allowed it to pay BDT 2,200 crore (20.5 per cent of total profit) to the government exchequer as dividend. BPC is currently making a profit of around BDT 23 crore per day since late February 2020 (The Financial Express, 2020).

According to the Implementation Monitoring and Evaluation Division (IMED) data for the first eight months (July–February), actual spending under ADP was 38.5 per cent of the originally planned allocation of BDT 202,721 crore, which is lower than the corresponding figures of FY2018-19 (38.8 per cent).[4] Lower utilisation (35.5 per cent) of foreign aid (lower than both FY2017-18 and FY2018-19 for the corresponding period) is a worrying sign in the context of budget implementation trends in FY2019-20. Slow project aid utilisation by Ministry of Science and Technology (e.g. Rooppur Nuclear Power Plant), Road and Highways Division (e.g. Dhaka Metro Rail project), Ministry of Railway (e.g. Padma Rail Link Bridge, Bangabandhu Railway Bridge on the Jamuna River) have primarily contributed to this. According to the proposed Revised ADP (RADP) for FY2019-20, five key sectors (e.g. Transport; Power; Science, Information and Communication Technology; Health, Nutrition, Population and

[4] However, data discrepancy among MoF and IMED is a major concern here. According to MoF data, ADP implementation during July–December of FY2019-20 was 19.5 per cent, while IMED reported the implementation rate to be 27.2 per cent for the corresponding period.

Family Welfare; and Agriculture) which constitute about 58 per cent of the total ADP, were subjected to significant cuts in the RADP for FY2019-20 due to slow pace of aid utilisation of the associated government agencies. ADP for FY2019-20 was slashed by BDT 9,800 crore (or 4.8 per cent) to bring the size down to BDT 192,921 crore. Project aid component was reduced by BDT 9,800 crore (or 13.6 per cent), while local resources (Taka) component remained the same.

China is currently co-financing or implementing about 13 projects[5] in transport and power sectors in Bangladesh. The surge of COVID-19 has already slowed down the pace of some of these key projects, such as Padma Multipurpose Bridge, Padma Bridge Rail Link, Construction of Dhaka–Ashulia Elevated Expressway, Construction of Joydebpur–Ishwardi Dual-Gauge Railway Line, and Construction of Multilane Road Tunnel under River Karnaphuli. This coupled with slow pace in other foreign-aided projects may affect the implementation of the overall ADP in FY2019-20.

Budget deficit and financing

As CPD had suspected earlier, deficit crossed the threshold of 5 per cent of GDP for the first time in FY2018-19.[6] CPD, in its subsequent periodic studies under the Independent Review of Bangladesh's Development (IRBD) programme, has been advocating for increasing the spending for social sectors, such as education and health, using the fiscal space and unutilised budgets. However, such high expenditure growth of 21.6 per cent (highest since FY2010-11) and the resultant high deficit was not reflected in high spending for social sectors in FY2018-19. Instead spending as a share of total expenditure for education (13 per cent) and health (4.9 per cent) were the lowest since FY2012-13, respectively. A significant revenue shortfall in the early months may result in even higher overall deficit financing by the end of FY2019-20 compared to FY2018-19.[7] However, lower subsidy demand in some cash incentives and lower utilisation of project aid in mega projects may lower the overall expenditure at the end of FY2019-20. In view of the current trends in revenue collection and public expenditure, budget deficit may increase to 5.5 per cent of GDP in FY2019-20. Depending on the extent of COVID-19 and associated costs and policy measures, this may rise further. Indeed, the final outcome of the budget deficit will depend on the extent of the pandemic's spread in Bangladesh.

[5] These include—Padma Multipurpose Bridge Project; Padma Bridge Rail Link; Multi-lane Road Tunnel under Karnaphuli River; Construction of Dhaka–Ashulia Elevated Expressway; Installation of Single Point Mooring (SPM) with Double Pipe Line; Construction of Joydebpur–Ishwardi Dual-Gauge Railway Line; Construction of 8th Bangladesh-China Friendship Bridge at Bekutia over the River Kocha at 12th km of Rajapur–Naikati–Bekutia Pirojpur Road; National Highway (N-1) development project from Link Road to Teknaf in Cox's Bazar; Dhaka Underground Substation Construction Project at Kawranbazar under the Dhaka Power Distribution Company (DPDC); Procurement of 200 Nos. MG Passenger Carriages for Bangladesh Railway; Payra 1320 MW Thermal Power Plant Project; Expansion and Strengthening of Power System Network under DPDC Area; and the Power Distribution System Development Project under DPDC Area.

[6] According to MoF (2020), deficit stood at 5.5 per cent in FY2018-19.

[7] As per MoF (2020), the overall deficit recorded a 128.3 per cent growth during July–December of FY2019-20, which is already 17.7 per cent of annual target.

The structure of budget deficit financing in recent years has been characterised by low net intake from foreign financing sources as against a heavy reliance on domestic financing sources.[8] Within domestic financing structure, high bank borrowing has been the key contributor in FY2019-20 unlike previous fiscal years. According to Bangladesh Bank (2020a), net borrowings from banking sources registered 1,331 per cent growth during July–December of FY2019-20, which is already 94.9 per cent of the annual target for FY2019-20 (66 per cent according to MoF). Since a large share of the financing has already been secured from bank borrowing, the need for non-bank borrowing was rather limited. Deterioration in the utilisation of foreign resources in FY2018-19 was a worrying sign, which also continued in FY2019-20, and may further exacerbate due to COVID-19. Net foreign borrowing registered 22.1 per cent growth in FY2018-19 (119.8 per cent in FY2017-18). It recorded (-) 47.8 per cent growth during July–December of FY2019-20. As the budget deficit is projected to go much beyond the programmed level, it is likely that the overwhelming majority of the budget deficit in FY2019-20 will need to be financed with the borrowing from the banking sources.

References

Bangladesh Bank. (2020a). *Major Economic Indicators: Monthly Update—February 2020*. Dhaka: Bangladesh Bank. Available at: https://www.bb.org.bd/pub/monthly/selectedecooind/magecoindfeb2020.pdf [accessed: 2 March 2020].

Bangladesh Bank. (2020b, 11 March). *Regarding Disbursement of Cash Incentive against Inward Remittances Sent through Legal Channels*. FEPD Circular Letter No. 08. Dhaka: Foreign Exchange Policy Department (FEPD), Bangladesh Bank. Available at: https://www.bb.org.bd/mediaroom/circulars/fepd/mar112020fepdl08.pdf [accessed: 15 March 2020].

CPD. (2019). *The First 100 Days of the New Government: Tracking Electoral Pledges and Implications for the National Budget for FY2019-20*. Dhaka: Centre for Policy Dialogue (CPD).

MoF. (2020). *Monthly Report on Fiscal Position: December 2019*. Dhaka: Ministry of Finance (MoF), Government of Bangladesh (GoB). Available at: https://mof.portal.gov.bd/sites/default/files/files/mof.portal.gov.bd/page/d9daf6f5_96d9_411b_bb44_42d6681075c4/M.F.Report. per cent20December-19.pdf [accessed: 2 March 2020].

The Financial Express. (2020, 15 March). Coronavirus: BPC finds fortune. Available at: https://thefinancialexpress.com.bd/trade/coronavirus-bpc-finds-fortune-1584246819 [accessed: 18 March 2020].

[8] According to Bangladesh Bank (2020a), domestic sources contributed to 74.1 per cent, while foreign borrowing contributed to 25.9 per cent of the overall deficit financing during July–December of FY2019-20.

4.5 Monetary Policy Response to COVID-19

COVID-19 has caused some formidable disruptions in the global production and supply chains. Especially, firms that rely on the global supply chain are being affected since private consumption demand is waning. For instance, Apple Inc. experienced that when the Chinese factories which complete the final assembly were shut down, the component-makers from Italy, Germany, Malaysia and South Korea were heavily impacted. Another example can be given from the Peru's state of emergency and nationwide lockdown. This led to decline in copper production, affecting mining companies like Freeport-McMoRan Inc. and Newmont Corp. The research findings from Scotiabank indicate that the affected copper companies from Chile and Peru incurred a loss of about 325,000 MT of copper production, which could be nearly 1.7 per cent of global annual output (Bloomberg, 2020). Therefore, amidst the present crisis, the risk of increase in unemployment rate is high, which will in turn, have negative impact on people's standard of living. In this regard, monetary policy tools can affect the aggregate demand and total spending of the economy by improving the liquidity situation. More specifically, an expansionary monetary policy is needed during such circumstances of depressed demand. Due to loss of income, fear of contagion and related uncertainties, people will spend less during the COVID-19 pandemic. Hence, expansionary monetary policy can provide cash to the hands of people.

Quantitative easing is one of the ways for injecting liquidity in the economy and increase of money supply by the central bank. The usual process is when the government purchases a large-scale asset through government securities to enhance lending and investment. Therefore, the central banks can inject liquidity into financial institutions to give space for functioning through—(a) purchase of treasury bonds and bills; and (b) cutting interest rates.

As there is a possibility of credit crunch, several countries have already taken a number of targetted measures and the central banks are apprising their policies regularly to keep the economy stable by reducing financial tightening. Some of the measures taken by the central banks of various countries are presented in Table 8.

Table 8: Measures taken by central banks of various countries

Central Bank	Measure(s)
The People's Bank of China	CNY 100 billion injected into the market through medium-term lending facility; CNY 550 billion long-term funds will also be injected through the cut in reserve ratio (Xinhua, 2020).
Reserve Bank of India	Six-month dollar/rupee swap; and Long-Term Repo Operations (LTRO) of up to INR 10 billion for liquidity boost (Moneycontrol News, 2020).
The Federal Reserve System (USA)	Interest rate cut to near-zero per cent from 1.25 per cent; and injecting liquidity by purchasing USD 700 billion bond (The Hill, 2020; Property Wire, 2020).
Bank of Canada	Injection of USD 10 billion for businesses; and interest rate cut to 0.75 per cent from 1.25 per cent (The Globe and Mail, 2020; Property Wire, 2020).
Bank of England	Interest rate cut from 0.75 per cent to 0.25 per cent (The Guardian, 2020).
European Central Bank	Bond purchase of EUR 120 billion; and interest rate stands at (-) 0.5 per cent (CNBC, 2020).

Central Bank	Measure(s)
The Bank of Japan	JPY 80 trillion set as upper limit for purchasing government bond; banks would purchase exchange-traded funds of JPY 12 trillion; and investment funds tied to Japanese real estate of JPY 180 billion (The Straits Time, 2020).

Source: Various media reports (as mentioned in the corresponding rows).

The IMF has called on governments to come forward with fiscal and monetary policy and financial incentives to save the economy from recession (Gopinath, 2020). In such crisis situations, the responsibility of designing an appropriate monetary policy falls on the respective country's central banks. How the central bank of Bangladesh will handle the crisis is yet to be observed.

Now at the time of COVID-19 pandemic, the borrowers may find it even more difficult to repay loans, when the world economies, including Bangladesh, are anticipated to be adversely affected. Bangladesh Bank issued a circular on 19 March 2020 announcing that loans that were classified on 1 January 2020 cannot be moved to a lower category of classification until 30 June 2020 (Bangladesh Bank, 2020). While it is thought to be a measure to support the COVID-19 affected enterprises, one could be curious to understand whether these recent measures taken by the central bank is to support the genuine victims due to the threat of COVID-19, or if these will again support the willful defaulters. These measures are in fact continuation of the benefits that are being offered to loan defaulters since May 2019, which created a scope for rescheduling of classified loans subject to a 2-per-cent down payment and a 10-year long repayment facility with one-year grace period.

Recently, the government has announced interest rate cut both on lending and borrowing, which is going to be implemented from 1 April 2020 (Bangladesh Bank, 2019b). As it is, banks are not eager to finance the SMEs, because they feel monitoring of these small loans is not cost-effective. Hence, Bangladesh Bank's recent announcement of rate cut will affect SMEs. Therefore, impact of COVID-19 will be a double jeopardy for the SMEs.

Moreover, the government itself relied on the banking sector heavily in recent months. Therefore, total allocation for bank borrowing in FY2019-20 has already been exhausted. According to Bangladesh Bank's monthly report of December 2019, in the FY2019-20 budget, total net domestic borrowing of government has been targetted at BDT 77,364 crore, of which BDT 47,364 crore is from the banking system and BDT 30,000 crore is from the non-banking system. However, BDT 42,551.3 crore had already been borrowed from banks by the government during June–December 2019 (Bangladesh Bank, 2019a). Hence, during COVID-19 period, if banks face a liquidity crunch then the general public will lose confidence.

In view of COVID-19, specific suggestions in the realm of monetary policy should be the following:

- Generate more liquidity by the central bank by way of reducing the policy rates such as Cash Reserve Ratio (CRR) and Statutory Liquidity Ratio (SLR);
- Reduce interest rate for SMEs and increase their repayment period;
- Provide loan at flexible terms to the genuinely affected large businesses.

References

Bangladesh Bank. (2019a, December). *Monthly Report on Government Borrowing from Domestic Sources*. Dhaka: Bangladesh Bank. Available at: https://www.bb.org.bd/econdata/govtdomdebt.pdf [accessed: 10 March 2020].

Bangladesh Bank. (2019b, 24 November). *Rationalization of Rate of Interest/Profit on Lending/Investment*. BRPD Circular No. 3. Dhaka: Bangladesh Regulation and Policy Department (BRPD), Bangladesh Bank.

Bangladesh Bank. (2020, 19 March). *Regarding Loan Classification*. BRPD Circular No. 4. Dhaka: Bangladesh Regulation and Policy Department (BRPD), Bangladesh Bank. Available at: https://www.bb.org.bd/mediaroom/circulars/brpd/mar192020brpd04.pdf [accessed: 20 March 2020].

Bloomberg. (2020, 20 March). A Covid-19 supply chain shock born in China is going global. Available at: https://www.bloomberg.com/news/articles/2020-03-20/a-covid-19-supply-chain-shock-born-in-china-is-going-global [accessed: 22 March 2020].

CNBC. (2020, 12 March). ECB surprises markets by not cutting rates but announces stimulus to fight coronavirus impact. Available at: https://www.cnbc.com/2020/03/12/european-central-bank-stimulus-package-amid-coronavirus.html [accessed: 23 March 2020].

Gopinath, G. (2020, 9 March). Limiting the Economic Fallout of the Coronavirus with Large Targeted Policies. Posted on *IMFBlog*. Washington, D. C.: International Monetary Fund (IMF). Available at: https://blogs.imf.org/2020/03/09/limiting-the-economic-fallout-of-the-coronavirus-with-large-targeted-policies/ [accessed: 10 March 2020].

Moneycontrol News. (2020, 16 March). Coronavirus impact | RBI announces two key steps to boost liquidity in economy. Available at: https://www.moneycontrol.com/news/business/economy/coronavirus-impact-rbi-announces-two-key-steps-to-boost-liquidity-in-economy-5039361.html [accessed: 17 March 2020].

Property Wire. (2020, 17 March). US and Canada cut interest rates again – the UK may follow. Available at: https://www.propertywire.com/news/us-and-canada-cut-interest-rates-again-the-uk-may-follow [accessed: 18 March 2020].

The Globe and Mail. (2020, 13 March). The Bank of Canada's rate cut could fuel the real estate market amid COVID-19. Available at: https://www.theglobeandmail.com/business/article-the-bank-of-canadas-rate-cut-could-fuel-the-real-estate-market-amid/ [accessed: 15 March 2020].

The Guardian. (2020, 11 March). Coronavirus: Bank of England makes emergency interest rate cut. Available at: https://www.theguardian.com/business/2020/mar/11/coronavirus-bank-of-england-makes-emergency-interest-rate-cut [accessed: 14 March 2020].

The Hill. (2020, 15 March). Fed cuts interest rates to zero percent amid coronavirus fallout. Available at: https://thehill.com/policy/finance/487692-fed-cuts-interest-rates-to-0-percent-announces-700b-in-bond-purchases [accessed: 17 March 2020].

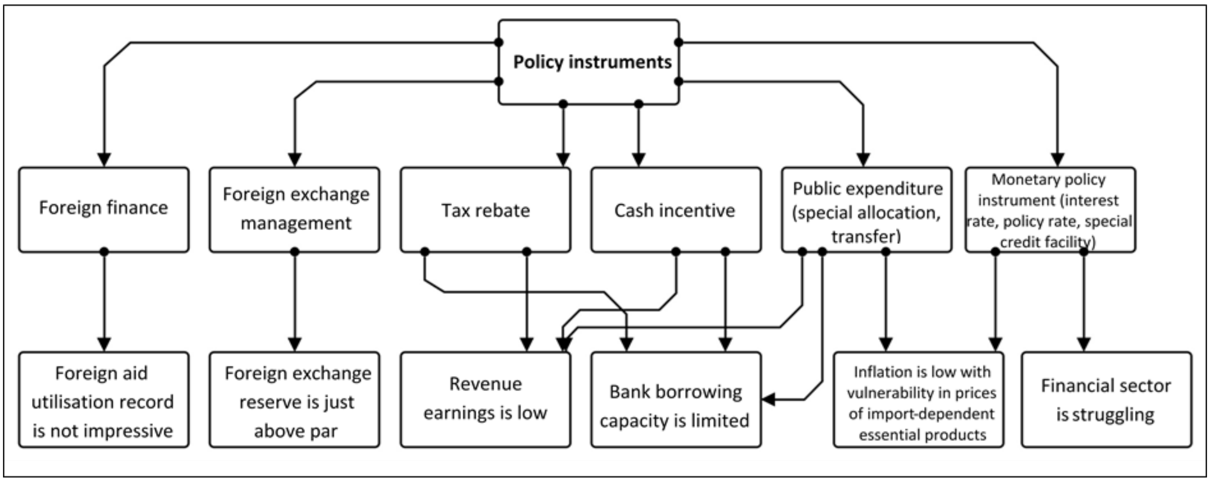
The Straits Times. (2020, 16 March). BOJ joins peers to fight coronavirus fallout, ramps up risky asset buying. Available at: https://www.straitstimes.com/business/economy/bank-of-japan-to-hold-emergency-policy-meeting-on-monday [accessed: 18 March 2020].

Xinhua. (2020, 16 March). China's central bank injects liquidity into market. Available at: http://www.xinhuanet.com/english/2020-03/16/c_138882657.htm [accessed: 19 March 2020].

5. POLICY RECOMMENDATIONS

Policy instruments to deal with the challenges of the ongoing COVID-19 outbreak can be summarised in Diagram 4.

Diagram 4: Major policy instruments to deal with the challenges of COVID-19



Source: Author's elaboration.

5.1 Broad Macroeconomic Stance

Notwithstanding the shrinking fiscal space and the weakened financial sector, in view of the emerging situation, an expansionary but targetted public expenditure and monetary policy should be pursued. While the fiscal deficit is likely to reach 5.5 per cent of GDP in FY2019-20, the likely rise in the budget deficit will need to be managed through prudent reallocation and prioritisation of public expenditure, and renewed efforts for domestic resource mobilisation (by curbing tax evasion and illicit financial flow). The above should involve the following steps.

Fiscal interventions

Use the fiscal space efficiently and with inclusivity. Review how poor people living on informal economy can be supported, including safety net transfers to people working in informal sector in both rural and urban areas. Higher demand for cash incentives in the wake of COVID-19 may put additional pressure; however, cautious approach should be adopted while designing any fiscal stimulus. To help address snags in supply chain, taxes at import stages may be reduced selectively. There is also a need to keep flexibility in the next budget (for FY2020-21) to cope with the potential impact of COVID-19.

Monetary policy

Bangladesh Bank should reduce the policy rates such as the repo rate and CRR to increase liquidity in the banking system. L/C margins on imports and L/Cs against Export Development Fund may be extended from three to six months. The government may buy treasury bills from the commercial banks to inject money into the financial system. Rescheduling facilities for outstanding loans should be extended on case by case basis. With COVID-19 affecting the SMEs, lending rate to them may be reduced to 5 per cent for a limited period.

5.2 Sectoral Support for Export Stimulation and Domestic Supply and Demand

While fiscal deficit could exceed 5.5 per cent of the GDP in the current FY2019-20, this should not deter the policymakers from pursuing an expansionary macroeconomic stance, underpinned by higher public expenditure, quantitative easing, fiscal incentives and sector-specific targetted support measures. Bangladesh Bank has already asked the commercial banks not to change the classification of loans between January to 30 June 2020, even if a business fails to repay its loan. In another positive move, the central bank has started to buy treasury bills and bonds to add to the liquidity in the banking system. Government could also take an initiative to create a fund from the savings accruing from the 1-per-cent incentive put in place earlier for the exporters (arising from lower amount of funds needed on account of the lower anticipated export this year), as also from other sources. This fund could be used for onlending to exporters by the commercial banks at a reduced interest rate, preferably at 5 per cent.

Export-oriented SMEs affected by COVID-19 should get priority in accessing this fund. The interest rate on the lendings from the USD 3.5 billion Export Development Fund (currently at six-month USD LIBOR +1.5 per cent) may be revisited and lowered. Some quantitative easing may be pursued to inject additional money into the system to enable banks to meet the demand for credit at a time of liquidity crunch in the banking system. The policy rates in place (bank rate: 5 per cent; repo rate 6 per cent; reverse repo rate: 4.75 per cent) and statutory reserves should be reviewed on a regular basis over the coming months.

Duties at import stage will need to be monitored on a continuing basis, so that availability of import items in the domestic market can be ensured at affordable prices, particularly in case of essential items. The NBR in the meantime has already taken the right decision to waive import duty, regulatory duty, SD, VAT, advanced VAT and advanced income tax on 12 medical items under 17 HS codes (Harmonized Commodity Description and Coding System); this is to remain in force till 30 June 2020. If the situation demands, other essential items and medical equipment and ingredients should be added to this list.

No doubt, health safety and measures to address the health emergency will need to be given priority over other considerations. Health safety issues concerning workers who are working in close proximity, in RMG and other export-oriented enterprises, should be given special attention; entrepreneurs should be encouraged and incentivised in this regard.

The snags in export supply chain is also adversely affecting export-oriented cottage, micro and SME enterprises with consequent income erosion of workers and entrepreneurs in these sectors. A decline in the income of people working in the vast informal and services sector of the economy is to be expected, and their concerns and interests should be given due importance. In view of this, targetted rationing system may be introduced in the urban areas, particularly for workers and low-income people. The significant food stock at the disposal of the government (of about 1.7 million MT at present), as also the stock maintained with the private traders, should provide comfort to the policymakers in this regard. The government could also think of introducing OMS programme, perhaps at a further reduced price, to cater to the needs of the low-income people.

The 2-per-cent cash incentive on the remitted money put in place by the government should be continued. A database of visiting migrant workers who are not being able to join their workplaces should be created. These people will need support from the government to tide over these uncertain times. Support of Bangladesh missions abroad to ensure safety and security of the diaspora, in coordination with host country governments, will also be important in these trying times.

Government needs to make an early assessment of the immediate-, short- and medium-term impacts on different economic activities. The key areas should include: (i) nature and extent of adverse impact in production, import, export and employment in different sectors; (ii) capacity of enterprises (partially or fully) to address the adversity; (iii) scope to share the losses of business enterprises (partially/fully) with buyers/brands/retailers; and (iv) level of losses in different sectors: immediate-, short- and medium-terms.

A major area of focus of government initiatives should be easing the disruptions in the supply chains and ensuring their smooth operation both within and outside Bangladesh in the coming days. Following steps should be taken to address the situation.

- Put dedicated efforts to keep supply chain going;
- Review stock of essential products and key raw materials for domestic production on a regular basis;
- Seek alternative import sources;
- Provide immediate support to some of the service-oriented sectors, such as travel and tourism and related activities;
- Provide minimum support to maintain day-to day expenses, support for retaining the staff and workers and rationing support facilities for contractual workers;
- Extend support to workers in the informal sector in the form of rationing facility.

The Ministry of Commerce should regularly update the supply situation of commodities with information on production, import, stock and export. Private sector should be encouraged to import food, raw materials, intermediate, machineries from different sources (China-plus) in case risks of shortages increases within next 3–4 months. To ensure smooth domestic supply, the government may consider reviewing short-term partial export restrictions on essential food, drugs and other products. The government may also consider the following: (i) introducing programmes for workers, including protection of workers under the OSH programme, adapting their working time, ensuring access to health-related facilities); (ii) supporting employment and income (extending social protection, employment retention, tax relief for SMEs); (iii) introduction of OMS operation in major industrial clusters.

5.3 Addressing the Health Emergency

Increase budget allocation for COVID-19-related areas in a focused and targetted way: production, supply and distribution of medicine; improvement of health services; availability of medical instruments and support to health professionals. Open new financial channels to support health-related actions with flexible procurement system using domestic and available foreign finances. Exempt the taxes on all medical supply (e.g. medicines, equipment, protective gears) required for confronting the coronavirus challenge. Bangladesh should apply for an international healthcare relief package.

Immediate measures to tackle the health emergency

In case the situation demands, the government should be prepared to take urgent and drastic steps, such as wider lockdowns, with appropriate preparatory measures. Necessary make-shift healthcare facilities should be arranged at district and upzila levels. All medical colleges, nursing institutions, other health establishments and voluntary organisations should be mobilised towards addressing the COVID-19 emergency. Health professionals should be adequately provided with PPE support. Public health awareness messages must be communicated more clearly and frequently. COVID-19 emergency once again reminds us about the importance of providing adequate policy support to health sector—budget for FY2020-21 should make this a priority.

6. CONCLUSIONS

In view of the emergent and the anticipated near-term scenario, Bangladesh's policymakers will need to face the health and economic challenges of COVID-19 through appropriate policies, targetted measures and incentives, and if the situation demands, by putting in place a comprehensive stimulus package.

The scale and scope of fiscal–monetary–sectoral interventions will need to be calibrated according to the needs of the evolving situation which ought to be monitored on a continuing basis. Global support instruments, such as those offered by the UN, World Bank and the IMF, should be accessed and deployed strategically to mitigate the adverse impacts of COVID-19.

The upshot of the analyses in this report is that navigating the COVID-19 pandemic-impacted evolving scenario will call for a dynamic and prudent macroeconomic management on the part of Bangladesh's policymakers. And the government should be ahead of the curve in dealing with health issues, meaning it will have to be proactive rather than reactive. While Bangladesh can rightly claim success in view of sustained economic growth of the past decade, the coming days will test whether the economy has also the capacity to absorb shocks without undermining the macroeconomic stability and by sustaining the growth momentum.

AFTERWORD

Measures Announced by the Government

Since 21 March 2020, when this report was written and presented at a virtual media briefing, a number of developments have taken place surrounding the corona situation of the country. As the present publication is brought out more than 15 days after the initial report prepared by CPD, it was felt that it is important to provide a snapshot of these ongoing developments and the measures taken by the government in view of the emergent situation.

The number of COVID-19 cases have seen a significant increase since the first release of this report. As of 18 April 2020, total number of corona patients has risen to 2,144, out of whom 66 have recovered. Total number of deaths from COVID-19 was 84 till this period.[9] On a brighter side, the supply of testing kits have increased considerably and PPE for health workers are more adequately available now than before. Testing facility has been expanded beyond the capital Dhaka. Meanwhile, the government has announced a number of measures to restrain the contamination and tackle the diverse impacts of COVID-19. These are summarised below.

1. On 25 March 2020, the Hon'ble Prime Minister of Bangladesh has announced holiday for all government and private entities till 4 April 2020. This holiday was extended thrice—first till 11 April 2020, then till 14 April 2020, and then till 25 April 2020. These holidays are in fact, assented to implement the proper lockdown, so that nobody is allowed to go outside without an emergency; all vehicles are restricted and inter-district communications are closed; and all shops, except for grocery and medicines, remain shut down.
2. As of 19 March 2020, the government allocated BDT 250 crore to the Ministry of Health and Family Welfare to purchase coronavirus test kits, different equipment and essential protective gears for the health professionals in dealing with corona patients
3. On 25 March 2020, the Hon'ble Prime Minister of Bangladesh announced a BDT 5,000 crore emergency incentive package as working capital and for paying the salaries and allowances of export-oriented industries' workers and employees.
4. On 5 April 2020, the Hon'ble Prime Minister announced four fresh financial stimulus packages of BDT 67,750 crore to cushion the shock of the global COVID-19 pandemic. Thus, the total amount of financial assistance would stand at BDT 72,750 crore (USD 8,573 million), which is nearly 2.52 per cent of GDP.
5. An amount of BDT 30,000 crore will be provided to affected industries and services sector organisations as working capital. The interest rate of this lending facility will be 9 per cent. The industries and business organisations will pay 4.5 per cent interest, while the government will pay the remaining 4.5 per cent.
6. An amount of BDT 20,000 crore will be provided to SMEs, including cottage industries, as working capital. The interest rate of this facility will also be 9 per cent; however in this case, the concerned industries and business organisations will pay 4 per cent interest, while the government will provide the remaining 5 per cent.

[9] Data source: Worldometer. *COVID-19 Coronavirus Pandemic: Confirmed Cases and Deaths by Country, Territory, or Conveyance*. Available at: https://www.worldometers.info/coronavirus/#countries [accessed: 18 April 2020].

7. An amount of BDT 12,750 crore has been allocated to raise the amount of Bangladesh Bank's Export Development Fund from USD 3.5 billion to USD 5 billion to facilitate raw material imports under back-to-back L/C. The interest rate has been reduced to 2 per cent from 2.73 per cent.
8. The central bank will introduce a new credit facility as 'Pre-shipment Credit Refinancing Scheme' with an amount of BDT 5,000 crore. The interest rate will be 7 per cent.
9. On 12 April 2020, the Hon'ble Prime Minister announced a new stimulus package of BDT 5,000 crore to provide financial assistance to farmers in rural areas for boosting agricultural production facing the fallout of COVID-19. She mentioned that Bangladesh Bank will formulate a new refinancing scheme of this amount to pump running capital into the agricultural sector. The money will be disbursed to farmers at an interest rate of 5 per cent.
10. On 13 April 2020, the Hon'ble Prime Minister Sheikh Hasina announced a package for the COVID-19 frontline fighters. This includes BDT 750 crore as special insurance and BDT 100 crore as incentives for doctors and nurses of government hospitals, health officials, field administration officers, law enforcers and relief workers.
11. Besides, the government has also pledged to distribute food supplies for up to six months for the economically vulnerable. It has also announced to expand the Vulnerable Group Feeding (VGF) and Vulnerable Group Development (VGD) programmes, and OMS of rice at BDT 10 per kilogram. The government has also committed to widen the coverage of the existing social safety net to address the basic needs of people living below the poverty line. These include workers in the informal sector, the daily labourers, old people and destitute women.
12. In addition to these, the Hon'ble Prime Minister had given 31-point directives on 2 April 2020 in view of COVID-19. Some of these are as follows:
    - Assistance will have to be given to day-labourers, workers and peasants, so that they do not remain unfed; a separate list of poor working people will have to be prepared.
    - Social safety activities will be enhanced.
    - Concerned stakeholders will need to pay due attention, so that economic activities do not stagnate.
    - Local public representatives, political leaders, people from all sects of the society will have to work together. The administration will have to work engaging all the people.
    - The public representatives and upazila administration will distribute food among the distressed people by preparing a ward-based list.
    - Special attention will have to be given to the most disadvantaged people like agriculture workers, day-labourers, rickshaw- and van-pullers, transport workers, beggars, street children, the abandoned women, widows and 'hijra' community; and providing relief to them will have to be ensured.
    - Necessary arrangements will have to be made for senior citizens and children.
    - The owners of industries may continue production through discussion with the workers and ensuring their safety.
    - No corruption will be tolerated in implementation of the relief activities.
13. **Incentives for health workers:** On 7 April 2020, the Hon'ble Prime Minister made an announcement of rewards of encouragement for those who are engaged directly in the fight against COVID-19 since March 2020. In addition to the incentive, there will be health insurance ranging from BDT 5 lakh to BDT 10 lakh for the physicians and others if they are affected by COVID-

19 while on duty. Moreover, if those working since March 2020 by putting their lives in danger die while discharging their duties, the amount of health insurance will be five times higher.

14. **Measures taken by Bangladesh Bank:** The central bank has undertaken a number of measures to ensure adequate liquidity in the financial system to support the operations of financial institutions. It has announced to buy treasury bonds and bills from banks. Additionally, it has cut policy rates. For example, the central bank has lowered Repo rates from 6 per cent to 5.75 per cent, effective from 24 March 2020. This was then further reduced to 5.25 per cent—to be effective from 12 April 2020. The central bank has also reduced the CRR from 5 per cent to 4.5 per cent (daily-basis) and from 5.5 per cent to 5 per cent (bi-weekly basis). These rates will be reduced to 3.5 per cent and 4 per cent, respectively from 15 April 2020. The reverse Repo rates are kept unchanged at 4.75 per cent. Besides, Bangladesh Bank has raised the amount of Export Development Fund to USD 5 billion with the interest rate fixed at 2 per cent. It has taken measures to delay non-performing loan (NPL) classification, relieve late fees for credit cards, extend tenures of trade instruments, and ensure access to financial services.

CPD's Initial Assessment of the Stimulus Package and other Announcements

CPD welcomes the stimulus package announced by the government as a timely and much-needed measure to deal with the economy affected by COVID-19 pandemic. However, it is also noticed that most of the supports are in the form for bank loans. Over 68 per cent, i.e. BDT 50,000 crore of the total COVID-19 stimulus package will be disbursed by the commercial banks Thus, Bangladesh's COVID-19 stimulus package is excessively dependent on the banking sector, which is already suffering from a number of problems. These include high NPLs, liquidity shortage, poor risk management and lack of efficiency. Therefore, how the loans will be disbursed and how the accountability will be ensured is an issue of concern. Because, it has long been observed that banking sector is so burdened with NPLs because of willful defaulters and political influence. Except for the support under Export Development Fund of the central bank, the commercial banks will be responsible for the selection of their customers, and thus for absorbing all types of risks attached to the loan, such as management risk, sectoral risk and market risk. The banks will also have to ensure that the loan is paid back to them in due course. Given the current health of the banking sector, whether it is in a position to perform this huge responsibility is a natural question.

The stimulus packages announced for the agriculture sector in terms of providing loan to farmers (at 5 per cent interest) should be provided at 2 per cent. The rest 3 per cent should be paid by the government, in line with the interest subsidy for other affected industries.

The stimulus package does not include anything for the poor and the vulnerable groups who are the farthest behind in the development landscape, and will be the hardest hit by the pandemic. There is no clear indication about the amount of resources to be allocated for the vulnerable groups, including those working in the informal sector (e.g. rickshaw- and van-pullers, transport workers, construction and hotel workers, street hawkers, agricultural and day-labourers, porters and domestic help). These people are already struggling without their flow of income, as the country is under lockdown. If these people are to survive through the corona period and beyond, they need to be supported with direct cash transfer for at least three months. It is expected that allocation for these disadvantageous sections of the population will be announced in the coming days.

CPD's Budget Recommendations for FY2020-21

On 5 April 2020, CPD submitted its recommendations for the national budget of FY2020-21 to the NBR, Bangladesh. In its recommendations, CPD discussed the fiscal stance for the upcoming fiscal year and made specific sector-wise budget proposals in view of the fall out of COVID-19 on the economy. CPD recommended that the NBR should set its revenue mobilisation targets in a manner, which is doable and will not weaken the macroeconomic management. Key highlights of the budget proposal include: (i) the NBR should design tax measures and revisit its current fiscal incentives in view of the ongoing COVID-19 crisis; (ii) this year, the primary focus of the NBR should be strengthening the monitoring and enforcement mechanisms to effectively curb tax evasion and illicit financial flows, and (iii) the NBR should continue to implement its medium-term reform plans including full implementation of the Value Added Tax and Supplementary Duty Act, 2012. CPD's budget recommendations are available at: https://cpd.org.bd/wp-content/uploads/2020/04/CPD%E2%80%99s-Budget-Recommendations-for-FY2020-21-to-NBR.pdf

CPD's Initial Assessment of Public Policy Interventions and Proposals for Food and Income Security of the Marginalised

In continuation of its COVID-19-related activities, CPD organised a virtual media briefing on 13 April 2020. The objectives of CPD's media briefing have been three-fold: (i) to share CPD's assessment of the government's public policy response in view of the ongoing corona emergency situation; (ii) to present CPD's proposals to ensure food and income security under the ongoing situation of severe disruptions and lockdown; and (iii) to disseminate CPD's proposals which were sent to the NBR in view of the FY2020-21 budget. While CPD welcomes government's various stimulus packages, there is a need for assessment of these from the point of view of sufficiency, implementation, delivery of results and governance. In the presentation, CPD has done the following: (i) made an estimation of the food and income support, particularly for the marginalised people; (ii) undertaken a quick assessment of government's economic interventions in view of COVID 19; and (iii) presented CPD's budget proposals submitted to the NBR. In its presentation, CPD proposed an allocation of BDT 30,000 crore for direct cash transfer to 1.9 crore households as financial support. This will be about 1 per cent of the GDP. This can be done by providing BDT 8,000 per month for two months to each household, close to the lower poverty line, for a family of four members in today's current prices. The presentation of CPD's media briefing is available at: https://cpd.org.bd/wp-content/uploads/2020/04/Presentation-on-CPDs-initial-assesment-on-COVID-19.pdf

Recent CPD Working Papers

*Available on web only

cpd.org.bd cpd.org.bd cpdbd CPDBangladesh

CENTRE FOR POLICY DIALOGUE

House - 6/2 (7th & 8th floors), Block - F
Kazi Nazrul Islam Road, Lalmatia Housing Estate
Dhaka - 1207, Bangladesh
Telephone: (+88 02) 58152779, 9141734, 9141703, 9126402, 9133530
Fax: (+88 02) 48110414
E-mail: info@cpd.org.bd
Website: www.cpd.org.bd