

Impact of COVID-19 on the Supply Chain: a study in Bangladesh

Fariya Tabassum

Abstract:

The COVID-19 is now the headache of the world trade and Bangladesh isn't the anomaly of it. The nationwide lockdown strategy includes several protective measures affects the supply-chain and vindicates to access to agricultural products, inputs, markets and all those results in increasing prices of rice and pulses but the price of milk is 40% lower than that of January, vegetables are sold at 25-50% of production costs, drastic devastation in poultry firm keeping about 50% of eggs and 70% of broilers unsold as well as crab, shrimp, and fish producers faced several export bans thus price fall. The invasion in the service sector also included and that result in moved online or IT-based service providing everywhere including education, healthcare, financial and consultancy firm. The supply-chain effect in the pharmaceuticals industry is huge because of a demanding hike for certain products and on the contrary, 28% of SMEs have seen revenue drop by at least 50%. In the RMG sector, cancellation of orders of 900 million pieces of garments worth \$2.9 billion resulting from the lack of demand from the US and European markets made shut down garments, incurred loss of nearly \$ 6 billion and massive job loss. Price hike in smartphones, electric products are noticed. The demand also got low for luxury products. The study is based on primary and secondary data to accumulate the impact of COVID-19 on the supply chain for some selected industries of Bangladesh. This will create value to understand the sector-wise circumstances of COVID-19.



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1. Introduction

Corona Viruses (CoV) are a large family of viruses that cause diseases ranging from the common cold to serious illnesses such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Coronavirus (COVID-19) is a new type that was discovered in 2019 and has never been identified in humans. Currently, it is declared a global health catastrophe and more than one person has died from the deadly virus. (WHO, 2020). The official names announced for the COVID-19 virus (formerly known as "2019 novel coronavirus") and COVID-19 means 'CC for Corona, VI for Virus, D for Disease and as introduced in 2019, is called 19) '. However, those around you can inhale these drops and become infected. Authorities around the world have responded with restrictions on tourism, closure, and occupational hazards, and the closure of disease control centers (NCIRD, 2020). Commercial transformation management is a complex system used by small and large organizations alike to obtain products from consumers, purchase building materials, produce, and deliver the final product to customers. A well-structured procurement management system involves improving the efficiency of the service to make it faster and more efficient (Kleab, 2017). Procurement operations include the conversion of natural resources, raw materials, and components into a complete product delivered to customers in the supply chain, products. used can also include a supply chain at any time when the residual value is reused (Kozlenkova et al. et al., 2015).

Bangladesh is the eighth-most populous country and more than two million people join the mid-year consumer group in Bangladesh and it was confirmed that the virus spread to Bangladesh in March 2020. As a developing country, Bangladesh is facing an economic crisis. The effect is seen in the sale of goods and therefore the product of everyday goods, imports and internal imports. COVID-19 was developed and the first result was seen in Chinese imports. Also, it is no longer a problem for Chinese goods so that all products, markets, industries in the entire Bangladesh economy are affected by the global economic downturn due to the virus. Property disruptions are caused by traffic collapse, product corruption, consumer behavior change (demand), social or political unrest involving labor disputes, and so on. Among the causes, the effect of COVID-19 introduces the destruction of transport, a social boundary that means the conditions of production and import. The cited section reflects the basic concept of this article which helps to trace the origin of this study but the fact is that no recent related article is available regarding the effect of COVID-19 chains. Here are steps to expose the impact of COVID-19 on the supply of many industries, several products that have been researched.

The main purpose of the study was to identify and extract the effect of Corona Virus on the Supply Chain of Bangladesh and additional objectives are (i) to determine the impact on local commodity prices and acquisitions from COVID-19, (ii) to integrate current disruptive imports into imported and exported products, (iii) to determine the impact on immature imports, & (iv) to establish procurement plan for selected industries.

2. Methodology

Data is based on primary and secondary sources. Important data collected from sample interview process sample 25. Second data collected from websites, Blogs, news sites published in 2019 and 2020, WHO Report, Previous book reviews, journals, and industry reports were used to compile this study and most of the second data was compiled from a newspaper data collection strategy. The main reason for using newspaper information is that

at present, none of that industrial information is available at the time of COVID-19. Data collection, online media are constantly searched to find news about the effect of COVID-19 on Bangladesh's leading industries. The deadline for data collection was from March 2020 to July 2020. This was mainly done in Western media with Google News search, as well as Prothom Alo, Financial Express, Dhaka Tribune, Daily Star, The Business Standard, etc. by saving PDFs of news and the Facebook community 'Business Stories' and 'Youth Policy Forum' and this type of news was reduced to initial testing. It took more than six months to prepare, analyze, and prepare a report. This study affects the environment and phenomenology the study of "phenomena" which is the appearance of things, or things as seen in our experience, or how we find things, hence the descriptions of things they have in our knowledge. Phenomenology research is information such as information from a visual or first-person perspective which is why it can be classified as phenomenological research.

3. Findings and Analysis

Bangladesh's economy is classified as a developing market economy where economic policies refer to an economic system in which decisions about investment, production and distribution are guided by price indicators created by supply and demand forces. Bangladesh is a major supporter of the free market and is a major trading partner, independent of trade in South Asia. In the midst of the corona epidemic, Bangladesh is now in a precarious position to ensure that the economic growth achieved over the past decade continues in the 2020-21 financial years and beyond. A market-based economy focuses on demand. The effects of COVID-19 vary in the type and size of the industry. And it depends on the product variety. The effects of corona infection can be summarized.

4.1 Effect in Agriculture

Bangladesh is an agricultural country and revenue from this sector plays an important role in the national budget. It has become a major agricultural sector with about 87 percent of the rural population earning at least some of the income from agriculture but over the past 100 years, many plagues, epidemics, have plagued the human race. Among them, COVID-19 is one of the most prevalent diseases. It should be noted that the agricultural sector consists of rice, jute, fish, shrimp etc. The major impacts on agricultural products are shown below:

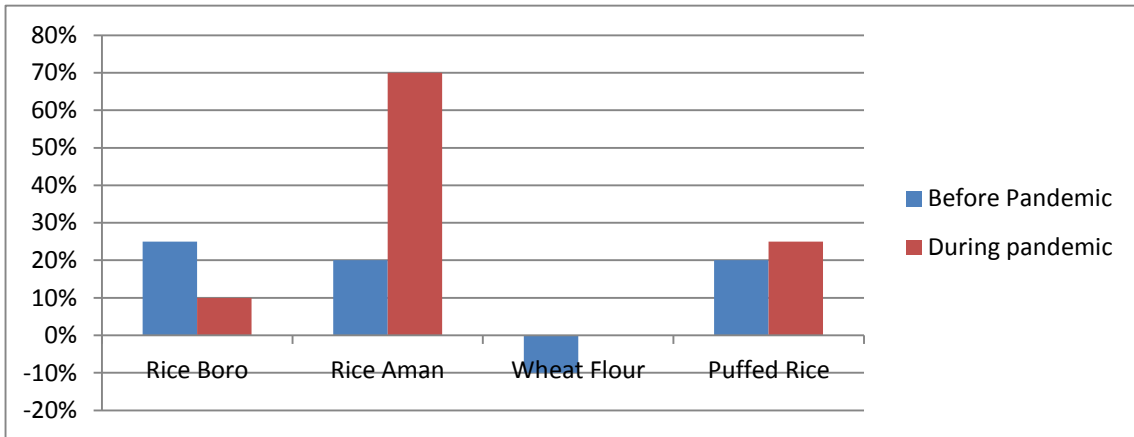
The national closure strategy includes preventive measures that lead to restrictions on access to agricultural products, inputs, markets, labor and extension and advisory services. The virus can affect the demand for food in a variety of ways. Often, when reduced costs and uncertainty make people spend less money and lead to the pursuit of wrinkles, sales decline and productivity remains the same. At the time of the closure, people were accustomed to visiting small food markets, affecting their choice and consumption of food. Since the demand for food is linked to income, the loss of income for the poor can affect consumption. Agricultural production and trade are likely to be affected by a number of policy measures for example high control on cargo vessels, aimed at avoiding the further spread of Covid-19. Agricultural restrictions restrict the trade and movement of goods; including food, feed, and imports, as stopping shipments across the country could affect trade and food production. In addition, the closure of transportation routes, restrictions and segregation measures, staff shortages, and speakers on commodity prices are disrupting new food purchases and may have increased rates of food and waste loss. The complete disruption of procurement is mentioned above. As the agricultural sector has many sub-sectors each has its own significance. The content below reveals the following:

Cereals, Pulses, Vegetables and Fruits

Both the manufacturing and consumer sectors are affected by for example delivery to retailers and farmers, as well as product delivery to retailers. Compared to March, only 15% of trucks are moving and 40% of truck drivers are not driving. Farmers have reported transportation and irrigation problems that have led to a shortage of diesel. The private sector is vigorously addressing specific challenges in re-supply chains. Supermarkets such as Shwapno and Meena Bazaar transport agricultural goods directly to farmers. Retailers have responded to the huge opportunities in the e-commerce market due to the closure and expanded food delivery to rural areas especially in Dhaka. The effect of the price due to the disruption of the sales process is given below:

- **Cereals**

During the pre-lockdown time, the price rose sharply because of increased consumer demand but after lockdown, the price hike was low than the pre lockdown price hike except sharp price hike of onion, but the price decreased for rice and the situation is shown below:

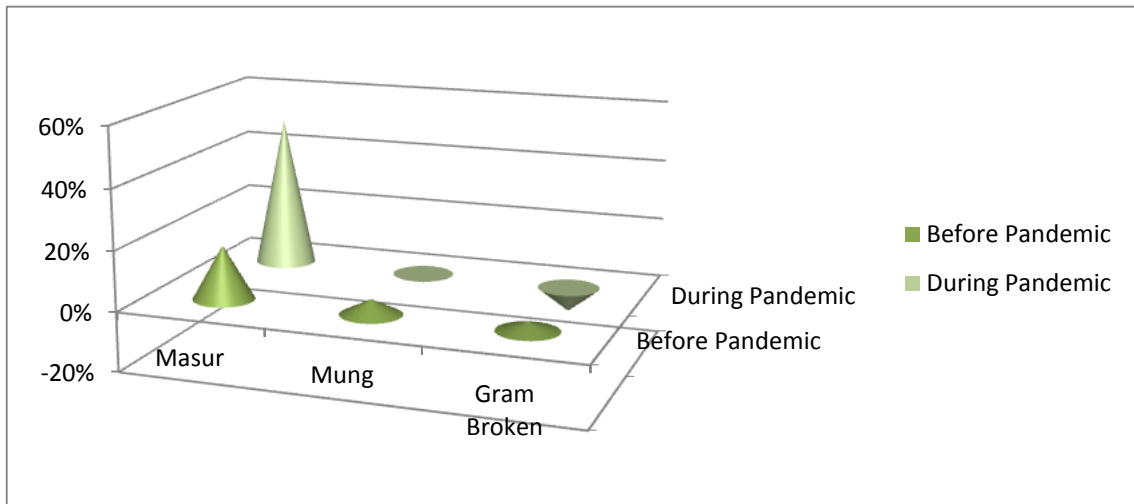


Source: Food and Agriculture Organization of UN, 2020

Figure 1: Ups and Down of Rice Price

- **Pulses**

Percentage change of Pulses price due to lockdown as well as supply-chain disruption is shown on figure:

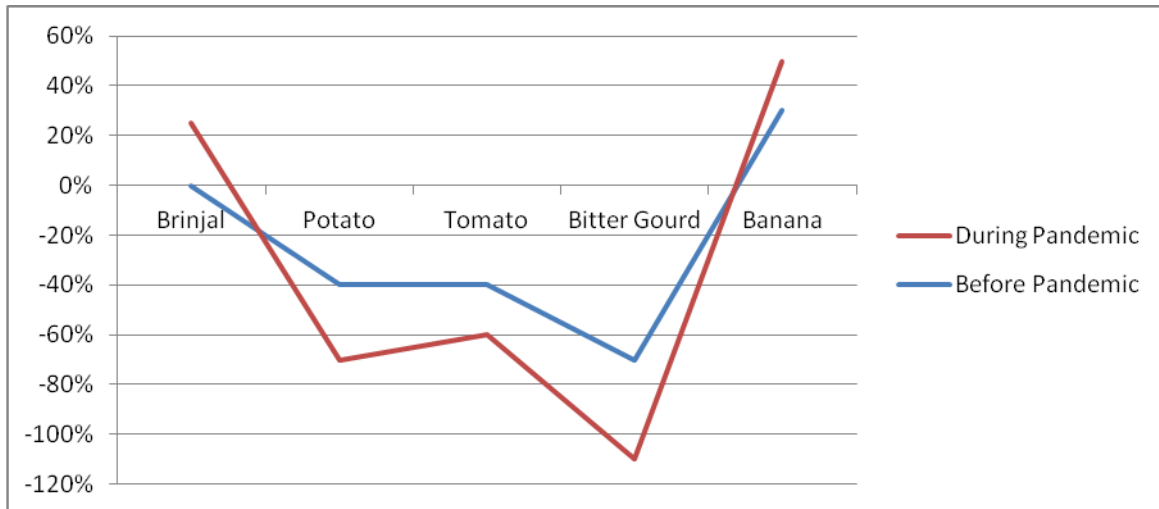


Source: Food and Agriculture Organization of UN, 2020

Figure 2: Changing Behavior of Pulses price

• **Vegetables**

The prices of vegetables depend on mostly the time that is consumed by delivering product because it's matter of freshness. The percentage changes in vegetables during lockdown are presented below:



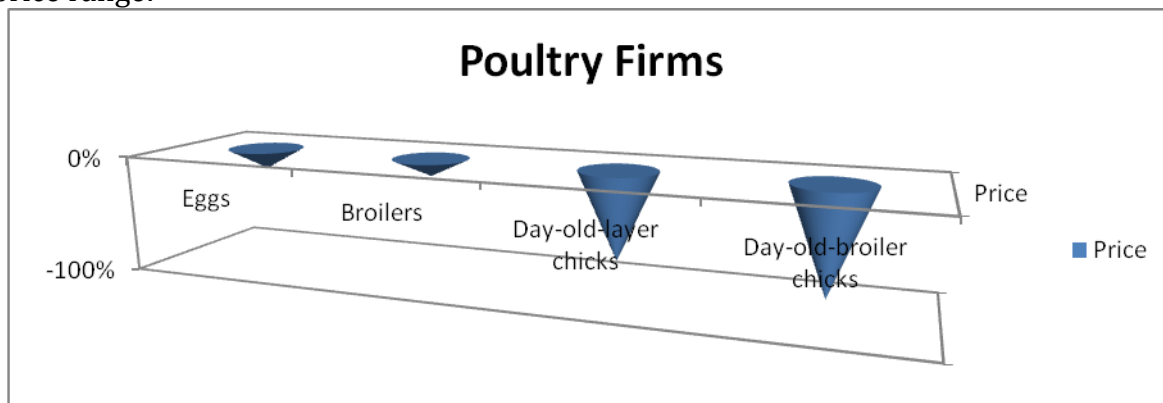
Source: Food and Agriculture Organization of UN, 2020

Figure3: Vegetables Price Ups and Downs

Farmers are selling vegetables at 25-50% of production costs because of minimum demand and transport problems. The cultivation season for upcoming crops has begun and is facing disruptions in the supply of labor, seeds and fertilizer. Mango, citrus fruits and vegetables exports particularly to Europe and America are facing reduced demand as well.

• **Poultry Sectors**

The poultry sector is taking a disproportionate hit during the crisis due to widespread myth that the COVID-19 virus is transmitted through poultry products. The effect can be presented by price range:



Source: Food and Agriculture Organization of UN, 2020

Figure 4: poultry firm's Helm

In addition, about 50% of eggs and 70% of broilers unsold at farms.

• **Crab Industry**

Crab growers and traders in Bangladesh's coastal areas are on the verge of collapse as exports are permanently postponed following the Covid-19 outbreak. In this sector the losses began well before the epidemic hit Bangladesh, as China, the main market for crab, imposed a ban on imports on January 25. China accounted for about 85% of exports. Due to payment

delays, losses in the sector have reached BDT 4 billion (USD 46.90 million). Current crab prices may represent the result of a transaction.

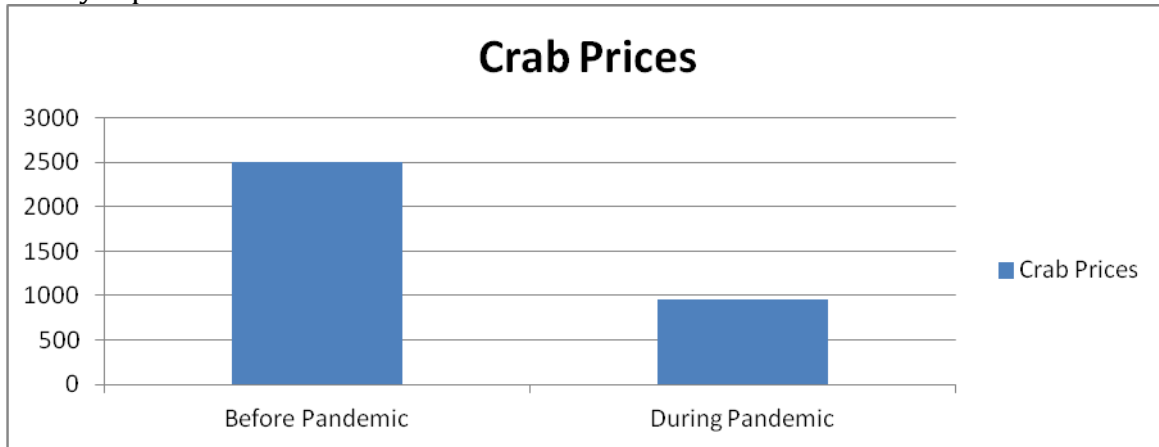


Figure 5: Crab Prices

Source: (Roy, 2020)

Selling quality crab at BDT 2,500 (USD 30) per kg, this is now around BDT 800-900 (USD 9.40-10.50).

• **Fish and Shrimp Industry:**

The global corona epidemic has had a profound effect on Bangladeshi shrimp traders, as they face cancellation of orders including Tk600 crore. This has been a double vengeance for them, as it is the season to buy shrimp in the local market. According to insiders in the industry (Ahmed, 2020), compared to their annual capacity of four lakh tons, they received only 50,000 tons of global production by 2019. That year, the total production of shrimp in Bangladesh was 1.6 lakh, but the lion's share was eaten locally. Sales result can be displayed in price range:

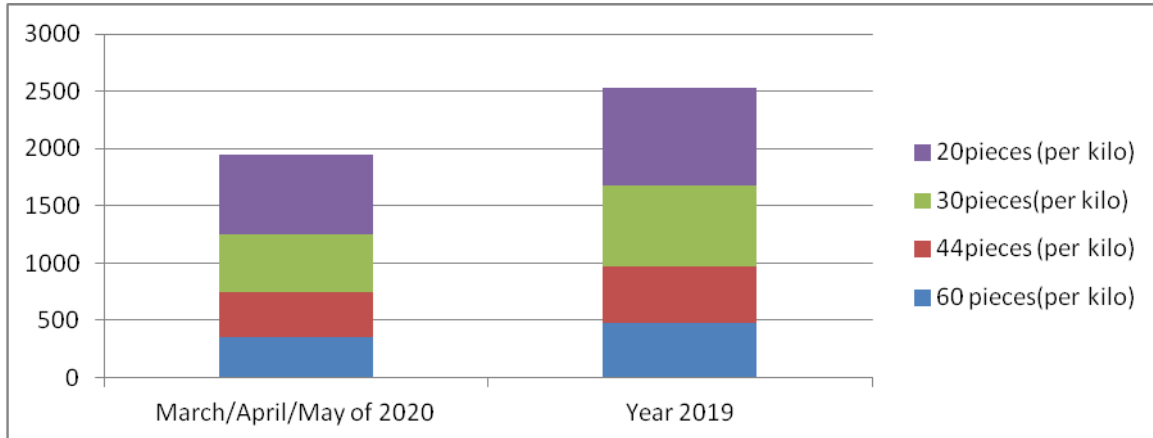


Figure 6: Price Diminution of Shrimp

Sources: Local Market

With the introduction of COVID-19 the internal and external supply chain has disrupted as well as the price range. In fact, the movement of fishery products for domestic markets is still fairly functional because private sector retailers, such as Shwapno, have chartered vehicles and refrigerated vans to transport fish and other agro-commodities. The export of fish and fishery products is permissible and continues at a narrow scale. Fish, spawn, fingerling, shrimp and post larvae have been either unsold or even sold at very low prices due to the lockdown.

- **Dairy Firms**

According to the Bangladesh Dairy Farmers Association (BDFA), about 90% of milk is not for sale, because dairy farmers, butchers, dairy processors, and others have reduced their demand, possibly due to transportation difficulties and economic closures. The price of milk has been reduced by 17% and the price of consumers has been reduced by 21%. The Integrated Dairy Research Network estimates that by the end of March 2020, dairy farmers were experiencing 37 crore losses daily. Most dairy farms are small producers (76% have 5 cows or less).

In addition, market purchases of processed meat have been reduced by more than 50%.

4.2 COVID-19 Effects in the Supply Chain in Service Industry

Service Providers are one of the highest contributors to Bangladesh GDP. Services are widely used in the production of all goods, which make up about 10-20 percent of the cost of production in the manufacturing and agricultural sectors, and are sometimes provided directly. In addition, in the case of service sectors 'time to provide and receive service' we take a critical step in determining demand and supply in the market. The epidemic is making a huge difference in the conditions of service. The main focus of the supply chain changes is provided below:

As a result of the community-based recruitment, face-to-face service delivery was closed. For example, Beauty Parlor, Health Care Service etc. Transportation will be required to adhere to strict rules and regulations so that the supply and demand side will be changed and the cost will increase by 60%. The fields of office services such as news and print affairs, the Bank etc. are governed by new conditions and both service providers and service recipients are changing their behavior. However, the exact effect varies depending on the type of service provided. The next section will cover this.

- **HealthCare Sectors**

Given the overcrowding, health care capacity, limited resources and poverty that exists, environmental factors, social structures, cultures, and the more than 3lakh infected people, the distribution of COVID-19 public transport occurs very rapidly. This has raised a complex alarm in the community. The health sector is now a major problem but their service delivery model has changed and changes are provided below:

The epidemic has opened up a new era in online healthcare for any type of disease whether it is urgent or not. With this disease, children's psychiatric services in Bangladesh have long been very online. At my center (BSMMU), there is the External Patient Department where people sit in front of a computer; patients call and receive free care. The National Institute of Mental Health (NIMH) provides online and offline services. Telemedicine services provide explanation and reassurance to parents, children's instructions, counseling for both parents and children alike, and comprehensive guidelines on how to survive the epidemic. Individual efforts from health professionals are evident, by writing articles online, live webinars, and live Facebook posts to avoid the problem of epidemics. Hello Doctor, Moner Daktar, Athena, Pulse healthcare, and Olwel have started online video consulting services for specialist doctors. Government was detained at a private hospital providing COVID-19 medical care.

- **Financial Institutions and Consulting Firm**

Prior to the arrival of Covid-19, Dhaka was already facing problems of mismanagement of the banking sector. These concerns have been exacerbated by the recent central bank's move to increase interest rates by 9%. The main impacts are:

Providing online service is more important than ever in both consultation and banking companies. Having a new invention that seems to be beneficial to customers for example is the opportunity of a bkash loan led by City Bank.

- **Educational Institutions**

Due to lockdown resulting from pandemic educational institution are getting dependent on several online apps such as 'zoom'. Face to face service providing has been stopped and government is rethinking the educational plan of Bangladesh.

- **Telecommunication and Transportation**

The Covid-19 crisis continues to cause anxiety and economic hardship for consumers, businesses, and communities around the world. Covid-19 has had a significant impact on Bangladesh's communications sector. According to registration details issued by the Bangladesh Telecommunication Regulatory Commission (BTRC):

The total number of subscribers on mobile phones declined steadily between March and May 2020. At the same time, the number of online subscribers remains stable, with no significant fluctuations. Broadband connectivity has increased by 41 percent over the same period.

The telecommunications sector is a highly competitive industry, comprising of experienced staff consisting of office groups, customer service stations and retail outlets. When such employees are forced to work far away or at home, their productivity and quality of services can be greatly affected.

In the transportation sector: The service is provided by keeping the public distance so that increasing costs and regulations are made separately for transport products and people traveling. At least 40 lakh employees and 10 lakh participants in the transport sector are in critical condition. The general secretary of the Bangladesh Road Transport Owners' Association says the transport sector loses at least Tk500 crore per day. With this information, it is clear that demand has decreased and suppliers are in big trouble.

- **Online Transportation (Pathao, Uber etc)**

Uber quickly gained popularity in Dhaka, a city of heavy traffic and traffic congestion. Pathao, OBHAI, Pickme, Shohoz, and other active equestrian firms in Bangladesh. At this time people are not allowed to go out unnecessarily and this will make it difficult for them to go to the markets to buy daily necessities. So on the quest side; reduced which is why you are leading a time loss of online travel services services and incurring significant losses for the company itself. Operators, drivers and users of ride-sharing services in particular have welcomed the ban on ride-sharing to combat the corona virus.

4.3 COVID-19 Effects in the Supply Chain in Pharmaceuticals Industry

As global drug sales are regulated indirectly by China, it is estimated that Chinese manufacturers produce 40 percent of the essential ingredients needed for drug production (APIs) worldwide. 95% of Bangladesh APIs are imported and most of them are from China. Currently, 98% of pharmaceutical demand is met locally, while only 2% are imported. After confirming the first cases in Bangladesh and declaring health and safety issues by the World Health Organization, some synthetic pharmaceutical products increased. But the supply could not go up according to demand. At that time: Hand Sanitizer, an anti-infection soap is gone. The face mask is not available and has increased in price. Some common medicines (Paracetamals, Vitamin-C, Zinc Tablets etc.) have become unavailable and increase in price. On June 13, the health department issued guidelines on the use of Remedies. It allows the drug to be used to treat middle-aged patients. Remdesivir was registered in Bangladesh in May, and

Bangladeshi companies began making it available at home as soon as it was approved. It can handle the timely supply of medicines currently exported to India through black marketing. Therefore, Pharmaceuticals companies are busy meeting the needs of life-saving products while some sectors are facing severe disruptions to products following closures that have forced the spread of COVID-19 infections. However, it should be noted that the total sales of pharmaceutical products may not increase significantly as the cost of surgery has dropped in many areas. Demand was high, the company wanted to grow but there was a problem on the other side. Due to the inefficient distribution channel, the remuneration of pharmaceutical companies will remain relatively low compared to other sectors. While some large fish may be associated with this situation, for example, despite some disruptions in the distribution and marketing network, Beximco Pharma does not see any serious shortages in the near future. During locking the side you need and the side of the supply has changed according to the following:

Demand Side	Supply Side
Expected to lead higher demand on Sanitizing product.	Limited supply of APIs as international market close up, driving of prices of raw materials.
Higher demand on Short term medication.	Expected fall in profit margin as companies are unable to charge higher prices to customers.
Rise in prevention and basic treatment measures.	Over dependence on imports could erode the sector's international competitiveness.
Enhanced demand both generic and patented Pharmaceuticals products.	Lockdown might disrupt pharmaceuticals production.

With this in mind, the top ten companies (Square, Incepta, Beximco, Acme, Reneta, Healthcare, Opsonin, ACI, Exkayef, Aristopharma) are more inclined to embrace modern technology and maintain excellence in production and marketing to meet the needs and provision of disruption within. and the plague. In addition to the sale of local markets, the pharmaceutical sector is one of the leading export sectors in Bangladesh. Due to the disruption of the epidemic and the procurement of goods, imports and exports are also at risk. Consumers, which are heavily imported from China, South Korea and India, do not always meet the required standards. The results of international trade transactions are shown below:

The government has banned the export of paracetamol and vitamins B1, B6 and B12, tinidazole, metronidazole, acyclovir, progesterone, chloramphenicol, erythromycin salt, neomycin, clindamyc salt and ornidazole in the midst of progressive coronavirus infection. The prices of effective antibiotics (APIs) for antibiotics and anti-inflammatory drugs have increased dramatically. COVID-19 infectious diseases have brought about a dramatic change in the pharmaceutical industry. It is difficult to determine whether a virus is an opportunity or a curse in the pharmaceutical industry.

4.4 COVID-19 Effects in the Supply Chain in Garments Industry

The ready-made goods industry, vital to Bangladesh's economic growth, is facing an uncertain future due to the COVID-19 epidemic. RMG is the largest employer in the private sector with about four million people participating in the sector. Women in particular make up two-thirds of the workforce and are the main beneficiaries, contributing to their upliftment. However, the effect of purchasing goods in the clothing industry has a lot of movement during the epidemic. The following point may be important:

First Outcome: Global operating industries (and especially those that rely on Chinese imports into production) have been particularly exposed to the initial disruption of supply sales due to COVID-19. This has always been the case with precision instruments, machinery, automotive equipment and communications. The first challenges were related to the acquisition of raw materials following the suspension of economic activities in China while the virus was spreading in that country. The industry relies heavily on China for its imports of raw materials. This is also an important part of Bangladesh's multi-billion dollar import from China. The fragmentation of commodities and the opening of economic activity in China have now resolved the categories of commodities.

Order Cancellation: Cancellation of orders has been the result of a lack of demand from US and European markets which has led to the closure of hundreds of stores, due to the closure of the epidemic. RMG vendors want international public relations to save the country's core industry and workers.

According to the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), orders for more than 900 million pieces of clothing worth \$ 2.9 billion had already been canceled or were still withheld. The Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA), another prominent organization in the national garment industry, says more than \$ 3 billion has been lost as most orders until July have been canceled or suspended. BGMEA data shows that exports from March to May 2020 will be short of USD 4.9 billion and unresolved debt will be USD 1.96 billion.

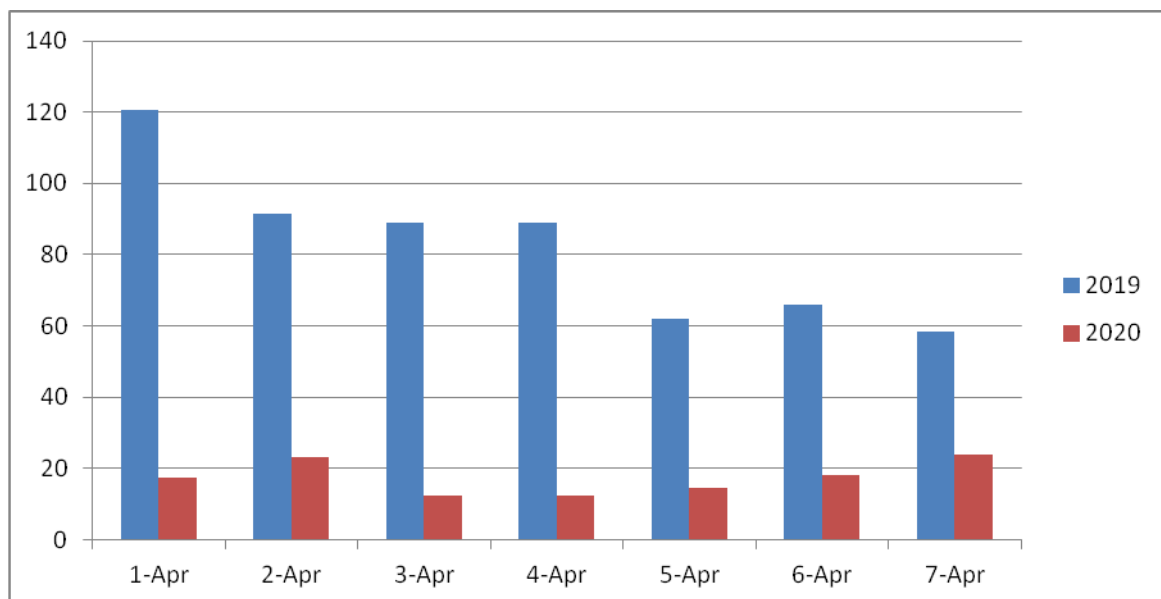


Figure-7: Comparison of day-wise RMG exports (in million US\$) for the first week of April 2019 and 2020. Source: BGMEA

The figure shows the drastic reduction in RMG export and effect of supply-chain.

Unused Appliances: The government began shutting down the economy on March 26th. Although export industries were free from closure. But in addition to appropriate guidelines for managing factory risk, BGMEA and BKMEA prioritized the health and safety of their employees and began recommending closure of the factory. However, factory owners can apply to the federation and the industry police if they want to keep their factories open to pay

their employees. Few and remain open to produce Personal Protective Equipment (PPE) for local hospitals. At that time production was disruptive and that hampered purchases and made waste of raw materials. The following table shows the comparison:

Table 1: Estimated liabilities due to unused raw materials imported against back to back Letters of Credit (RMG export in million US\$)

Month	2019	2020	Growth
April	\$2539.28	\$761.78	-70.00%
May	\$3243.18	\$972.95	-70.00%
3month total	\$8607.53	\$3706.98	-56.93%
Loss of export in 3 month		\$4900.55	
40% of lost Export in a/c of BB LC		\$1960.22	

Revenue Recovery Loss: The industry, which was the world's second-largest retailer of ready-made clothing, is now facing a loss of nearly \$ 6 billion following the cancellation or suspension of orders by its customers and orders canceled as a result of the sale.

Serious Loss of Employment: Any disruption in the RMG sector leads to disruption of the nation's economic growth and to the social and economic gains achieved over the years. Declining demand has already led to massive job losses and is now feared to increase poverty in the country. More than a million garment workers in Bangladesh have already been fired or dismissed for cancellation of orders and failure of consumers to pay for such cancellation. Millions of RMG workers will be affected economically by the COVID-19 crisis.

Promotion Package: In March, the government announced a \$ 500 million incentive package for the clothing industry. Later, the government announced another \$ 8 million incentive package for all industries, much of it inconsistent with clothing and related industries. Also, the Bank of Bangladesh, a central bank, has adopted an industry-friendly policy and announced that none of the industries will be considered late until June. This Bailout package has been announced as one that will continue to promote purchases and survival.

Production Strengthening and Delivery of Perspective (PPE Production): Due to the restriction of public space, initially clothing management doubted whether it could be kept closed or locked. After having a lot of play the stored clothes and a certain number of PPE were produced according to the additional need for the situation.

In short, the fashion industry is facing serious risks. This industry is characterized by greater integration of land supply. Indeed, in the era of COVID-19, as consumers around the world remain locked, they no longer need new products so the losses are growing exponentially.

4.5 COVID-19 Effects in the Supply Chain in Energy Sector

Bangladesh has acquired a wide range of energy-producing products leading to energy growth every year. As of 2018, Bangladesh uses 125,000 barrels a day of oil, accounting for about 0.1 percent of global consumption. The transport sector is the largest consumer exporter, followed by electricity generation, agriculture and the industrial sector as well. According to Bangladesh Petroleum Corporation (BPC), the average import price of diesel was USD 73 per barrel which dropped to USD 38.5 per barrel in April. Meanwhile, demand for petroleum products has also dropped by 33 percent in Bangladesh due to the closure of

transport. Therefore, the only way to take advantage of the oil price hike is to buy more oil and save it for future use when Bangladesh is in short supply and world oil prices are rising but Bangladesh has not been able to reap its benefits.

4.6 COVID-19 Effects in the Supply Chain in SME Sector

SMEs in Bangladesh play an important role in the lives of middle-class people. During the crisis and crisis these sectors also face the challenge of market demand and supply arising from improper management of procurement. Major outcomes are considered in the following categories: 28% of SMEs experienced a decrease in revenue by at least 50%, while 52% of SMEs had locks hung over their businesses with no revenue at all due to their inability to provide timely and closed results during EID events and so on. 2/3 SMEs have windows less than four months to live in current conditions before they spend all their savings.

4.7 Effect of COVID-19 on Imported Products

During the first phase of COVID-19 in Bangladesh, imported products from China were affected by price and quality. The reasons for these conditions are:

Imports and exports through the Chattogram Port dropped in March by more than 12 percent and 26 percent, respectively, due to the harmful effects of the novel corona virus worldwide. In February, imports fell by 16 percent since January. In March, the country imported goods costing Tk31, 617 crore at a traditional cost of Tk4,500 crore less than last month. The price dropped again on March 26 after the national holiday was announced due to the epidemic. The number of import bills also dropped in March, by about 25 percent of imports. A total of 27,554 entry bills were sent to Durban for customs clearance exports in March which were less than 9,281 than those sent last month. Importers are holding back the export of their products because factories are closed amid fears of a corona virus. All of the above facts have happened because of COVID-19 and that is why imported goods could not reach the market on time and all those things caused ruin by having a smooth purchase. Misleading presentation reflects consumer market status:

- **Effect on Smartphone Markets**

Like other businesses in Bangladesh, the sale of mobile phones has been hit hard by the epidemic. Mobile phone sales used to go up around two eid every year. But in this case, because of the epidemic, a large portion of the target will not be sold; officials of various companies express fear. The industry, however, is facing a disruption of purchases and consumer demand in the short term. Value is recognized on the supply and demand side.

Demand Side	Supply Side
<p>Demand for smart phones is declining as people save money for important items, or buy computers and tablets to work and research from home.</p> <p>Sales percentage has dropped around 60%- 70% in comparison to our first quarter (January- March).</p> <p>Though the corona virus quarantine has spurred some demand for smart phones as replacement items by people forced into remote work.</p> <p>Yet despite the financial crisis impacting everyone, many customers and companies now see new smart phones as a luxury, delaying their purchases, a research firm.</p> <p>Mobile commerce has declined because consumers usually have convenient access to shopping devices, and many are saving their money on important purchases.</p> <p>Because of social isolation and quarantine conditions, customers use far greater numbers of supermarket and take-out apps.</p>	<p>Many smart phone manufacturers have facilities in China and rely on the country to supply parts, as a result of the corona virus pandemic, they faced delays.</p> <p>A lot of raw materials stored in our inventory which if waited long enough may not be of any use. To keep the production running, we need certain materials and instruments that we import from other countries which we also cannot get due to the global lockdown.</p> <p>Delays in production and reduced demand would dampen the creation of affordable 5G phones, which are required to enable the technology to be embraced on a large scale.</p> <p>A big challenge that we have been facing and foresee as a possibility in the near future as well is the inaccessibility of innovative and latest smart phones in the market due to higher restrictions on imports</p>

Although some shops are open this month, outlets in the big markets and malls are also. As per the instructions of the government, shops will be open till 4 pm every day. So the situation is expected to change.

- **Effect on Hardware and Electronics**

Many factories had closed for production in China. The products that were expected to be exported remain stagnant and at least 70% of all exports of goods come from China. As the importation of these supplies stopped, they were afraid of losing a lot. Another issue is that LCs relating to consumer goods intended to be imported two months ago have not been removed due to the closure of the office. This will create a problem with the installation of existing products on the market. Although electronic and electronic imports from China came in with some containers, but those were limited and necessary. In short, Due to the shortage of goods, the prices of the remaining items, including parts of the TV-computer, remote and other items in the Khulna market have increased by 10-20%. Prices for other computer products, including door keys, locks, and other items, have also risen.

- **Effect on Cosmetics and Beauty Products**

The ongoing corona epidemic has transformed the face of the beauty business and into the financial arena proving that some prestige and class are coping better than others. On the demand side: As the cosmetic product is classified as a luxury item the demand for these types of products has decreased due to declining incomes and closing conditions. The main customers of these products are places of beauty. As the service was suspended due to public sector problems, the demand side was affected. Finally, with supermarkets closed, high-income people are caught shopping.

On the Delivery Side: The cosmetics market is heavily dependent on China and Korea in Bangladesh. Due to import restrictions, a shortage of products is evident. Outdated products create more load. The provision of the Internet is a major way to bring such types of products to customers and the lack of transportation and delivery of these news also deteriorates during the epidemic.

However, both sides are showing significant change and leading to a change in market position. The transaction was interrupted as the import regulation and demand were disrupted due to customer behavior. All of that is the result of poor sales.

The outbreak is a special case of the supply of consumer goods and luxury products that are distinct from an industrial perspective and have already been introduced in relation to Bangladesh's market economy.

5.0 Conclusion & Recommendation

5.1 Conclusion

As the global economy faces a 'Great lockdown' economic downturn caused by the COVID-19 epidemic, the Bangladesh economy is also affected. Bangladesh is in a precarious position to deal with the economic impact of COVID-19 and the impact is particularly evident in economic life. To prevent the virus the government of Bangladesh takes action by enacting public law, closure, transportation restrictions, import restrictions and daily life. All of them go a long way to contributing to supply chain management and thus to the market economy. Major outcomes could include price disruption or inflation, a focus on product quality, high new risk and production retention, B2B and B2C supplier relationships in keeping the markets changing rapidly. About 87 percent of rural people earn at least an income from agriculture and COVID-19 has also caused damage to farmers and consumers. That's because of transportation, incorrect demand and delivery puzzle. But telecommunications companies

are part of the profits and they do their business especially in Bangladesh very well. Health care is done on video and audio calls which are a much-needed part these days. The pharmaceutical industry, the only one is receiving COVID-19 as a blessing in spite of a shortage of imported raw materials. The RMG sector in Bangladesh featured a number of dramas in connection with the closure of factories and the effect is huge here. Although poor service delivery management has repeatedly suffered major losses, layoffs and outbursts, they have now begun to change their status as PPE production numbers and more are available. With the help of government and peace the importation of the sector has been liberated from ruin. This study was prepared based on secondary data especially where information could not be adequately provided as most of them were not yet identified due to limited data sources of this content and confidentiality of many organizations. However, COVID-19 is a global disaster and the developing world Bangladesh is one of its victims.

5.2 Recommendations

As part of the economic stimulus, the government has established a fund equivalent to BDT 5,000 crore for export-oriented industries so that they can continue to pay salaries and benefits to their workers and employees and are still distributed according to industry importance. Together with the Government of Bangladesh is taking many steps to address the epidemic. However, the following points may be helpful in this regard.

First, a clear understanding of the reasons for this variable price movement may be required, focusing on different points in the supply of different food chains. If the understanding is not clear then the steps will be like taking it up in the dark. Second, The Task Force should engage in anticipation of the expected trade downturn due to restrictions or action to protect the market by key trading partners and ports that may need to be amended and set up COVID-19 security agreements, which may be negotiated with new trading partners. Third, retailers should respond to the potential opportunities in the e-commerce expansion market under closure and should immediately increase food delivery in urban areas through their websites. Financial and risk management systems should empower businesses to make informed and strategic decisions about identifying sustainable and sustainable purchasing purchases. Four, Bangladesh's mobile network operators have to assess the state of their business during the Covid-19 disaster and make strategic decisions to maximize the value of their customers and themselves. A clear strategy coupled with Bangladesh's growth potential could help operators achieve that goal. Five, Pharmacists should be encouraged by the government to invest in their R&D programs to increase their capacity to strengthen the production of vaccines as soon as they are found to be effective after clinical trials. In this regard, the government could allow a partnership between WHO and private pharmaceutical companies to bring these vaccines to market, using the TRIPS release of a country they enjoy.

Finally, In the post-COVID-19 era, design is the most unique way to navigate the challenges facing the Bangladeshi clothing industry. Another option is to deepen the marketing mix of RMG products. Apart from that, emphasis can be placed on Bangladesh's own product development to reduce the industry's dependence on foreign buyers by selling its products. In addition, imports that do not rely on imports should remain smooth and retain other supplies in the event of an emergency. The COVID-19 crisis has already exposed the vulnerability of many businesses, especially those that manufacture their own raw materials or finished products from China. The steps outlined above can help.

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