

Economic Impact of Covid-19 and Uneven Recoveries in South Asian Economies

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Abstract: The post-covid economic rebound is not yet sustained economic recovery and will be uneven across economies. Expansive fiscal and monetary policy support in primary advanced economies have prevented further falls in economic activity. Risk to the global economic recovery include limited fiscal capacity to support firms and households, firm closure as debt deferrals and support payments are withdrawn, rising long-term unemployment, increasing inflation and sustained under investment by firms and future productivity implications of measures like extended school closures. Combination of all these factors resulted to uneven economic growth and declining in economic growth in most of the south Asian countries.

Introduction

To date COVID-19 pandemic has developed numerous uncertainties, risk and vulnerabilities causing massive damage to economies and healthcare sectors in almost every country around the world. Given the severity of pandemic, global economy confronted worst economic collapse that was intensified by the rapid spread of the infection. Most powerful economies including United States, United Kingdom, Japan, Germany, and Europe are also seriously affected with the massive economic losses. It is also global health emergency due to the cationotropic impact that is more than global financial crisis (Rungcharoenkitkul 2021) and it has become now a global systemic economic risk since the pandemic affected almost all the economies in the globe irrespective of the sizes of the countries (Rasul, 2021). Many Government authorities and Central Bank around the world put their maximum efforts through the implementation of various monetary and fiscal policies to protect the counties from the catastrophe. However, many countries experienced an economic downturn during this period. The main difficulty for the implementation of effective policy was that the pandemic-induced crisis triggering a simultaneous supply and demand shock (Borodeur et al., 2020).

The current economic activities showed that many economies are suffering due to the consequences of pandemic. According to the World Economic Outlook (WEO) of April 2021 published by the International Monetary Fund (IMF), the world economic growth declined by 3.3 percent in the year 2020 compared to 2.8 growth in 2019 showing the severity of the pandemic. Further it is expected to contract the advanced /emerging economies and developing countries by 4.7 percent and 2.2 percent respectively. Further, the human costs in terms of lives lost will permanently affect global economic growth in addition to the cost of elevated levels of poverty, lives upended, careers derailed, and increased social unrest (Jakson et al., 2021). The numerical figures confirm that economies are moving towards recession.

Pandemic is not only an economic crisis but also severe health crisis which created many concerns and fears among the people leading to massive impact to the millions of employments around the world. Millions of people were infected by the rapid outbreak of infectious diseases causing significant strain on healthcare sectors as well as massive scale of economic losses for many economies. As as of 30th of March 2020 published by the WHO, the confirmed COVID-19 cases of around 483.5 mn have been recorded while about 6.1mn deaths were reported. According to the latest WHO statistics, it was reported about 617 million cases and about 6.5 million deaths as of as of 06th October 2022, confirming that severity of the contagion. Globally, as of 3:45pm CEST, 6 October 2022, there have been 616,951,418 confirmed cases of COVID-19, including 6,530,281 deaths, reported to WHO. As of 3 October 2022, a total of 12,723,216,322 vaccine doses have been administered.

The coronavirus pandemic, currently known as COVID-19, was detected as severe acute respiratory syndrome. Although COVID-19 was detected for the first time in Wuhan city situated in the Hubei province in China, it started to outbreak rapidly throughout the world occurring far reaching consequences to world population and all most all economies around the world. Given the severity of this virus, on 30th January 2020, COVID-19 was recognized as an epidemic, a public health emergency and on 11th March of 2020, this has been declared as a global pandemic by the World Health Organization (WHO).

Considering the contagious nature of the pandemic and seriousness of the virus, many countries all around the world employed immediate actions such as implementation of country specific quarantine in different stages, closing international borders for visitors, Country-wide vaccinating programmes and lockdown policies together with work from home arrangements in order to control the speed of contagion. By

implementing these healthcare measures, governments and health authorities expected to control the mass gathering of people in public places while maintaining social distances. Under the social distance measure, many countries across the globe were required to close down schools, private firms, government offices, business, and universities while allowing to open essential services.

Given the necessity of urgent action, many authorities across the world are working together with the objective of “flattening the curve”. This means reducing the number of COVID-19 infected cases from one day to the next day which enables to occur declining trend of outbreaking of virus. The extended health crisis, however, created a wide-range of spill-over effects beyond monetary and fiscal policies have hindered recovery of national economies and pose a threat to global trade thereby creating economic crisis (Jakson et al., 2021). Also, given the highly contagion nature of the virus, pandemic occurred with significant impact on the economy across the globe. In addition to the health consequences, the COVID-19 outbreak is producing massive and far-reaching economic cost burden for all nations (Barua et al., 2020).

This analysis mainly focusses on the South Asian economies. Relatively, there is a limited literature on analyzing the macroeconomic implications of pandemic in South Asian region. Although recent empirical and theoretical studies attempted to provide on macroeconomic implications of pandemic, the covered is limited scope. Therefore, this paper intends to provide systematic review of macro-economic implications based on the recent catastrophic pandemic. Assessing severity and impact of health-related economic crisis of COVID-19 has become timely important area of the research. Given the seriousness and devastating impact of COVID – 19 on overall economy, more and more research are essential and paramount importance in terms of effective decision making and policy implementation for the economy. However, given the importance of producing new research, relatively a limited number of studies have been examined on impact of COVID-19 on South Asian economies. Therefore, this analysis intends to provide a systematic analysis of macroeconomic implication of pandemic for the benefit of policymakers, authorities and healthcare professionals.

Empirical analysis on historical pandemics impact of pandemic on economy

A limited number of Empirical studies on economic impact of pandemic have been done in the past. Among them, many studies have given attention to epidemiology aspects than the economic impact. Several

studies have shown quantitative estimates on the impact of pandemic on the economy. Occurrence of Pandemic in human history go back to the period of 117AD ago, and human experienced catastrophic disaster causing to kill millions of lives and severe socio-economic damage. Lee and McKibbin (2004) using the macroeconomic model of CGE, demonstrated the economic impact of SARS virus. According to his estimates, the outbreak of SARS has created 0.1 percent loss in GDP. Burns et al., (2006) evaluated the economic consequences of avian influenza pandemic in 1918-1919. He analyzed the economic loss of influenza pandemic 3.1 percent loss in annual GDP because of severity of pandemic outbreak across the globe. Further, Arnold et al., (2006) conducted analysis on "A potential influenza pandemic in 1918-1919 and possible macroeconomic effects of the rapid spread. The estimated results showed that 3.1 percent in annual GDP is due to the pandemic effect.

Fan et al., (2016) analyzed The inclusive cost of pandemic influenza risk on Hypothetical pandemics and provided quantitative measure for loss of GDP due to ex ante prospects of pandemic, income loss and mortality. According to his analysis, 0.4-1 percent was dropped as a result of ex ante prospects of crisis. Mortality caused to drop the output by 86 percent and 14 percent of loss GDP due to mortality rate. Further Barro et al., (2020) examined the Coronavirus and the great Influenza Pandemic: Lessons from the Spanish Flu for Coronavirus potential effects on mortality and economic activity for 48 countries using regression model. According to this analysis, he estimated that about 2.1 percent death during the period of pandemic (1918-1919) will translate to loss of around 150 million. Further, he demonstrated that a 2.1 percent death rate results to decline GDP by 6 percent as well as 8 percent reduction in private consumption

A recent study of Economic-induced uncertainty conducted by Baker et al., (2020) discuss the importance of assessing the economic impact of the COVID-19 and identify three indicators such as stock market volatility, newspaper-based economic uncertainty, and subjective uncertainty in business expectation surveys. Using the estimated model of disaster effects, they found that year-on-year contraction in U.S. year-on-year real GDP contracted about 11 percent as of 2020 Q4, with a 90 percent confidence interval extending to a nearly 20 percent contraction. Coibion et al., (2020) used several waves of a customized survey to analyze the economic costs of US lockdowns in terms of spending, labor market outcomes, and macroeconomic expectations. Ans the estimated results shows that the covid impact led overall spending to drop more than 30%, unemployment expectations climbing more than 10%, inflation expectations falling, uncertainty rising, and plans to purchase large durables plummeting.

According to Ludvigson et al. (2020) also analyzed COVID-19 and The Macroeconomic Effects of Costly Disasters using the sample 1980:1-2020:04 considering the dynamic impact of a disaster shock on economic activity and on uncertainty. They applied VAR model for US recent data and demonstrated the widespread of COVID-19 has significantly disrupted the economy. According to findings, cumulative loss in industrial production of 20% and 39 percent of employment in service sector (about 50million jobs) will over by next year. Jonung and Roeger (2006) conducted analysis on the possible macroeconomic effects of a pandemic in Europe in 2006. The analysis used a quarterly macroeconomic model and made forecasted estimation that both supply and demand side factors caused a hypothetical global pandemic to declined GDP by 1.6 percent for the European Union (EU). Using the Global Trade Analysis Project (GTAP) CGE model, Fernando and McKibbin (2021) analyzed impact of COVID-19 on Asian economies within a global framework for macroeconomic variables including real GDP, private investment, consumption, trade balance, employment, interest rates, inflation, and exchange rate They imposed shocks to the labour supply, productivity, and shocks to the country risk premia. And the results demonstrated that the impact of pandemic on economy USD8.8 trillion and in terms of percentage, 9.7 of world's GDP.

Jackson et al.,(2021) analyzed the Global economic impact of COVID 19 and estimated result confirmed that impact of COVID-19 pandemic reduced the annual global economic growth rate by 3.2 percent with a recovery projected value of of 5.9 percent in the year 2021. Further, from the demand side, analysis pointed out that there is a potential inflationary pressure in the economy due to the increase in savings whereas labor supply shortages and associated disruptions to the labour market, production and supply chain interruptions , global energy markets disruptions and transportation issues further increase inflationary pressure in the economy. Walmsely et al.,(2020) analysis of the macroeconomic impacts of the COVID-19 pandemic in the U.S., China and the rest of the world using the three scenarios from moderate event to a disaster event. This Scenario analysis was done using the computable general equilibrium (CGE) model, a state-of-the-art economy-wide modeling technique. According to the estimated results, GDP loss due to the pandemic 14.8 percent to 23 percent in a 2-year period for all scenarios. The mandatory closure and partial reopening have become major reasons for the estimated results.

Sawanda and Sumulong (2021) carried out an economic assessment of economic impact of pandemic on Asia and Pacific region for the

months of March, April, May, June and December. Under the assumption of no COVID_19 baseline, it was estimated that the global losses of GDP range from 5.5 percent to 8.7 percent and therefore GDP for developing Asia will range from 6 percent to 9.5 percent in 2021. These losses is expected to occur due to the fall in domestic demand, tourism and the effect of global spillovers. The Social Distancing and the Economic impact of COVID-19 analysis was carried out using baseline simulation for United States by Gorgulu (2020). Further, in his analysis, he attempted to analyze how the demographics of new infections and mortality changed over time. His analysis confirmed that it is expected to increase the number of infected and deaths by around 50 percent less by end of the June 2021. However, loss of GDP for Q2 is more than 2 percentage points.

Djurovic et al., (2020) examined the macroeconomic effects of COVID-19 on Montenegro and measures the macroeconomic cost using a Bayesian Vector Auto Regression approach under the 5 economic scenarios using the available data from January 2006 to December 2019 and provided forecasted estimates for the year January 2020 to December 2020. They attempted to analyze the pandemic impact on both supply and demand including the GDP, tourism, capital stock, human capital, health expenditures, economic freedom, and unemployment. Accordingly, they predicted that GDP will fall -7 percent sharply by end of the December 2020.

Theory of the Pandemic

A pandemic can be defined as a global epidemic which outbreaks across the globe rapidly. A pandemic is an epidemic of infectious diseases that outbreak all over world. It is also a widespread emergence of a diseases across the globe (Morens et al., 2009)An epidemic is a situation which spread the virus over a large geographical area a larger extent but not a global scale

Further, WHO developed 6 phases of pandemic and revised in 2005 to provide a global framework as per the figure 1 given below. According to phase 1 in figure 1, both humans and animals are not infected. However, in phase 2, a virus is infected to animals and in phase three, the virus transmits to humans, but it is limited transmission. In phase 4, there is a significant risk of widespread of virus and the transmission is limited to a certain location. Phase that the virus starts to outbreak between people in certain locations, but it has not developed as a pandemic. The final stage is the pandemic stage and virus is spreading across the globe.

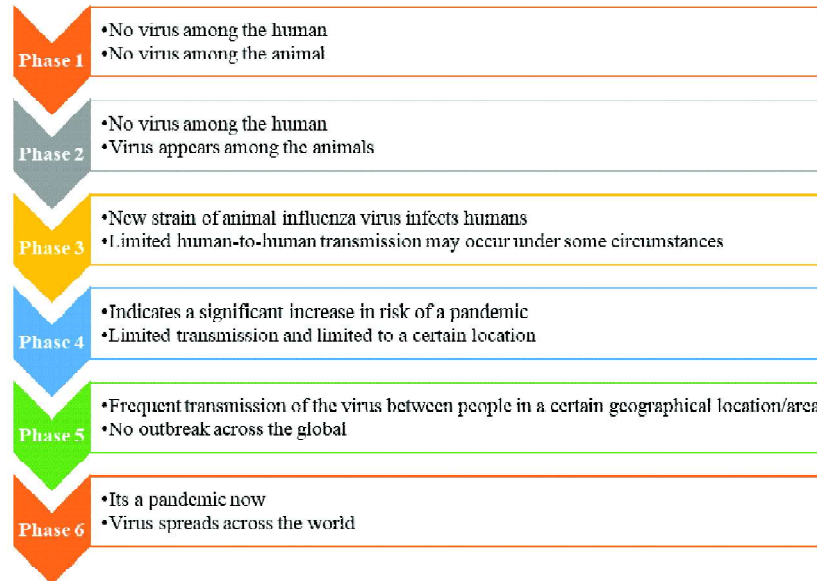


Figure 1: Classification of the pandemic

Characteristics of the Pandemic

The pandemic has some key characteristics that help to understand the nature and specific features of the pandemic.

Novelty – The term “novelty” has been used to highlight the new category of diseases which have been detected for the first time in history.

Severity – Considering the higher death rates and infected rate, pandemic is categorized as a highly infected disease.

Transmission – Pandemic is a disease that can spread from one person to another person or from an animal to human.

Infectious and Contagiousness – The pandemic is a type of infection which rapidly transmits to another human.

History of the Pandemic

The history of the pandemics also evidenced many deaths and losses to whole nations of the world irrespective of wealth or poor status of each country. In the past time people have experienced many significant deadly diseases including respiratory syncytial virus -RSV (1170AD), Black-Death (1347-1351), Influenza virus (1729-1889), Spanish flu (1918), Asian Flu (1957), Hongkong flu (1968) Swine flu (2009) and at present COVID 19 (2019-2022). Some infectious diseases such as Swine Flu and Spanish flu changed the and had greater impact on other geographical areas beyond where it originated (Adewunmi et al.,2021).

The Black-Death (1347-1351) - The Black Death was considered as one of the worst catastrophic pandemics in the history that had been spread among communities across Europe. It is also known as the most fatal pandemic in human history, resulting to kill 75 to 200 million of people. This pandemic is believed to be originated Crimea in 1347 and later it reached to Africa, Western Asia and rest of the Europe.

The Spanish Flu (1918) – This pandemic is considered as one of the deadliest pandemics in human history that have created significant threat to many lives and livelihood of people causing to kill around 20 mn to -40 mn around the world. The Spanish flu is known as H1N1 and a kind of influenza virus. According to historical records, the virus infected about half of the world's population causing severe consequences to both society and economy. The most affected group of people from this influenza was aged between 18-40 years.

The Asian Flu (1957) – The Asian flu is known as a novel strain of influenza. The virus was later named H2N2. The flu was originated in South Asia and later it was spread to Hong Kong, Singapore, Taiwan and Japan. The most vulnerable group of the virus was aged over 60 because of the lower level of immunity associated with them. It was estimated that around 1-2 million of people were killed due to severity of the virus.

The Hong Kong Flu – (1968) – The Hong Kong flu virus named as H3N2 that has resulted to create another crisis in 20 the century. The virus originally detected in Hong Kong though later virus began to outbreak to other countries including Canada, Australia, Japan, France, and United Kingdom. The highly vulnerable group of the people was children. The highest death rate was also recorder from children.

The Swine Flu - (2009) – The Swine flu is also another type of virus that have been identified in Mexico and US and named as an influenza virus PH1N1/09. The virus originated in pigs and later the virus spread to other countries across the globe. In June 2009, virus was declared as a pandemic resulting to kill about 800people while 134,000 people were infected.

The pandemic induced economic crisis has created devastating effects on macroeconomic components of the economy Including Aggregate Demand (AD) and Aggregate Supply (AS). AD was affected due to the fall in demand for consumption, contracting the exports due to the fall in external demand and decline in investments due to deterioration in of the investors sentiment in most of the countries in South Asia region. In empirical studies, the Keynesian model of the AD and AS has been widely used to analyze the true impact of pandemic on economy. Further, the model helps to analyze the overall impact of pandemic for short-term as well as long-term. Therefore, the effect of pandemic on the South Asian

economies can be described using the AD-AS framework based on the new Keynesian theory.

The new Keynesian Theory and Pandemic induced Economic Crisis

According to Keynes, AD consist of Consumptions (C), Government Expenditure (G) and Net Export (NX). Any shocks to these variables result to change in the AD. A shock that leads to change the AD can be defined as demand shock whereas any shock that can be changed the supply is known as supply shock. Also, AS shocks also propagate when output falls and price level rise whereas AD shocks occur when both output and price level fall. Furthermore, Shocks to the AD can occur due to a reduction in demand for money. On the other hand, a supply shock is affected by price level and any adverse shock to the supply side causes to increase the price level.

During the Pandemic, the economy was significantly affected by both demand and supply shock. The shock to the AD can occur in different ways and these shocks are considered exogenous show. According to Kawshiwgi, shock to economy emanated from COVID-19 is fundamentally different. Assume the situation of outbreaking virus from one person to another person. If one person is infected, then he temporally stops his employment. If more people confront the same situation, many people will stop their employment. In such a scenario, these people lose their income sources and consumption falls sharply, Reduction in consumption demand directly affect the reduction in AD. Similarly, If the local authority implements sudden lockdown and mobility restrictions, everyone must stay at home. Also, all business activities, shops, hotels, entertainment activities are closed for uncertain periods. Boarder restrictions accompanied with mobility restrictions, interruption to transport will make direct impact on supply chain connections. As a result, the supply of goods and services will decline. The combined effect of these pushes the economy into recession resulting in falling economic output. Further, pandemic creates unusual, combined effect to AD and AS shock. More specially when the economy is in these types of nature, economy does not have excess capacity and the economy is facing shutdown, the natural level of output falls.

This situation can be presented graphically as shown below figure 2. In the short run, the economy's equilibrium can be seen at point A where the output level is Y^* and the price level is P^* . When the economy is experiencing pandemic, immediate lockdown and mobility restrictions causes to increase in unemployment thereby resulting in a decline in consumption and finally AD. Then the AD curve shift to the left side from AD1 to AD2 level. As a consequence of this shock, the potential level of production will be negatively affected. Then, the natural level of output

falls to Y_1 level. Further through the global supply chain disruptions, many factories have to shut down their business thereby affecting production, and the AD is directly affected through the disruptions.

South Asian economy is also experienced devastating impact on aggregate economy. In particular, consumption, investment, government revenue, FDI, and remittances are the sectors that have had a severe impact.

Impact of pandemic on South Asian

Countries in the South Asian region are categorized as most vulnerable

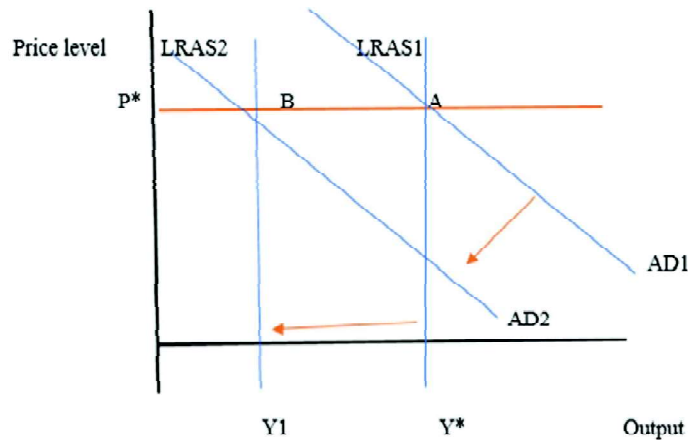


Figure 2 : Pandemic-induced Economic Crisis

segment in the world that have been drastically affected by the COVID-19. The major reason for the severe impact is country specific long-lasting structural factors including region-wide political unrest, massive governments' corruptions and higher poverty rates that have worsened the prevailing situation of these countries. According to the SOUTH ASIA ECONOMIC FOCUS SPRING (2020) published by the Asian Development Bank (ADB) one of the poorest nations in the world. According to the poverty rank, South Asia has the second highest poverty rate compared to other regions in the world situation. Further, report confirmed that the pandemic caused to push the south Asian economy into extreme poverty. Accordingly, 4.7 million people are now in extreme poverty.

Lockdown implementation in the region further deteriorates the vulnerable sectors of the economy. In particular, 9.3 million employments lost due to the severity and rapid outbreak of disease. The region experienced a significant loss of employments and income linked to Micro-Small and Medium (SMEs) enterprises and informal sector i.e., daily-wage earners of the economy due the closing down of businesses, operations,

services, factories, hospitality, event organizations and hotels coupled with the extended lockdown policies and strict mobility restrictions. Not only the domestic sector, but also the external sector of the economy is also faced difficulties due to drop in remittances, moving capital flow from the country, decline in the external sector demand and lower export have intensified the prolonged crisis.

Country Specific poverty level and poor level of living standards hindered efforts of controlling spreading of the virus. Like other countries in the world, these countries also had to spent large amount of money for the vaccine programmes, lockdown implementations, treatments and testing. However, the majority of the countries 'attempt to control the outbreak of virus is not effective compared to the other countries in the world. This is because of failing to ensure social distances, opening of borders for tourists whenever the virus is spreading rapidly and failing to adhere to health rules and practices during the outbreak period. For this reason, the number of infected and deaths within the region accelerated significantly.

The South Asian region consists of the countries of 8 countries including Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The region has a higher population around 8 billion that is almost 25 percent of the world population. Majority of the countries in South Asia region primarily depend on agriculture because the agriculture sector is the backbone of South Asian economy (Islam et al., 2020). Some key structural issues unique to South Asian region can be summarizes as per the below figure 3.

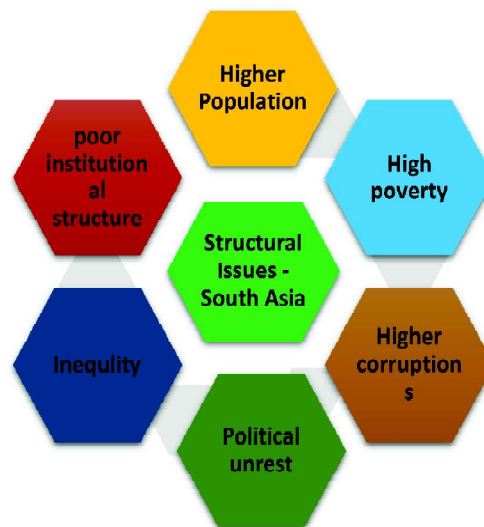


Figure 3 : Unique Structural issues in South Asia

Afghanistan

Afghanistan economy is categorized as a low-income economy with the population around 39.7 mn (2021). Compared to other countries in the region, country is experiencing high level of poverty and prolonged war that has been hinder to the future growth of the economy. The GDP stood around USD 19.81 billion, and the per capita income is about USD 511 which is the lowest amount in comparison to the regional status.

Afghan country specific issue such as weak institutional structure, political instability, huge corruptions, poor infrastructure and ineffective regulations together with ongoing pandemic further pushed the economy into severe hardship. One third of the Afghan population also seriously affected. Further, urban casual workers were impacted there by worsening the prolonged poverty.

Bangladesh

Bangladesh economy can be categorized as developing economies and it reached to lower middle-income status in 2015. It is fast developing country in the region with GDP is USD 324 million. The country's population is around 170.3 million.

In comparison to the regional status show in the figure 5, Bangladesh has the second largest GDP which is around USD 324 million as of year 2020. The GDP per capita income stood around USD 1903.7 which is higher than India. The country is also known as the leader of the garment industry, which has become one of the key factors for the economic growth of the country.

Although, Country was able to maintain positive economic growth until 2019, pandemic started to hamper the demand side of the economy due the contraction in economic activities including lowering the consumption linked to the lower income level.

Bhutan

Bhutan is a very small country with significantly low population around 0.8 million. Compared to other countries, country own to lowest level of GDP in the south Asian region. The major contributors to the economy are tourism and non-hydropower industries. Also, over 50 percent of Bhutan population has been employed in agriculture sector. The impact of the pandemic spilled over to both tourism and hydro-power industries. The economic impact emanated from pandemic caused the agriculture sector to increase the food prices. Also, over 50 percent of Bhutan population has been employed in agriculture sector and these people had to face severe hardship.

India

India is the largest economy in the south Asia region with population of 1380 mn. The country is also known as the seventh largest country by area and the second- most populous country in the world (Wikipedia). Compared to other countries in the region, India has the highest GDP with the USD mn 2590.6. Also per capita income is the heist figure in the region. Indian economy also experiences severe disruptions to economic activities due to the implementation of massive lockdowns and mobility restrictions. Due to this, the economic growth of the country declines to 4 percent compared with two years before. This economic contraction is mainly due to the reduction in private consumption associated with the lower level of demand as a consequence of the falling income level of the people. The major sectors of the economy which were affected were tourism, constructions, Aviation, hospitality and trading activities.

Nepal

Nepal economy is based on a traditional economic and the majority of population has been employed in the agriculture sector according to this system. The population of the country is around 29.1 million and the GDP was around USD 33.9 million. Since the country mainly depends on the agriculture sector, any negative impact to the sector directly affects the economy.

During the pandemic period, the economy experienced substantially, large number of employment losses due to the containment measure. Nepal accounts for 7.9 percent for tourism in South Asia of the tourism sector also confronted economic strains due to the prolonged pandemic.

Maldives

Maldives is a small island with the population of around 0.5 million which is the lowest level of population in South Asia. The main contributor to the economic growth is tourism which accounts for 66 percent of the tourism and travel industry in South Asia. The economy's GDP was around USD 4 million which is the lowest amount in the rejoin.

Pakistan

The structure of the Pakistan economy a semi-industrial economy with the population of 220 million. The country's economy is primarily based on the agriculture sector though now contribution to the GDP is about 20 percent. The economy has become now more diversified. The country owned a GDP of around USD 264.5 million and the per capita income is around USD 1197.6.

The economy contracted due to prolonged pandemic shock associated with mobility restrictions and other containment measures. Due to containment measures adopted to control the COVID-19 pandemic caused to interrupt the economic activities of 2020 (World Bank, 2021). Like other countries in the region, the informal sector experienced low-income level and job losses.

Sri Lanka

Sri Lanka can be categorized as a lower-middle-income country in South Asian region with a population of with a GDP per capita of USD 3,852 (2019) and a total population of 21.9 million. With over six decades of 21.9 million. Country's per capita income is around USD 3685.6, and GDP is USD 80.7 million.

COVID-19 resulted the decline the output of 3.6 percent. Due to the mobility restrictions associated with containment measures put much pressure on economic activities. Further, manufacturing and services activities experienced significant slowdown during the period of 2019-2021. The services sector was mainly affected due to the interruptions in the transport, food and banking service, accommodations and other services.

A prolonged crisis coupled with imposed mobility restrictions and rapid spread of virus increased the unemployment rate over 5 percent in 2020. This combined effect ultimately resulted to hampered economic activities in all sectors.

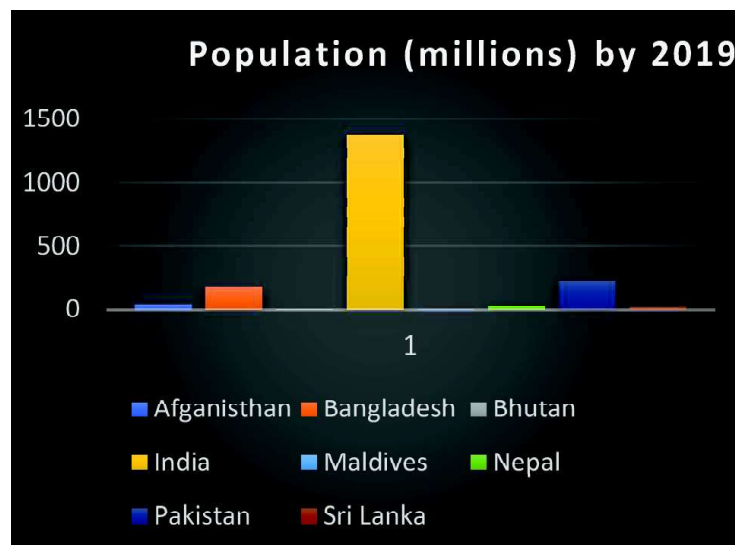


Figure 4 : Population in South Asia

Data source : World Bank

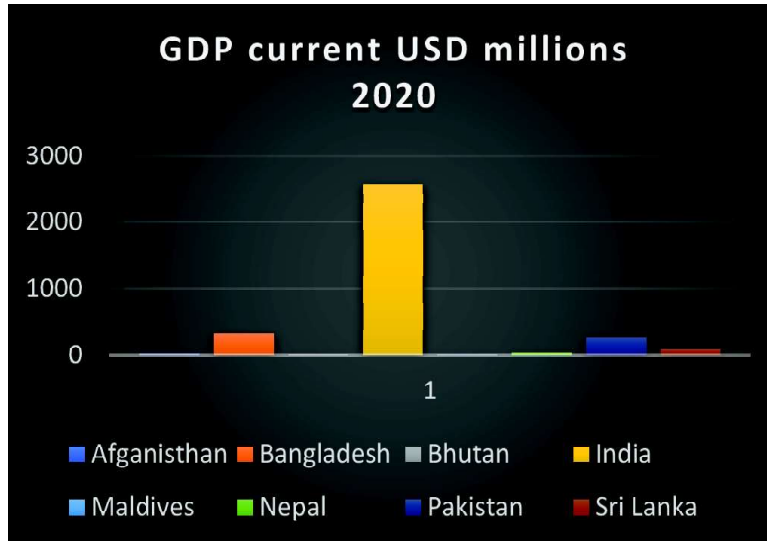


Figure 5 : GDP in South Asia

Data source : World Bank

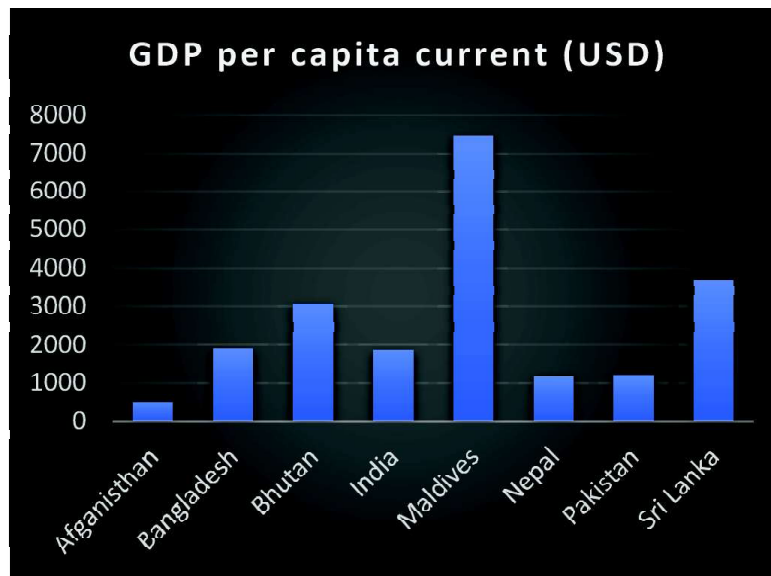


Figure 6 : GDP per capita in South Asia

Data source : World Bank

South Asian unique pandemic crisis

The unpredictable nature of the pandemics is costly and disruptive. Almost all countries in South Asia including India, Pakistan, Sri Lanka, Bangladesh,

Nepal, Bhutan, Maldives, and Afghanistan have been confronting deepest economic recession in the wake of challenges, uncertainties surrounded by the COVID-19 pandemic. According to Barua (2020) the biggest challenge in responding to address the pandemic is that the crisis is totally different, unprecedented, and kind of new and not like an economic crisis driven by known causes such as banking crisis or financial crisis. Also, pandemic related crises have been associated with enormous negative impact on health economy, society and security of both national and global communities (Qiu, 2020).

It is true that due to globalization, many economies around the world are highly integrated, interconnected, and interdependent. Therefore, countries are highly vulnerable to contagion and economic impact of the spillover effects of the pandemic. Especially, such as lower-income level countries are the most vulnerable sector to the pandemic shock. According to Rungcharokitkul (2021), the highly globalize and integrated nature of the economies make present pandemic more likely and potentially more disruptive.

The unique characteristics of the South Asian countries such as heavy external debt, lower socio-economic conditions, higher population, poor healthcare facilities, poor living standards and high inflation caused to become vulnerable segment of pandemic and situation led to intensify the consequences of the pandemic through many sectors of the economy.

Early attention and the necessary action are paramount important to mitigate and the control the contagion of virus because absence of involvement in right time could lead to severe economic recession at a fast phase that can hampered the lives, livelihood and ultimately whole economy. The massive scale of economic losses create the pandemic crisis one of the most pressing and severe problem (Rungcharoenkitkul 2021). The necessity of control and preventive measures are paramount import. Therefore, healthcare-sector authorities, policymakers, government authorities and central banks across the globe are struggling to cope with the social and economic damages. Furthermore, unprecedented healthcare policy response was controlled large number of death due to the pandemic (Rungcharoenkitkul 2021).

Some efforts to restrict the mobility of the people

Number of Non-Pharmaceutical implementations have been implemented by the healthcare sectors in collaboration with the government authorities depending on the contagion nature, population density, severity of the variant, and healthcare infrastructure.

- Closing of airports, regional borders, and national borders

- Implementing national-wide lockdown
- Imposing mobility restriction among the regional areas and provinces
- Enforcing the policy curfew
- Delivery of Healthcare services
- Delivery of essential services
- Continuous support to vulnerable segment

These initiatives are considered as effective implementations that have been taken by the healthcare authorities and the government authorities. Nevertheless, the continuous imposition of healthcare measures has created negative shocks to the economy through various channels causing massive economic losses to human lives, livelihood, and business. The present lockdown situation after the spread of COVID -19 is causing devastating impact on major economic sectors of the South Asian region (Islam et, al., 2020).

Table 1 : Number of Covid Cases as at 19th September 2021

<i>As at 19th September 2021</i>				
<i>South Asia</i>				
<i>Country</i>	<i>Total Cases</i>	<i>New Cases</i>	<i>Total Deaths</i>	<i>Total Recovered</i>
India	33,529,986	27,242	445,799	32,775,282
Pakistan	1,227,905	1,987	27,327	1,137,656
Bangladesh	1,545,800	1,562	27,277	1,504,709
Sri Lanka	506,009		12,218	433,093
Maldives	83,656		229	81,804
Nepal	786,577	1,036	11,053	754,000
Afganistan	154,756	44	7,193	122,754
Bhtan	2,599	2	3	2,593

Macro-economic implications of COVID-19 in South Asia

South Asian economies confronted emerging recession due to the prolonged health crisis of COVID -19 intensified by the rapid spread of virus across the many geographical areas. The nature of this pandemic is still spreading and has a possibility of developing future variants.

The pandemic-induced economic crisis had substantial impact on the different sectors of the economy including monetary sector, fiscal sector, financial sector and external sector. Depending on the nature and extent of interconnectedness of each sector, negative shocks will be transmitted thereby creating imbalances and vulnerabilities. The overall impact to the economy transmits through the sub-sectors of the above four sectors.

According to Magitretti and Pugacheva (2021), “the shocks stemming initially from the restrictions to activity in high-contact sectors rapidly spilled over to other industries and to aggregate demand, both domestically and to other countries through trade linkages”. Furthermore, South Asian economy is confronting a major slowdown with decline in GDP and damage to major sectors (Islam et al., 2020)

According to Islam et al., (2020), about 60 percent of population in South Asian region employed in Agriculture sector and, impact of COVID-19 on supply chain management would be serious. Further, Services and manufacturing sector also have negative impact due to supply-demand chain disruptions on major raw materials.

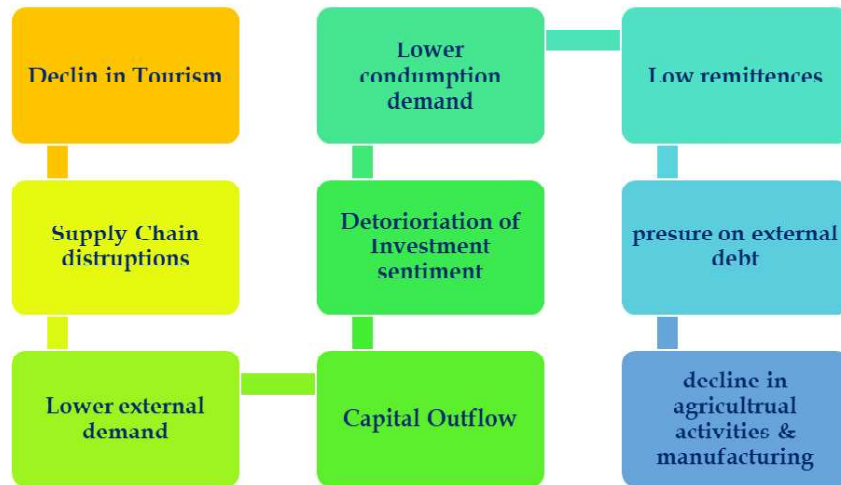


Figure 7 : Economic Impact of COVID-19

The figure 7 shows, that during the period of 2020, Inflation in South Asia region has been increasing continuously compared to other emerging markets and developed countries. The major reason for the higher inflation is that higher food price inflation in Sri Lanka and Pakistan.

According to figure 8, GDP sharply declined in 2020 due to the contracted economic activities in manufacturing and services sector in the economy. More especially, Services sector which provide the highest percentage amount of contribution to GDP, contracted due to continuous lockdown, mobility restrictions and employment layoff. The growth rate in South Asian rejoin in 2019 was around 4.3 percent and this dropped drastically by 5.4 percent. Except other countries in the region, agriculture sector in Sri Lanka declined mainly due to indirect impact of supply chain disruptions and lockdown policies

Further, consumption demand and investment declined causing to decline in aggregate demand in the economy. Private consumption demand declined in the countries India, Sri Lanka, Afghanistan, and Maldives showing the declined in Aggregate Demand. The Figure 9 shows that declined of private consumption in Nepal is significantly high. External

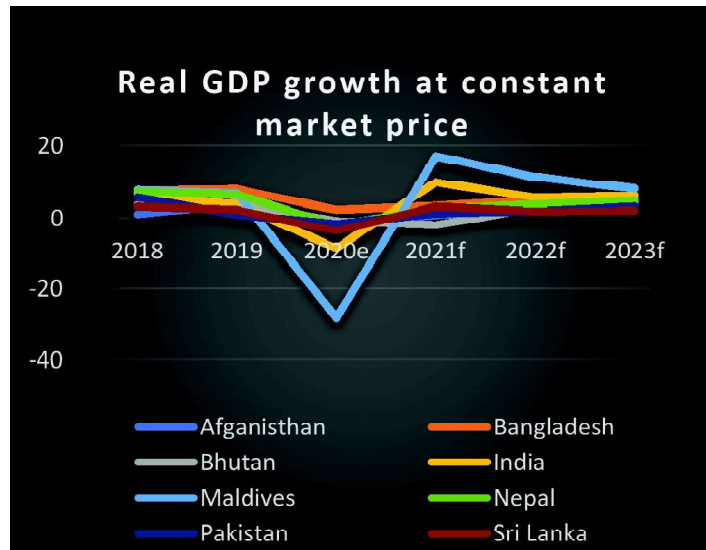


Figure 8 : Real GDP Growth

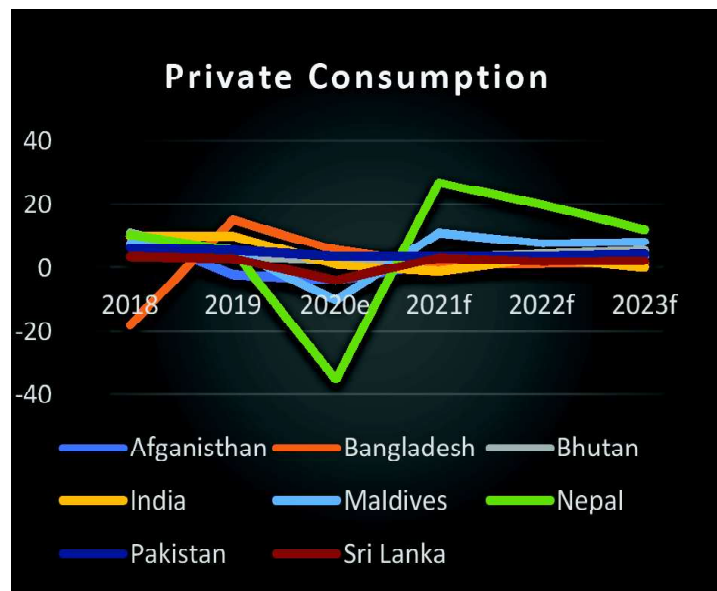


Figure 9 : Private Consumption

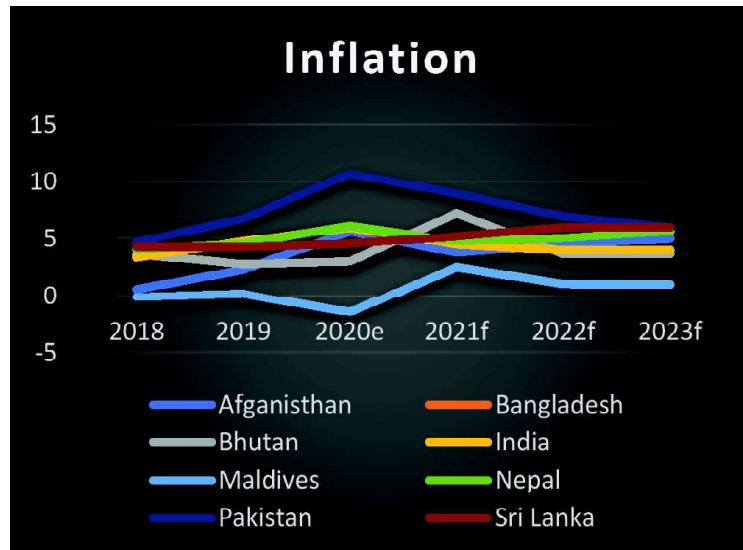


Figure 10 : Inflation



Figure 11 : Exports, Good and Services

sector also confronted pandemic impact showing that declined in export during the period of 2020. As per the figure 11 Maldives experienced sharp decline in export income due to the contraction in revenue from tourism sector. The estimated loss was 25.9 percent in GDP as measured at factor cost due to the continuous closing down of tourism sector.

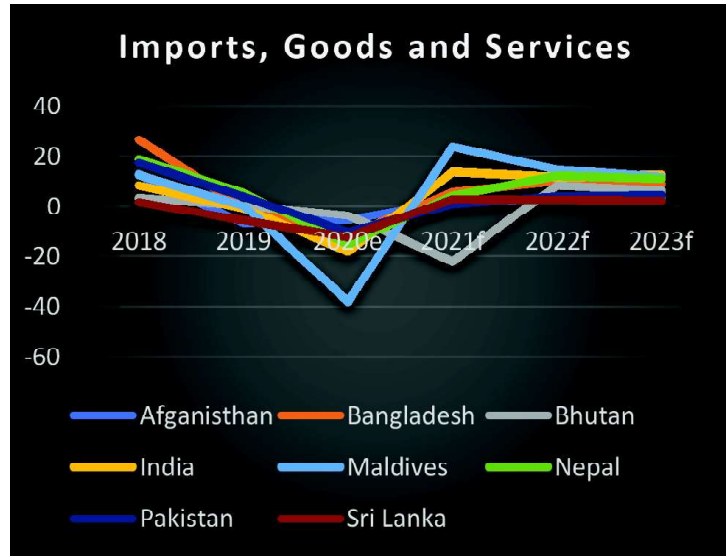


Figure 12: Imports, Good and Services

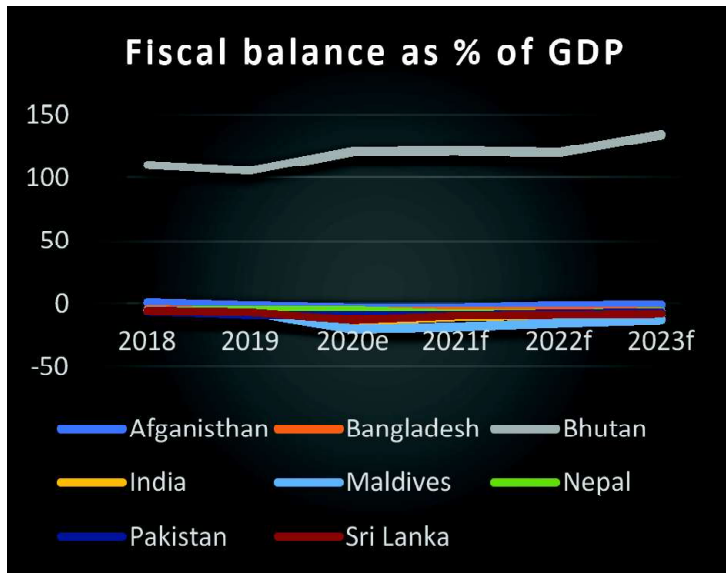


Figure 13: Imports, Good and Services

Impact on Aggregate Demand

South Asian countries experienced contraction of economic activities including falling the private consumption associated with decline in household income, contraction of export due to the falling external

demand, sharp contraction in tourism activities and agriculture activities, supply chain disruptions during the pandemic period. Combined effect of all these activities led to hamper the real economic activities in the country. Further, massive scale employment layoff coupled with imposition of lockdown policies and rapid spread of virus led household sector to reduce the demand for consumption. According to Khan et al., (2021) lockdown policies lead to contract domestic consumption and investment significantly. South Asian region who are categorized as low-income group contracted the consumption as they were seriously vulnerable to the impact of pandemic

Impact on Aggregate Supply

Direct Impact to aggregate supply emanated through fall in labour supply due to massive loss of employment related to the informal and SMEs sector. Impact to the South Asian region is very much significant due to higher percentage of employments are from these two sectors. The Aggregate Supply side was further affected due to the disruptions to local and international supply chain. Since COVID-19 originated from China, many factories in China have been closed due to outbreak of COVID-19. Being a major supplier, closing down of China's economic activities severely affected to South Asia through the supply chain.

Declining Trade

South Asian trade was affected due to decline in external demand from other countries. One of the major trading partners, China seriously affected by COVID-19 being as COVID-19 originated country. China had to stop their trading activities with other countries due to widespread of the virus across the country. As a result, China reduced imports from other countries, export from South Asia to China contracted. Similarly lower external demand from other countries led to a decline in export income in South Asia. Since many people in the South Asian region have been employed in apparel and garment industries, decline in export income severely affected the income of household sector.

Table 2 : South Asia's Exports

<i>South Asia - Exports</i>	<i>Trade USD mn</i>	<i>Share of export%</i>
US	38,322	16.67
UAE	30,740	8.84
China	19,347	5.56
Hong Kong	15,578	3.32
Singapore	10,875	3.13

Table 3 : South Asia's Imports

<i>South Asia - Import</i>	<i>trade in USD mn</i>	<i>Share of import%</i>
China	82,001	15.26
US	38,313	7.13
UAE	36,793	6.85
Saudi Arabia	29,441	5.48
Iraq	22,105	4.11

Source: World Integrated Trade Solution

Supply Chain Disruptions

South Asia's major trading partners are China, USA and UAE. According to the above table 2, South Asia exports to USA around 16.67 percent, UAE 8.84 percent and China 5.56 percent whereas import from China, US, and UAE are 12.26, 7.13, 6.85, percent respectively. Since these major trading partners also were affected, lower external demand led to slowdown the economies of South Asia. Due to banning of non-essential imports and closure of seaports and airports adversely affected the supply chain.

Impact on Remittances.

Remittances are considered as one of the major components of foreign exchange income for many south Asian countries. Also, it provides major cushion for external sectors of the economy. Therefore, decline in the revenue from remittances creates unnecessary pressure on the external sector of the economy for the countries who mainly rely on foreign remittances. Remittances are considered as one of the major sources of revenue for almost all South Asian countries compared with other countries. Nepal has been ranked as the third in the in the world which contributed about 27 percent to GDP.

Implementation of contained policies to combat widespread of pandemic led many economies to impose travel restrictions, impose curfew, closing airports and restrict mobility and gathering together. Due to these implementations, several sectors including transport, tourism, hospitality and entertainment were affected substantially. Due to sudden implementation of these strict non pharmaceutical healthcare policies, foreign exchange revenue from remittances severely affected thereby creating heavy stress on household sectors who receive remittances from foreign employment because **inward remittances are considered as lifeline for the families those depend on the inward remittances (Rasul, et al., 2021).**

Impact on Informal Sector and Small and medium business Sector

Proportion of informal sector is comparatively high for south Asian economies compared to emerging economies and other Asian countries due to prolonged poverty status in South Asian region. Also, Small and Medium enterprises are considerably high in South Asia. The most affected sectors are considered to be the informal sector, which mainly depends on daily income and the small and medium enterprises. A significant number of employments related to these sectors and the continuous closing down of business activities have been severely affected by the people who have been employed in these sectors. Loss of income due to closing and lay of employment, the poverty level increased. Further, loss of income and higher food prices negatively affected private consumption.

Impact of Agriculture

Agriculture is also considered as one of the major contributors to the economy in almost every country in the South Asia region. The large number of people compared to other countries in Asia have been employed in the Agriculture Sector. Therefore, any adverse impact to this sector can lead to a serious impact on the whole economy. During the pandemic period, a sharp contraction of activities related to agriculture was noted since the disruptions associated with supply chain, restrictions to transport and issues related to climate changes. These combined effects lead to the risk of food insecurity and supply shortages thereby increasing food prices.

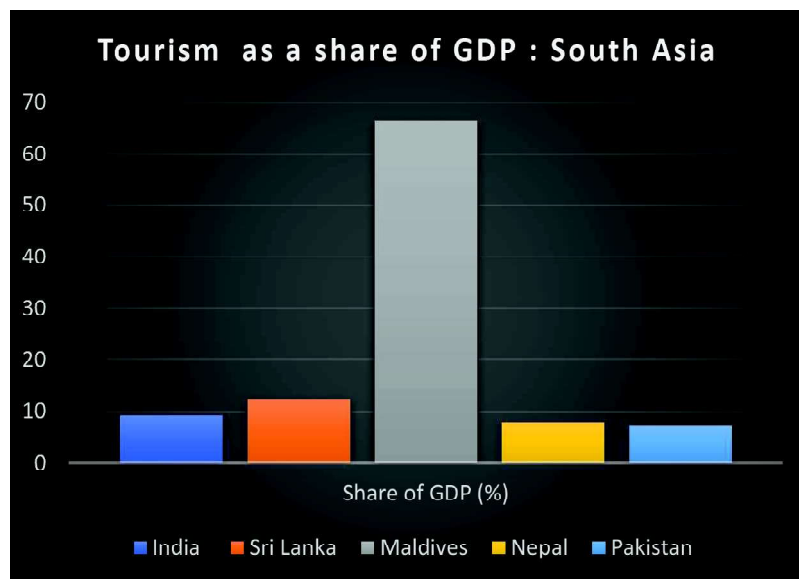


Figure 14: Tourism as share of GDP

Impact on Tourism

Tourism sector is one of the major contributors to GDP in South Asian countries. According to the following figure 9, Maldives is the country that has highest percentage (around 66 percent) that contributes to GDP. Sri Lanka is the second highest and the percentage is around 12. percent

During the pandemic Tourism sector in south Asian countries were more vulnerable to prolonged crisis and implemented mobility, travel and boarder restrictions resulting massive number of jobs and income losses. These declines in the tourism sector seriously affected the contraction of tourism activities and lower level of revenue. Asian economies also confronted severe issues as losing of revenue from tourism has negative impact on fiscal balances and increasing unemployment due to the large number of layoff and closing sown of business.

Conclusion

The pandemic is an unpredictable phenomenon, and no one can predict the occurrence and end date of it. Hence, early preparedness is important to minimize the impact and the risk of pandemic. Recent analysis already showed that the South Asian economies also confronted enormous challenges and economic losses due to the negative consequence of the pandemic. In this analysis it was demonstrated that even though, sudden lockdown, boarder closure and mobility restrictions were enormously helpful to control the contagion, severe lockdown have had far reaching consequences on economic activities of the almost all countries in the Asian region. It also also emphasized that the countries are required to early preparedness including pay attention on allocation of budget for unexpected contingencies for the assurance, more new investment activities for the development of health care facilities, enhancing social safety nets and proper methods to resettle the lives and livelihood of vulnerable sectors.

Further, timely implementation of effective monetary and fiscal policies should be the first priority to rebuild the economic activities of the vulnerable sectors of the economies. Monetary stimulus to the financial markets should be readily available to recover the vulnerable sectors of the economies as a lender of last resort thereby ensuring the stability of the financial system. By providing ample liquidity to the market with lower interest rates, Central banks are able to provide support to boost the economic activities of the country.

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