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RESEARCH PAPER

COVID-19 Pandemic: Emerging Risks and Challenges

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ABSTRACT

This article aims to analyze the risk, implications, and problems that COVID-19 poses to various important social and economic sectors in South Asia. The rapid global dispersal of COVID-19 has caused severe risks to human health, interrupted daily life, and impacted commerce, industry, and trade. This article conducts an analysis of the impact of COVID-19 on key sectors like migration, tourism, the informal economy, agriculture, and rural life, considering how these areas are affected by the pandemic. Results shows, COVID-19 have an impact on economic growth, increase the fiscal deficit, heighten the risks of macroeconomic instability, decrease immigrations, reduce income of tourism, and declined the micro, small, and medium industries and informal businesses. To mitigate these challenges, governments in South Asia should implement targeted economic relief packages, strengthen healthcare infrastructure, and focus on sustainable social safety nets to protect vulnerable populations and ensure long-term resilience.

KEYWORDS COVID-19, Poverty and Inequality, Public Health, Socio-Economic Impact, South Asia

Introduction

The increasing prevalence of COVID-19 is the greatest danger to the global economy, people's lives, and ways of living. What began as a health scare has escalated into a worldwide financial disaster. This has caused an unprecedented economic downturn in today's highly interconnected and globalized globe (Ozili and Arun, 2020). Because it has had such a widespread impact, COVID-19 is now a systemic concern for all economies, regardless of their size. Due to increased globalization, economic integration, and interconnection among the many economic sectors, a shift in one area of the economy or one country now has reverberating effects on other areas of the economy in other parts of the world. Like the dangers of climate change, pandemics can quickly spread throughout the globe from any point of genesis (Acharya and Porwal, 2020; Ibn-Mohammed et al., 2020).

Due to the region's large population and high rates of poverty, deplorable health infrastructures, poor socio-economic conditions, inadequate social protection systems, limited access to water, sanitation, and adequate living space arrangements, COVID-19 has posed unique challenges to the South Asian economies (Rasul, 2020; Hossain et al., 2020). Approximately a third of the world's impoverished call South Asia home; the majority of these people (about 70%) reside in rural areas and mainly depend on agriculture for their livelihood. 649 million individuals in South Asia were either moderately or severely food insecure before the COVID-19 epidemic, and 271 million were in extreme food insecurity. Similarly, 36% of the kids were short for their age, and 16% were severely malnourished. Because of COVID-19, the problem is only going to become worse (Rasul, 2020).

Literature Review

Delhi, Mumbai, Karachi, and Dhaka—megacities with enormous population densities—are in this region. Many nations lack clean water, sanitation, and hygiene. In Afghanistan, 42% of households use unsafe drinking water, and more than 50% lack water and soap to wash their hands (ICIMOD, 2020). High population density, terrible working conditions, and inadequate housing make social distancing impossible. South Asia has the world's largest slums, including Karachi's Orangi district (2.5 million inhabitants), Mumbai's Dharavi (1 million), and Cox's Bazaar's Rohingya camps (1 million) (Rasul, 2020). Overcrowded living spaces and shared water and sanitation facilities make physical separation and self-isolation impossible, increasing exposure and vulnerability (Hossain et al., 2020). Most people in this region lack the resources and resilience to handle a pandemic shock due to economic distress. Many works in informal industries or selfemployment without health or social protection compound the problems (ICIMOD, 2020). Concerned about the rapid spread of COVID-19, a few scientists, notably in India, have attempted to estimate and predict transmission and fatality rates (Khajanchi and Sarkar, 2020; Samui et al., 2020). Acharya and Porwal (2020) also examined if the population's demographic composition in different Indian states affects infection vulnerability and mortality rates. This research stressed the importance of contract tracing and physical distance to control coronavirus propagation. To save lives, these region's governments have implemented strict lockdowns to keep people apart. In the early months of the pandemic, South Asian countries successfully limited the virus and saved lives, but protracted lockdowns directly hampered economic activity. Simulations show that a month-long economic lockout might reduce GDP by 1.5%-2.0%. Locking down the economy for a day costs India US\$4.64 billion (Acuité Ratings, 2020).

The healthcare systems in South Asian countries are very substandard. Afghanistan, Bhutan, Bangladesh, and Nepal only have 5.3, 5.3, and 6.5 physicians per 10,000 population, respectively, a tenth of the amount found in more developed nations. Even India, one of the most advanced healthcare systems in the area, has just 7.8 doctors for every 10,000 residents (Rasul, 2020). As a result of inadequate healthcare facilities and resources, the nations of South Asia have implemented rigorous policy measures to halt the spread of the coronavirus and preserve the lives of their citizens. Except for a few necessary services, all economic activity has been halted, travel is prohibited, the circulation of products and services is restricted, and movements across international borders are closed. There has been a restriction placed on labour, which is the primary factor in manufacturing; borders have been shut down; and national, regional, and global supply networks have been affected, primarily in the South Asian region.

While physical separation and lockdown are necessary to stop the spread of the coronavirus, they have harmed millions of people in South Asia, home to one-third of the world's poorest population (ESCAP, 2020). Economic effects increase with shutdown severity. This paper briefly addresses these questions: What are the short-, medium-, and long-term economic implications of the COVID-19 epidemic in South Asia, and what are the obstacles and issues facing the poor, vulnerable population? How will this pandemic influence migration, tourism, the informal sector, agriculture, and rural livelihoods? How are South Asian nations addressing these issues? What national, regional, and global policies are needed to solve these issues?

Material and Methods

The methodology for this research primarily involves a thorough review and analysis of existing literature, reports, and data relevant to the economic and social impacts of COVID-19, particularly in South Asia. Secondary data sources include publications from international organizations such as the World Health Organization (WHO), the World Bank, the International Monetary Fund (IMF), and the United Nations (UN), as well as governmental reports, academic journals, and industry analyses. To analyze the broader effects of the pandemic on sectors like migration, tourism, informal economies, and agriculture, secondary research gathers insights from case studies, statistical data, and policy papers. These sources offer empirical evidence on how the pandemic has affected different economic segments and social structures within South Asia. Comparative analysis is employed to evaluate the differential impacts of COVID-19 across South Asian nations based on their varying socio-economic conditions, healthcare infrastructure, and policy responses. Additionally, various forecasts and projections from economic models and reports are used to anticipate long-term implications for poverty, unemployment, and food security. By synthesizing information from a diverse range of reputable secondary sources, this research aims to offer a comprehensive understanding of the pandemic's implications for the region.

Results and Discussion

Economic Impacts of the Covid-19 Pandemic in South Asia

While the exact extent of the pandemic's economic impact remains unknown, some projections indicate that South Asian countries will see their GDP rise at the slowest rate in 40 years due to the COVID-19 pandemic. Length and severity of health crisis, size of the lockdown, and the course of events after the lockdown is lifted will all affect the extent of the economic damage. The International Monetary Fund predicts that in 2020, the gross domestic product (GDP) growth rate of South Asian countries will range from -18% (in the Maldives) to 3.8% (in Bangladesh), with five countries experiencing negative growth (Table 2). In the event of a steep decline or negative growth in GDP during 2020, a sizable portion of the population would see a drop in disposable income. While the people and cost of living increase (Table 2), the decline in GDP will lead to a further fall in per capita income, which will have repercussions for most of the population. The Maldives is projected to have the highest growth rate in the area at 12.7% in 2021, followed by India at 8% if the global economy recovers quickly.

Macro-economic indicators of South Asia									
	Real GDP growth(annual% change)			Inflation (%change in consumer prices)			Current account balance (%of GDP)		
	Actual	Proje	ctions	Actual	Proje	ctions	Actual	Proje	ctions
Countries	2019	2020	2021	2019	2020	2021	2019	2020	2021
Afghanistan	3.9	-5.0	4.0	2.3	5.4	4.8	11.7	9.5	7.8
Bangladesh	8.2	3.8	4.4	5.5	5.6	5.9	-1.7	-1.5	2.8
Bhutan	3.8	0.6	-0.5	2.6	3.6	4.6	-22.5	-21.4	-13.5
India	4.2	-10.3	8.8	4.8	4.9	3.7	-0.9	-0.3	-0.9
Maldives	5.7	-18.6	12.7	1.3	0.4	2.7	-26.0	-31.8	-17.0
Nepal	7.1	0	2.5	4.6	6.4	6	-7.7	-2.5	-7.0
Pakistan	1.9	-0.4	1.0	6.7	10.7	8.8	-4.9	-1.1	-2.5
Sri Lanka	2.3	-4.6	5.3	4.3	4.7	4.6	-2.2	-3.6	-3.2

Table 1

Sources: InternalMonetaryFund,2020.

Inflation: As a result of COVID-19, South Asian countries might expect a little higher inflation rate in 2020. Except for Pakistan (10.7%), all other South Asian countries are forecast to have modest inflation in 2020 (ranging from 0.40 percent in the Maldives to 6.40 percent in Nepal) (Table 1).

Impact on Migration and Remittances

Due to restrictions, tourism, sports, entertainment (film), education, transit, manufacturing, migration, and remittances are the most affected industries. Millions of low-income households in the area rely on remittances sent back by migrant workers (KNOMAD, 2020; World Bank, 2020c). The money migrant workers send home is crucial to their families and helps the national economy by bringing in foreign currency. In Nepal, for instance, remittances account for almost 27% of the GDP (2019). In 2019, India received US\$ 83 billion in international remittance, making it the world and region recipient.

In 2019, the remittance-GDP ratio was 8.2% in Sri Lanka, 7.9% in Pakistan, 5.8% in Bangladesh, and 4.6% in Afghanistan, all showing how essential remittances are to these economies nations the households inside them (World Bank and KONOMAD, 2020).

The COVID-19 pandemic has done heavy damage to the migration and remittance industries. It appears that all South Asian countries will experience a significant decline in remittances in 2020, according to preliminary estimates. For the three countries of India, Pakistan, and Bangladesh, the remittance flow is expected to decrease by nearly 23% in 2020 compared to 2019. By 14%, which is the predicted drop in Nepal. Amount of remittances sent to South Asia is expected to decrease from US\$ 140 billion in 2019 to US\$ 135 billion in 2020 and then to US\$ 120 billion in 2021. (World Bank and KNOMAD, 2020). Even in 2021, the demand for migrant labor and migratory movements may be impacted by the global economic slowdown connected to the coronavirus, dropping oil prices, and travel restrictions, all of which are likely to keep remittances low. While these projections were made before the shutdown began, more recent information suggests that remittance inflow may be less affected this year compared to the next. Yet, many regional migratory workers are infected with the virus in their job locations, resulting in some fatalities and leaving millions stranded and needing repatriation. It presents enormous obstacles and risks.

Losing Jobs in Informal Sector and MSMEs

Most people in South Asia are self-employed or work in agriculture or a closely related field. Micro, small, and medium companies (MSMEs) and the informal sector services hire the most people in the region. Here, we can see this example in (Figure 1).

In India, for example, the country's 36 million SMEs accounted for 60 million jobs and made a sizable economic impact on the country in 2020 (Dev and Sengupta, 2020). More than two million Nepalese citizens have found work thanks to the efforts of Nepal's micro, small, and medium-sized enterprises (Shrestha, 2020). Small and medium-sized enterprises (SMEs) play a crucial role in the economies of South Asian countries by creating jobs, generating revenue, and boosting exports and foreign exchange.

Basic facilities in health sector and Social Security Coverage in South Asian countries						
Countries	Public health exp(%GDP)	Basic sanitation services	Employment with social security	Employment without social security	Potential job losses(millions)	
Afghanistan	0.49	38.75	3.7	96.3	12.37	
Bangladesh	0.47	43.78	2.5	97.5		
Bhutan	2.49	65.67	14.00	86.00		
India	0.91	50.48	10.3	89.7	112.8	
Maldives	5.21	96.2				
Nepal	1.00	51.28	3.4	96.6	2.27	
Pakistan	0.72	54.45	3.9	96.1	11.71	
Sri Lanka	1.62	93.41	24.1	75.9	0.92	
World	5.8	69.94	41.3	58.7		

Table 2

Sources: ESCAP, 2020

 Table 3

 Health security ranking and score of South Asian Countries

 Global health security rank and score*

Countries Rank Score

India	57	46.5
Bhutan	85	40.3
Pakistan	105	35.5
Nepal	111	35.1
Bangladesh	113	35.0
Sri Lanka	120	33.9
Maldives	121	33.8
Afghanistan	130	32.3

Source and notes: Higher the score better (lower) the rank. Score is 0–100. 100 is the best health security condition. The rank and scores are based on the following criteria: A) Prevention of the emergence of release of pathogens; B) Early detection and reporting for epidemic of potential international concern; C) Rapid response to and mitigation of the spread of an epidemic; D) Sufficient and robust health system to treat the sick and protect health workers; E) Commitment to improving national capacity, financing and adherence tonorms, and F) Overall risk environment and country vulnerability to biological threats. source: Babu et al (2020)

Approximately 50 million jobs were created in the travel and tourism sector in the region in 2018 (Table 5), considerably boosting national GDPs. For example, tourism and travel services account for over 9% of the economy in India. In comparison, Pakistan accounts for around 7% of the economy, and Nepal accounts for over 1% of the economy (Table 4).

		Table 4					
Employment and economic contribution of tour travel industry in South Asia.							
Countries	Share of GDP (%)	Number of jobs in T&T (in Thousands)	Share in total employment, most recent year (%)	Growth (2018 or latest year)			
Bangladesh	4.4	2,414	3.9	11.6			
India	9.2	42,673	8.1	6.7			
Maldives	66.4	69	32.4	7.9			
Nepal	7.9	1,051	6.7	3.6			
Pakistan	7.1	3,850	6.3	7.4			
Sri Lanka	12.5	1,000	12.1	12.4			

Source: World Bank (2020a)

Government and Civil Society Responses

South Asian governments have swiftly responded to the COVID-19 pandemic, adopting several legislative steps to stem its spread, aid the impoverished, and stimulate the economy. Here we quickly outline the economic countermeasures implemented by South Asian nations.

Response to Minimize the Short-Term Economic Pain

South Asian governments have taken various fiscal and monetary measures to ease the banking system's liquidity crisis and stabilise the economy in the short term. To make liquidity available and to create flexibility for debtors, governments have adopted various measures, such as concessional financing to prioritised sectors, decreased limitations on payments (such as forbearance of taxes, rent, utility payments, and loan payment deadlines), and so on. For instance, the Reserve Bank of India offered a plan to improve financial sector liquidity that would cost 1.8% of GDP. Some Indian states have taken initiatives to stimulate economy and help the underprivileged in addition to those taken by the federal government. The state of Kerala, for example, has pledged a \$2.6 billion package (2.5 percent of the state's GDP) for economic recovery and some direct transfers to disadvantaged households (World Bank, 2020a). The government of Pakistan also provided a massive stimulus package and financial support, including tax rebates for the export industry and aid to small and medium-sized businesses to the tune of \$600 million (World Bank, 2020a). The government of Bangladesh stated that the country would be providing US\$ 588 million in pay support to garment and other export businesses. Nepal's government has also made available subsidised financing for small and medium-sized enterprises to help them meet payroll.

Response to Reopen and Revitalize Economy

The economic activities of various nations were revitalized through the gradual opening of economies and the financial assistance of priority sectors. However, these measures were taken in a variety of ways. To ease the lockdown and progressively reestablish economic activity in places where the virus is absent or in low quantity while implementing strict safeguards in the hotspot areas, the government of India has established a technique of zoning the country depending on the prevalence of the coronavirus infections. The Indian state of Assam has formed a special committee to develop plans to boost the state's flagging economy. India's pharmaceutical, construction, and tourism industries will now have easier access to loans thanks to new policies imposed by the country's central bank. To combat the difficulties brought on by a lack of available manpower during paddy harvesting, the Bangladesh government is subsidizing farmers' purchase of harvesters by between 50 and 70 percent. Governments in Bhutan, Myanmar, and Nepal have also implemented policies to encourage small and mediumsized enterprises (World Bank, 2020a). The recent reopening of the Benapole-Petrapole land border between Bangladesh and India, which had been closed for three weeks, is encouraging since it will allow for the free passage of people in cases of emergency (ICIMOD, 2020).

Conclusion

The COVID-19 pandemic has devastated the economic and social well-being of people in South Asia. Although the coronavirus transmission has slowed, it remains unclear whether the virus will be eliminated to save lives, defend livelihoods, and help the economy from the COVID-19 pandemic; immediate and strong action is required. Direct significant expenses have been incurred on human health and economic activities, with the most negative consequences on the lives of the weakest and most vulnerable groups due to the Covid-19 outbreak. This research discusses key information that may aid a marginalised population now experiencing this epidemic. Since most South Asian countries have either a very limited or nonexistent social security system, the government should find a way to provide social security services to the poorest population, especially when they lose their informal work prospects. In times of crisis, for instance, safety nets could be created by encouraging the poor to save more and expanding their access to banking services.

Because of the interwoven nature of health, environment, and social issues, it will take collective action to reduce the impact of the COVID-19 outbreak on human communities and economies and to rebuild after it inevitably wreaks havoc. Every government needs to set short, medium, and long-term priorities. Further, regional and international cooperation is required to address the repercussions of COVID-19 in many communities. South Asia has to work together to overcome their problems and improve the region's economic outlook. Importantly, unique methods, tactics, and strategies are required to deal with the difficulties posed by coronaviruses. South Asian governments may consider the following policy initiatives to lessen the blow of the epidemic on the region's poor and most vulnerable citizens and to stimulate economic growth.

Plan for economic recovery from COVID-19

Since a complete shutdown of the economy severely affects the economy and people's livelihoods, planning for economic recovery from COVID-19 involves developing a method to adjust swiftly based on the scenario, avoiding blanket lockdowns. One possible

starting point is to adopt India's strategy of classifying the country. According to the prevalence of coronavirus infections, allowing economic activity to resume in areas where the virus is either nonexistent or at low levels and enforcing stricter restrictions in hotspot areas.

However, detailed guidelines are needed to operationalize such rules, such as precise protocols designed based on local conditions and evidence and defined techniques for limiting the virus after opening. The recurrence of COVID-19 virus, as has been happening in the United States and Europe, is real possibility because no such protocols have been implemented. Utilizing the media extensively to promote mental health awareness, spread health care education, and self-protection is crucial (Khajanchi et al., 2020).

Develop a roadmap for achieving short, medium, and long-term goals

We hope to spark a national economic revival by addressing the unique challenges faced by low-income and marginalised communities on a local level. The immediate health crises, food and nutritional security, short-term job creation, and transferring incomes to the needy population are paramount for the economy's survival in the short run. The economy needs a boost in economic activity and the best possible stimulus to get the financial system back on track in the medium run. Transforming or reviving the economy through the promotion of long-term sustainable growth and the alleviation of poverty should be the ultimate objective.

Orchestrate the fiscal, monetary and development intervention

In a unified and well-coordinated fashion, various policies reinforce one another and have a multiplicative effect on economic revival. The immediate priority will be to recover from the effects of the pandemic and get people back to work. Still, in the long run, it might be more beneficial to invest in a diversified mix of physical, human, social, and natural capital to strengthen the economy's ability to withstand future shocks and to prepare for the possibility of more frequent and severe epidemics. The productive capacity of the population can be increased, and future generations returns can be secured by investing in areas such as health care, education, skills training, innovation, technological advancement, green infrastructure, and natural capital.

Recommendations

To mitigate the adverse effects of COVID-19 on South Asia's economy and society, it is crucial for governments and policymakers to implement a multi-faceted response strategy. This should include enhancing public health infrastructure to ensure equitable access to healthcare, especially for marginalized populations, while prioritizing vaccination campaigns. Financial support programs, such as direct cash transfers and microcredit facilities, should be established to assist vulnerable communities and informal workers. Additionally, fostering digital transformation in various sectors, particularly in education and commerce, can help create new economic opportunities and enhance resilience. Strengthening social protection systems and promoting inclusive economic recovery initiatives will be essential to address unemployment, poverty, and food insecurity. Lastly, enhancing regional cooperation and collaboration among South Asian nations can facilitate shared resources and knowledge, helping to stabilize the region's economy and ensure a more robust recovery in the face of ongoing challenges.

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