

THE IMPACT OF COVID-19 PANDEMIC ON EDUCATION, LIVELIHOODS AND FOOD SECURITY STATUS

Policy Implications For Sub-Saharan
Africa (SSA)

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THE IMPACT OF COVID-19 PANDEMIC ON EDUCATION, LIVELIHOODS AND FOOD SECURITY STATUS: POLICY IMPLICATIONS FOR SUB-SAHARAN AFRICA (SSA)

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Abstract

The global response to the COVID-19 pandemic is at a critical juncture. It points to an eminent need to consider improvements in health care provision, education, food security and livelihoods across sub-Saharan Africa. National and Regional partners should move swiftly to develop policy measures that incorporate actions against the pandemic. In this policy paper, we will illustrate various trends that have emerged across the SSA region in the wake of the pandemic. The aggregate regional figures, startling as they might be, do not reveal the severity of the epidemic in localised areas in sub-Saharan Africa. The vulnerability of SSA countries is attributed to several factors, including but not limited to; fragility of health systems, low financing of testing and detection and low budget for response measures. The policy paper also highlights the role and importance of the media and communication pipelines to obtain information about the COVID-19 pandemic. Among challenges directly linked to inadequate health systems, misinformation has led to disbelief and distrust in the existence of the disease. SSA member states should coordinate efforts with all stakeholders (politicians, academia, private and informal sectors) at both local and regional levels to map communication pipelines in response to the COVID-19 pandemic. Cognisant of the impacts of COVID-19 on SSA countries, this policy paper attempts to layout policy implications, and recommendations focused on supply chains, trade and market access, food security and agricultural production, control measures to reduce the growing infection rates, media and information dispersion, the tourism industry, the education sector and measures that can support the health sector in SSA countries.

1 Introduction

Ongoing since early 2020, millions of lives and livelihoods have been destroyed because of the novel coronavirus pandemic, transport and logistics have also been disrupted, and many economies have shrunk. Addressing the impact of COVID-19 is a challenge that requires sustained commitment as well as planning and coordination from domestic, regional and international communities. The impacts of COVID-19 on SSA countries are not independent of the developments on a global scale, as such consideration of both global and regional factors should inform policy measures geared towards addressing the COVID-19 impacts. In the same line of thought, the African Union Commission (2020) argues that “The exogenous effects come from direct trade links between affected partner continents such as Asia, Europe and the United States; tourism; the decline in remittances from African Diaspora; Foreign Direct Investment and Official Development Assistance; illicit financing flows and domestic financial market tightening, etc. The endogenous effects occur as a result of the rapid spread of the virus in many African countries. On the other hand, they lead to a disruption of economic activities. This may cause a decrease in domestic demand and in tax revenue due to the loss of oil and commodity prices coupled with an increase in public expenditure to safeguard human health and support economic activities.”

At the time this pandemic was discovered, the world was worried for Sub-Saharan Africa. Almost all SSA countries are either in middle income or low-income categories. The added burden of COVID-19 on the pre-existing fragilities of the health infrastructure can worsen the health challenges already faced by these countries and may lead to increasing poverty, indebtedness, higher unemployment and causes other major problems within the SSA. The nature of the living standard in the region and the transmission method of the pandemic make it hard to control its spread. However, some African countries have immediately responded to the pandemic and followed the guidelines from the World Health Organization (WHO). Schools and Universities were closed with immediate effect. Also, public gatherings such as massive attendance at celebrations and concerts were restricted. Additionally, many other measures were introduced such as; face mask in public places and transport, hand washing and elbow greeting .

On the food security and agricultural front, the important factors to consider are availability, access, affordability, utilisation and guarantee of food at all times. According to Ayanlade and Radeny (2020), agriculture remains the main source of livelihood and food security for most of the rural population in SSA, with the climatic conditions favouring the cultivation of diverse crops. COVID-19 restricts the consistent supply of food within the SSA markets due to a slow down in production caused by physical containment measures.

Data illustrating the socio-economic impact of COVID-19 at the regional and national level remain limited for rigorous analysis of household impacts. However, movement restrictions will have

negative consequences for the transportation of goods and services, informal traders and the tourism sectors throughout the SSA region. For example, the import of staple foods such as rice was disrupted as a result of transport and logistics challenges brought about by the closure of ports of entry.

The rest of the report is organised as follows, Section 2 presents the key trends of the coronavirus pandemic in sub-Saharan Africa, and Section 3 sets out containment measures on the control of COVID-19 pandemic in SSA. In Section 4 and Section 5, we discuss the economic and health impacts respectively and in Section 6, we lay out the education impacts of COVID-19. Section 7 illustrates the importance of strategic communication during the pandemic in different economic sectors and Section 8 highlights some issues surrounding recovery post pandemic. Finally, Section 9 sets out the policy implications and recommendations.

2. Key Trends of the Covid-Pandemic in sub-Saharan Africa

On 31 December 2019, the Chinese authorities and the World Health Organization (WHO) officially announced the discovery of the novel COVID-19 disease. A month later a number of countries in the world confirmed the first cases and deaths due to COVID19. By the end of March 2020, almost all countries in the world confirmed at least one case. As things progressed, the disease became formally classified as a pandemic, and since the beginning, more than 125 million confirmed cases have been reported, with a total death count amounting to around 2.7 million people. Continental Africa confirmed the first case of COVID-19 in Egypt on the 14th of February 2020. On the 18th of March 2020, the first death case was registered in Burkina Faso.

From the aggregate COVID-19 data provided by John Hopkins University, several key characteristics of the COVID-19 pandemic emerge in the different blocks of SSA. For example, as of March 08, 2021, about 4 million confirmed COVID-19 cases were recorded in Africa, representing around 3.4% of the cases around the world. However, the number of confirmed cases must be interpreted with caution as they depend on how much a country tests and reports the results.

A critical and challenging issue in the control of COVID-19 is to know the exact number of infective subjects. In support of this view, Maurizio and Roberto (2020) asserted that current estimates of COVID-19 infection are significantly hampered by the difficulty to perform large-scale diagnostic tests, despite the current awareness that undetected carriers mostly cause the spread of the COVID-19 disease. On the other hand, death counts have a likelihood of excluding people who did not die in a hospital or who upon death, were not yet tested. From the SSA region, South Africa accounts for the highest number of cases and deaths, followed by Ethiopia and Nigeria.

Like in other countries from different regions of the world, the response for COVID-19 in a few countries located in the SSA region was also mixed and sometimes politicised. At the beginning of the pandemic, a few leaders doubted the existence of the virus. Conspiracy theories were also widespread, and even a few leaders and elites tried to propagate it¹. The public reaction at the beginning was mixed like in the rest of the world. The response from different heads of state, celebrities, religious leaders, and elites of the region were both hot and cold. Some governments as suggested above politicised the pandemic and leveraged it during the election period (Ethiopia, Uganda), while others tried to their best to halt the pandemic at bay (South Africa). Overall, regardless of the measures in place and some mixed method of implementation, still Africa has a higher ratio of death to total confirmed cases than other regions (save for South America), which is much higher than the world average.

Table 1: death and recovery rate per confirmed case

no	Region	cases	Death	recovery	death/cases	recovery/cases
1	Afrika	4397524	116282	3934778	2,644%	89,48%
2	Asia	31636779	451956	28058498	1,429%	88,69%
3	Europa	41876460	956945	29733976	2,285%	71,00%
4	North America	36901640	838829	28618411	2,273%	77,55%
5	South America	22591537	597374	20205818	2,644%	89,44%
6	Oceania	60156	1153	34700	1,917%	57,68%
7	world	1,37E+08	2962554	1,11E+08	2,155%	80,45%

Source: Authors compilation and calculations (fatality) using publicly available data from John Hopkins Hospital, date of computations 12.04.2020

2.1 Southern Africa

Within the Southern African block, South Africa continues to report the highest number of confirmed (1,559,113), active (21, 401. 356) and death (53, 356) cases of COVID-19 on the African continent. Figure 1 illustrates the time series of South Africa independently from the Southern African block. The fatality rate of South Africa is amongst the highest within the SSA region at 3.42%.

¹For example, the late Brundi President Pierre Nkurunziza who died of what the government said was heart failure but speculation ran rife that he had contracted coronavirus, claimed God had spared the country from its ravages and undertook few/no measures (<https://www.africanews.com/amp/2020/12/18/burundi-ex-president-pierre-buyoya-dies-from-COVID19/>).

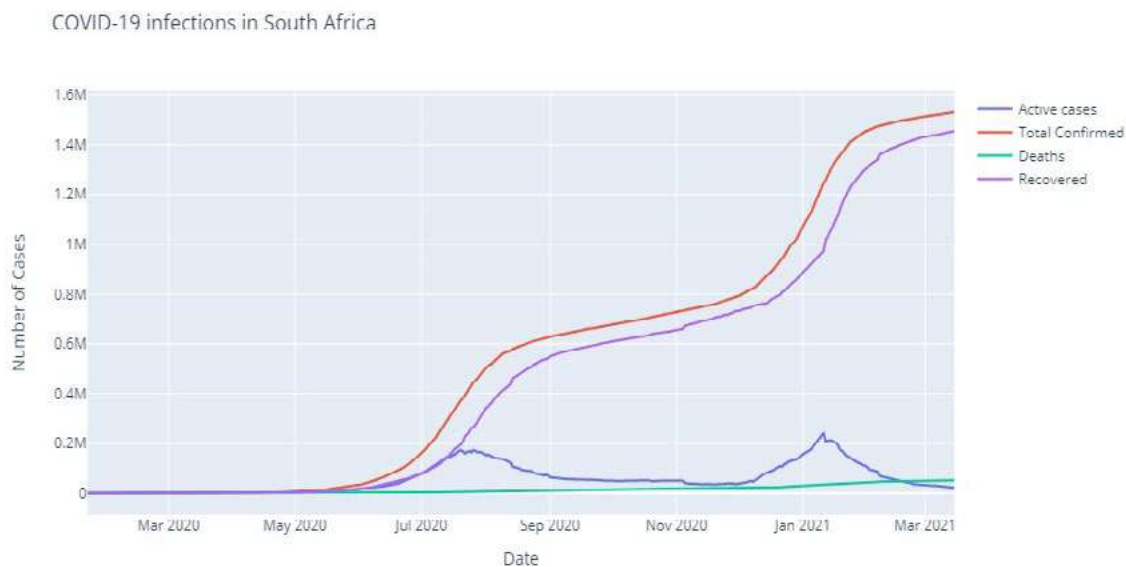


Figure 1: COVID-19 cases in South Africa

The country was amongst the first in Africa to impose several travel restrictions, including the closure of half of the country’s land ports. More countries in the region imposed similar travel restrictions to contain the spread of the pandemic. Table 2 below reports the number of death, active, and confirmed cases in Southern Africa as of the 12th of April 2021 and the respective mortality rates.

Table 2: COVID-19 cases (confirmed, deaths, recovered, active) in Southern African Countries and the corresponding mortality rates

Southern Africa	Confirmed cases	Death cases	Recovered cases	Active cases	Fatality rate
South Africa	1,559,113	53,356	1,484,356	21,401	3.42%
Botswana	43,444	663	38,923	3,858	1.53%
Lesotho	10,709	315	5,028	5,366	2.94%
Namibia	45,787	575	43,721	1,491	1.26%
Eswatini	32,318,393	669	17,682	42	3.64%

Source: Authors compilation and calculations (fatality) using publicly available data from John Hopkins Hospital, date of computations 12.04.2020

Figure 2 illustrates the trends of COVID-19 for each Southern African country, and the rest of this report shall follow the same pattern of reporting each region of SSA. The figure in panel (a) shows that the number of daily new cases in all SSA countries is constantly on the rise except for Lesotho, which reported a drop in the number of active cases between the 9th April and 12th of April 2021. Panel (b) and (d) depict increases in the number of recovered individuals and deaths for all the

countries in Southern Africa. South Africa, followed by Lesotho, has a high number of active cases, as reported in Table 2 and depicted by panel (c) of Figure 2. While Lesotho was the last country in Africa to have reported no cases of COVID-19 at the onset of the pandemic, it currently reports the lowest confirmed cases in Southern Africa, and the third highest fatality rate (2.94%) in Southern Africa (where Eswatini reported the highest fatality rate of 3.64%).

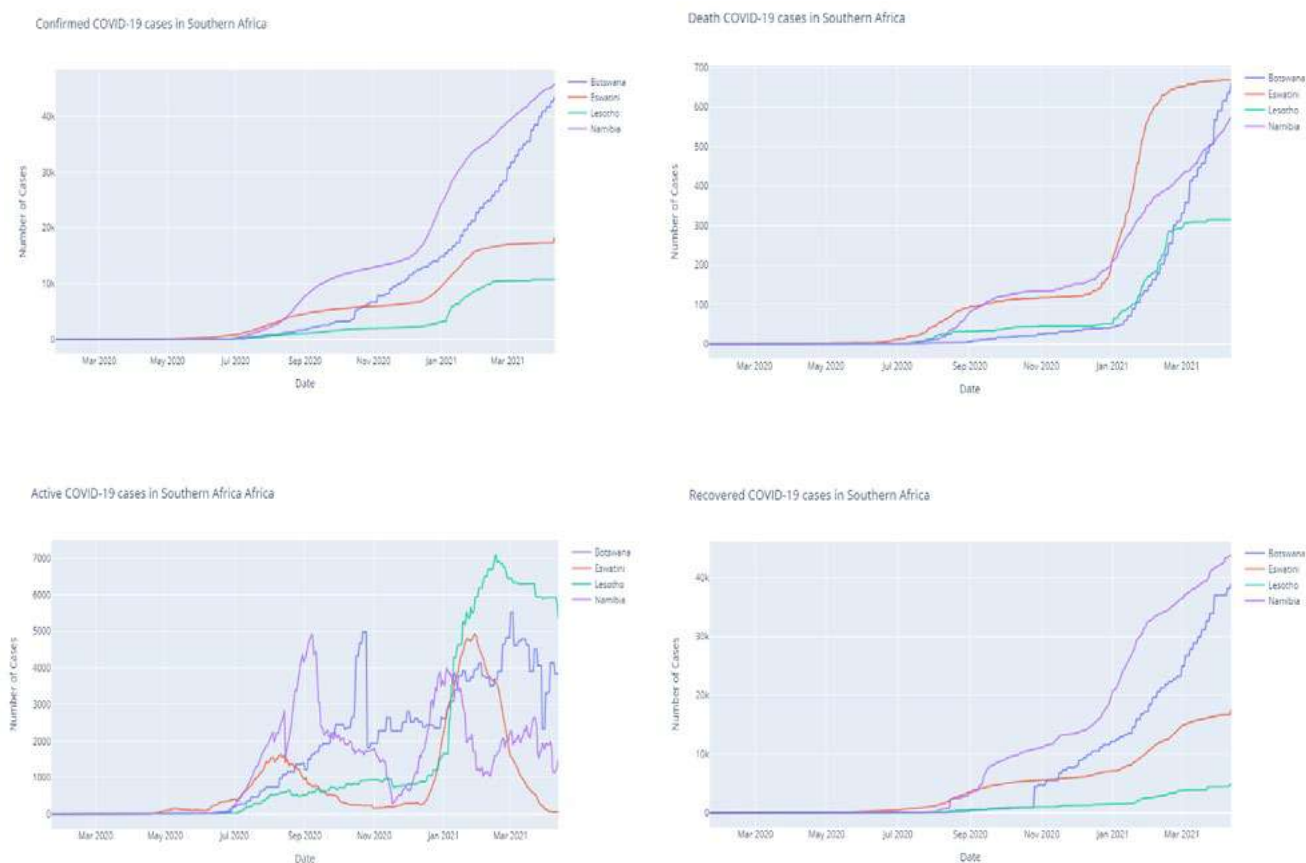


Figure 2: COVID-19 cases in Southern Africa

2.2 Western Africa

Nigeria, the largest economy in West Africa, recorded the highest number of confirmed COVID-19 cases and deaths with 163,837 and 2,061 respectively. The confirmed cases were diagnosed from a testing sample of over 1, 838, 170, which is very small relative to the population of over 208 million. The highest fatality rates were reported by Liberia, Mali, Niger and Gambia with 4.16%, 3.45%, 3.72% and 3.00%, respectively. Guinea, Ghana, Cabo Verde, and Togo have computed fatality rates of less than 1.00% (recorded in Table 3 as 0.65%, 0.83%, 0.96% and 0.96%, respectively).

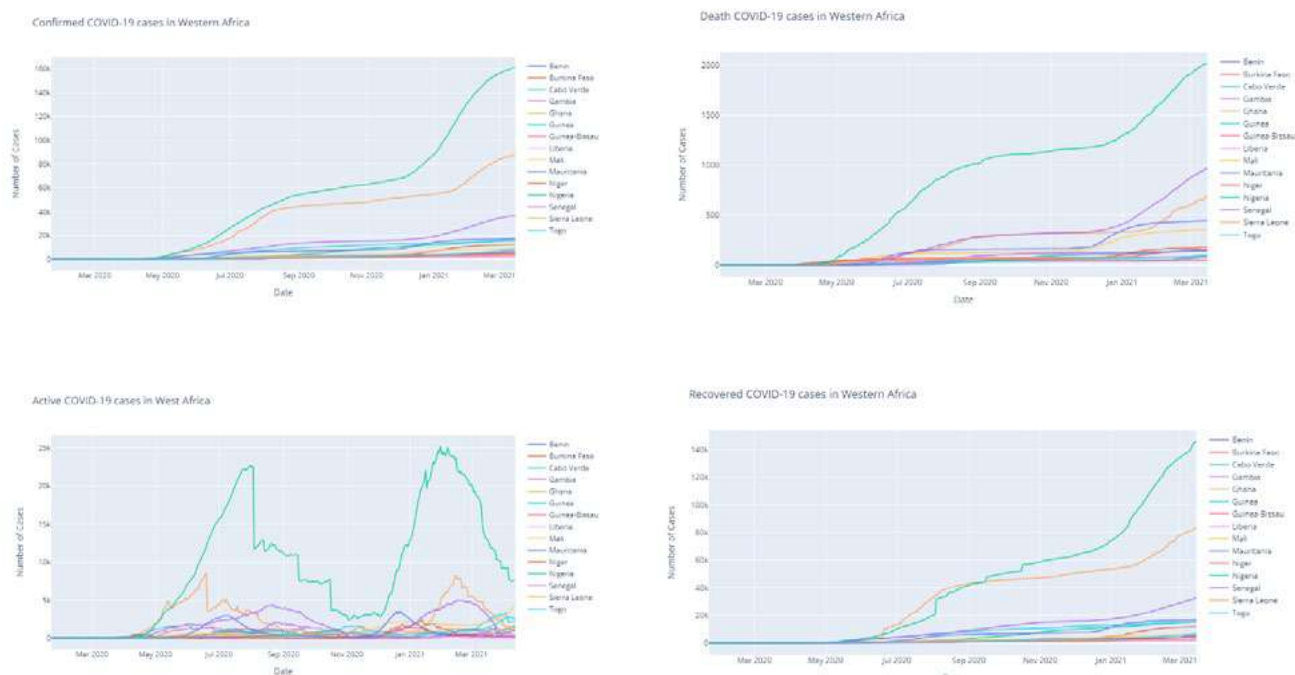


Figure 3: COVID-19 cases in Western Africa

Table 3: COVID-19 cases in Western African Countries and the corresponding mortality rates

West Africa	Confirmed cases	Death cases	Recovered cases	Active cases	Fatality rate
Benin	7,515	93	6,452	970	1.24%
Burkina Faso	12,989	153	12,627	209	1.18%
Cabo Verde	19,110	184	17,399	1,527	0.96%
Gambia	5,602	168	5,145	289	3.00%
Ghana	91,206	754	89,092	1,414	0.83%
Guinea	21,032	136	18,613	2,283	0.65%
Guinea-Bissau	3,680	66	3,069	545	1.79%
Liberia	2,042	85	1,899	58	4.16%
Mali	12,002	414	7,166	4,422	3.45%
Mauritania	18,035	450	17,373	212	2.50%
Niger	5,081	189	4,760	132	3.72%
Nigeria	163,837	2,061	154,177	7,599	1.26%
Senegal	39,465	1,079	38,215	171	2.73%
Sierra Leone	4,008	79	2,831	1,098	1.97%
Togo	12,034	669	9,303	2,615	0.96%

Source: Authors compilation and calculations (fatality) using publicly available data from John Hopkins Hospital, date of computations 12.04.2020

2.3 Central Africa

As of the 12th April 2021, Angola, Cameroon and the Democratic Republic of Congo reported the largest number of confirmed cases in central Africa. However, Chad reported the highest computed fatality rate of 3.60%, as shown in Table 4. As an existing health challenge within the region, malaria containment has been found to be impacted by restrictions on movement and large gatherings that arose with COVID-19.

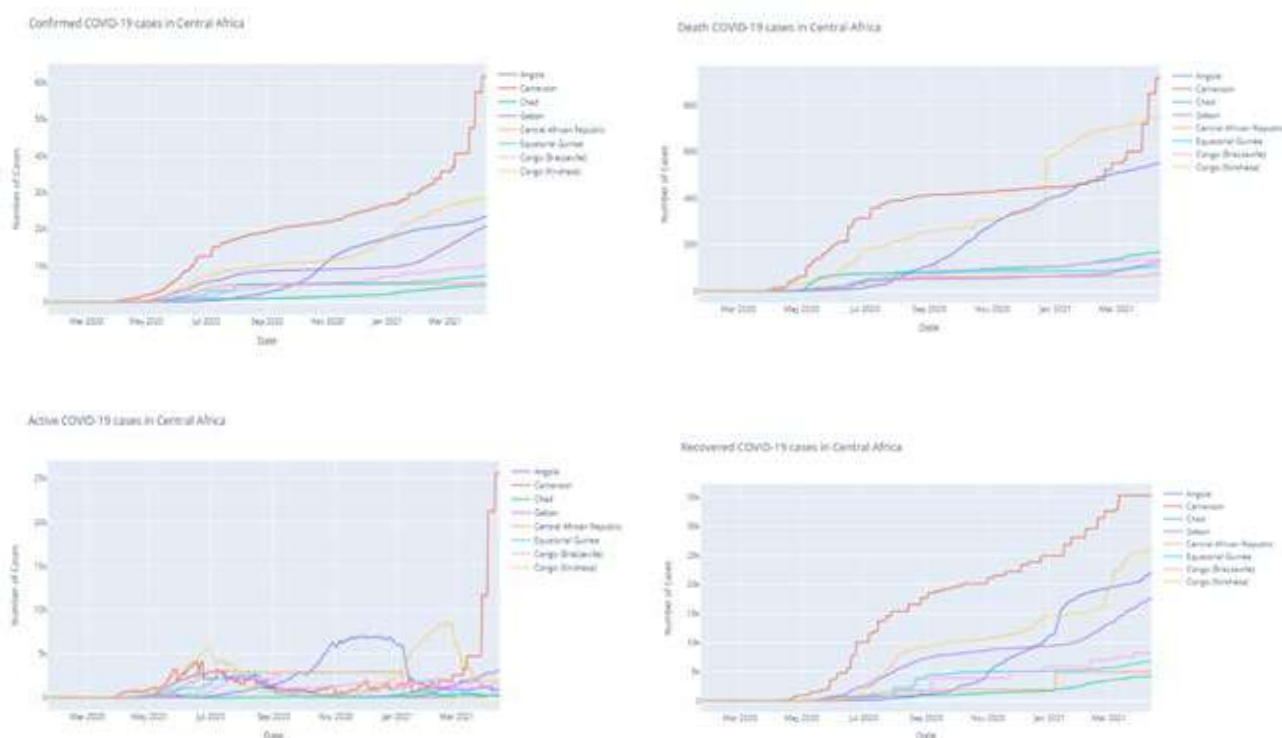


Figure 4: COVID-19 cases in Central Africa

Table 4: COVID-19 cases in Central African Countries and the corresponding mortality rates

Central Africa	Confirmed cases	Death cases	Recovered cases	Active cases	Fatality rate
Angola	23,549	554	22,093	902	2.35%
Cameroon	61,731	919	35,261	25,551	1.49%
Chad	4,641	167	4,298	176	3.60%
Gabon	20,971	129	17,762	3,080	0.62%
Central African Republic	5,491	74	5,056	361	1.35%
Equatorial Guinea	7,219	106	86,799	314	1.47%

São Tomé and Príncipe	No data	No data	No data	No data	
Republic of the Congo	No data	No data	No data	No data	
Congo (Brazzaville)	10,084	137	8,208	1,739	1.36%
Congo (Kinshasa)	28,542	745	25,841	44,578	2.61%

Source: Authors compilation and calculations (fatality) using publicly available data from John Hopkins Hospital, date of computations 12.04.2020

2.4 Eastern Africa

Ethiopia and Kenya were the most affected countries in the Eastern area of the African continent. Figure 4 below shows that Tanzania is not COVID-19 free. An ECA report (2020) pointed out that most of the Eastern African countries spend less than 50 USD per capita on health, which is less than half of the African average at 114 USD per capita per year (2017 data). This means less financing for health infrastructure and development.

On the 8th of June 2020, it was announced that Tanzania was COVID-19 free. The misinformation led opposition parties in Tanzania to demand the Government to produce official reports on the COVID-19 outbreak.

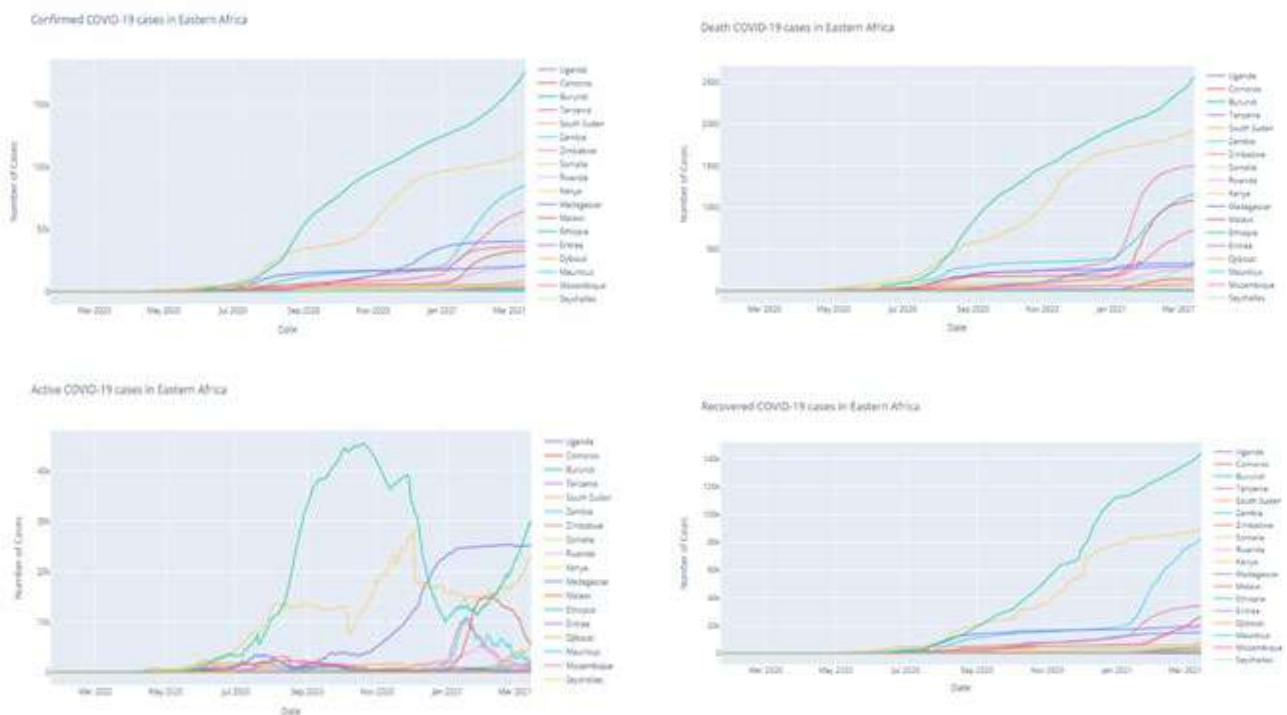


Figure 5: COVID-19 cases in Eastern Africa

Table 5: COVID-19 cases in East African Countries and the corresponding mortality rates

East Africa	Confirmed cases	Death cases	Recovered cases	Active cases	Fatality rate
Kenya	146,156	2,368	99,210	44,578	1.62%
Ethiopia	230,944	3,208	171,980	55,756	1.39%
Zambia	90,064	1,227	88,077	760	1.36%
Zambia	90,064	1,227	88,077	760	1.36%
Zimbabwe	37,307	1,542	34,901	864	4.13%
South Sudan	114	754	10,148	119	1.10%
Tanzania	509	21	183	305	0.19%
Burundi	3,154	6	773	2,375	0.19%
Comoros	3,789	146	3,577	66	3.85%
Uganda	41,174	337	40,779	58	0.82%
Djibouti	9,975	100	8,184	1,691	1.00%
Seychelles	4,444	25	4,161	258	0.56%
Mozambique	68,792	791	No data	No data	1.15%
Mauritius	1,193	15	797	381	1.26%
Eritrea	3,466	79	3,196	260	0.29%
Malawi	33,859	1,132	31,572	1,155	3.34%
Madagascar	28,541	506	24,105	3,930	1.77%
Rwanda	23,535	316	21,272	1,947	1.34%

Source: Authors compilation and calculations (fatality) using publicly available data from John Hopkins Hospital, date of computations 12.04.2020

3. Containment measures on the control of the COVID-19 pandemic in SSA

Haider et al., (2020) argued that drawing conclusions about the impact of lockdown measures on COVID-19 transmission is difficult for several reasons. First, the true pattern of the epidemic cannot be readily deduced from the number and pattern of reported cases because many infections are undetected, and some may be unreported. The effectiveness of the lockdowns and containment measures will depend upon how stringent countries are in implementing them as well as the citizens' adherence and/or compliance to these COVID-19 control strategies.

3.1 Initial lock-down and Containment measures per region

a. West Africa

All Western African countries suspended international passenger flights relatively early in the pandemic. Land and sea border crossings were also restricted, with exceptions made for the continued passage of goods and commodities. Nigeria and Ghana implemented targeted lockdown measures to selected areas within the country. Some western African states set up coordinated arrangements such as a High-Level COVID-19 Task Force. As a response plan, Benin has modernised ten existing health establishments to transform them into COVID-19 treatment centres, and also engaged capacity building of the treatment centres staff as well as communication with communities.

b. Southern Africa

Southern African countries such as Botswana declared a State of Emergency from 2 April 2020 and extended it for the next six months. Some of the measures put in place during the lockdowns included permits to travel across regions within the country. The country was divided into nine containment zones that were used to restrict movements by specific areas; travel across zones required a government authorisation. Lesotho also declared a National Emergency on the 28th of March 2020, restricting all movements and closing all non-essential services. Namibia declared a State of Emergency on the 17th of March 2020 with the following mitigation techniques: returning residents and nationals being self-quarantined, mandatory quarantine in isolation facilities for symptomatic cases, and bans on gatherings of more than 50 people. In addition, South Africa's President Cyril Ramaphosa declared a national state of disaster in response to the pandemic, closing the country's borders and shutting down 35 land ports and two seaports on 16 March.

c. Eastern Africa

In Ethiopia passengers with no negative COVID-19 test results (done up to 120 hours before) are placed in a mandatory quarantine at several designated sites, tested and then self-isolated at home. Other Eastern African countries implemented Nationwide curfew for a certain duration, restricted

domestic travels to those only seeking/providing essential services and required mandatory quarantine at Government facilities for travellers or those who had contact with symptomatic people. The Tanzanian government departed from the rest of the region and began lifting restrictions and removed mandatory quarantine for international arrivals in May 2020.

d. Central Africa

To curb the infections, all Central African states closed their land and sea borders and limited their international and domestic air links. The population was encouraged via television and radio stations to wash their hands with soap and use a face mask before entering supermarkets and public buildings as well, end the handshake (to name a few recommendations). Gathering of more than 50 persons was prohibited in Cameroon.

Gabon set up COVID-19 screening laboratory with a testing capacity of 10 000 tests per day to deploy its massive testing strategy. If well managed and funded, the benefits of such a laboratory would later benefit the countries within the region and continent.

3.2 Assessment of the impact of lockdowns in a sample of SSA countries relative to Italy

In this subsection, we compared the effectiveness of local lockdowns in controlling the spread of COVID-19 in a regional-representative sample of sub-Saharan African countries (Botswana, Nigeria, Cameroon and South Africa). We investigate confirmed and death cases during the lockdown periods, and proceed to make a comparison of a sample of SSA countries with the lockdown measures in Italy as it was one of the world's worst hit at the onset of the global coronavirus pandemic.

Evidently, the lockdown measures seem to suggest a positive impact on reducing the number of confirmed cases in Botswana, South Africa and Italy. In the case of Cameroon, it is not very clear from the illustrations that the lockdown led to a decline in the number of confirmed cases, and as such, all the time series graphs need to be interpreted with caution.

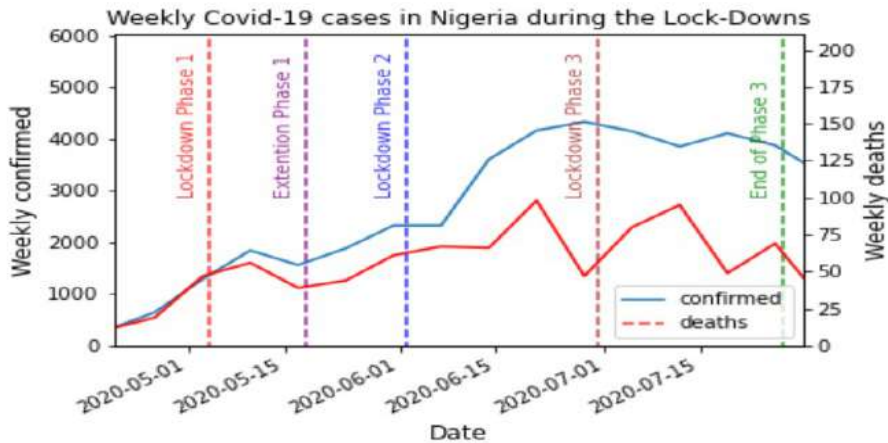


Figure 6: The impact of Nigeria’s first lockdown on Covid-19 cases

The first phase of the lockdown was announced by the president on the 27th April 2020 with effect from 4th May to 17th May. The first phase was extended from 18th May to 1st June 2020. Thereafter, the second phase of the lockdown began on the 2nd June 2020 and ended on the 29th June 2020. Phase three was announced on the 30th June 2020 and lasted for four weeks, ending on the 27th July 2020. As shown by Figure 6, which illustrates the lockdown time series of Nigeria, the modest hump shape took effect around 15th June to the 1st July 2020, signifying a decline in the number of deaths and confirmed COVID-19 cases.

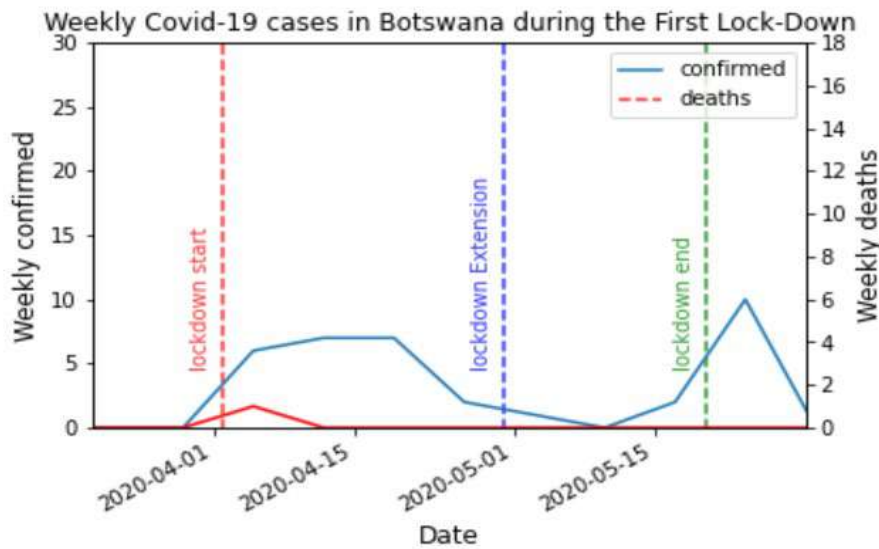


Figure 7: The impact of Botswana’s first lockdown on Covid-19 cases

The initial 28 day lockdown in Botswana started on the 2nd of April after confirming the first COVID-19 cases. The lockdown was extended from the 30th April until the 7th May 2020. The second extension took place on the 8th of May 2020 until 20th May 2020 at midnight. From the time series in Figure 7, there was a decline in the number of deaths and confirmed COVID-19 cases between the start of the lockdown and the extension. The time series illustrates a rise in the number of cases around the end of the lockdown when measures restricting movement were eased.

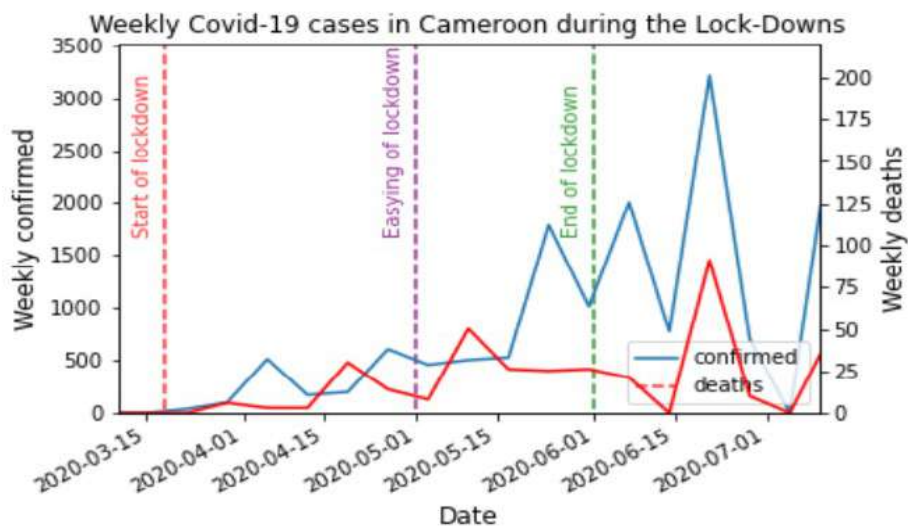


Figure 8: The impact of Cameroon’s first lockdown on Covid-19 cases

The Lock down started in Cameroon on Wednesday 18th March 2020 through a presidential decree by His Excellency Paul Biya. From the 1st of May 2020 there was an easing of the lockdown (for example the initial limit placed on the carrying capacity of public transport was removed and reset to the allowed carrying capacity before the lockdown), and bars and restaurants were allowed to open from 6pm. According to Figure 8, it can be seen that around the 1st of May 2020 (beginning of the easing of the lockdown), there was a spike in the number of deaths and confirmed cases. The lockdown ended on the 1st of June 2020 with the reopening of schools.

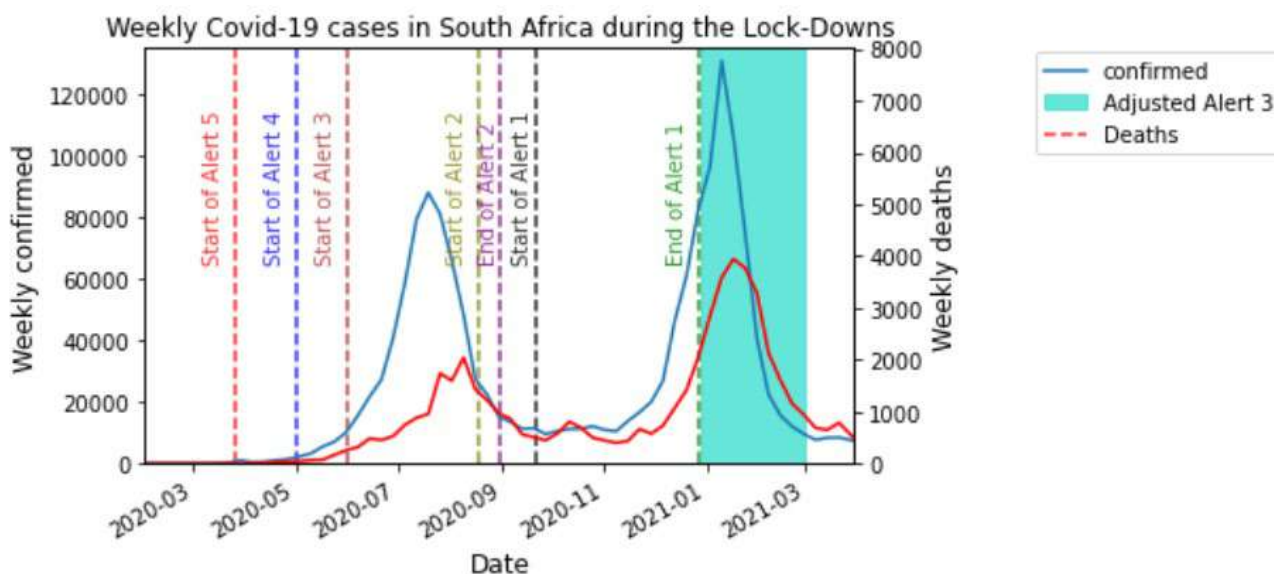


Figure 9: The impact of South Africa’s first lockdown on Covid-19 cases

On the 26th of March 2020 South Africa introduced Alert Level 5 lockdown restrictions which ended on the 30th of April 2020. Borders were shut down to international travellers, schools were closed, alcohol was banned, and the people were told to stay at home. From the 1st of May 2020 to 31st May 2020 the lockdown was gradually eased through the implementation of Alert Level 4. Alert Level 3 was introduced on the 1st of June 2020 and ended on the 17th August 2020. The time series in Figure 9 depicts a decline in the number of confirmed and death cases between Alert Level 3 and Alert Level 2. Another decrease in the number of cases was obtained between Alert Level 1 and the Adjusted Alert Level 3, which was implemented from the 29th December 2020 to February 28th 2021.

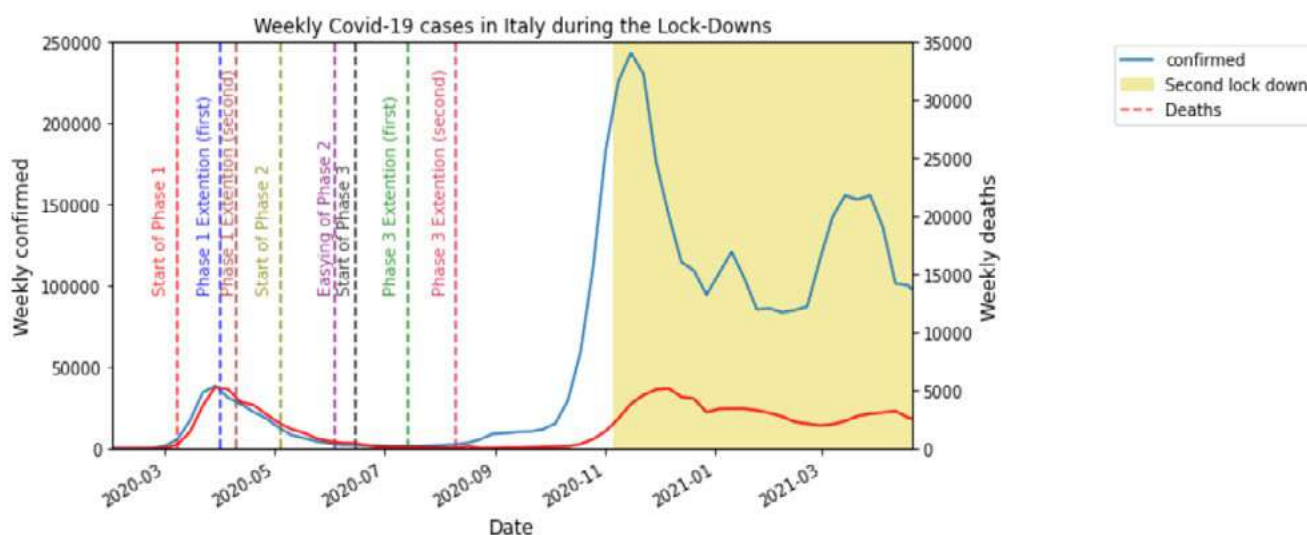


Figure 10: The impact of Italy’s first lockdown on Covid-19 cases

We proceed to take Italy as a sample country in Europe in order to draw comparisons with the sample SSA countries (Botswana, Nigeria, South Africa and Cameroon). As illustrated in the time series in Figure 10, the number of deaths and confirmed cases started to decline around the implementation

of the extension of Phase 1. However, as restriction measures were eased between Phase 3 extension and the beginning of the second lockdown there was an increase in the number of confirmed cases and deaths.

In conclusion, in order to study the impact of lockdowns on COVID -19 cases, we phrase the question 'Have Lockdowns worked in SSA countries to Control COVID-19?'. The time series analysis of the sample SSA countries by itself is not conclusive of the impacts of the full impact of lockdowns on COVID-19 cases. It is only indicative of the historical trends in and around the dates of implementation of the lockdowns. The graphs do not prove a direct cause-and-effect relationship. Further robust analysis needs to be carried out such that it takes into account the limitations in COVID-19 testing and data collection in many of the SSA countries.

4. Economic Impacts

A COVID-19-triggered economic downturn is prevalent within the SSA region hence the question "What economic policies should a welfare-maximising government pursue to deal with the COVID pandemic?" SSA countries have responded by implementing a combination of emergency fiscal and monetary policy actions with many central banks in the region employing measures such as the reduction of interest rates.

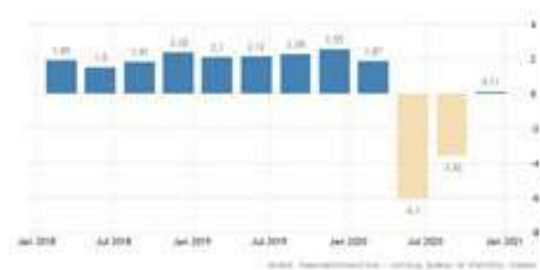
SSA has the highest rate of people living below the poverty line in the world. The World Bank estimated a decline in global GDP per capita growth of 5% and pointed out that this would increase the number of Africans living below the international poverty line of \$1.90 (2011 PPP) by 26 million. The ECA, elucidated that 71% of the population in Africa works in the informal sector and consequently, due to lockdowns and social distancing, millions of people have lost their livelihoods, hence a need for social protection.

4.1 GDP Contraction

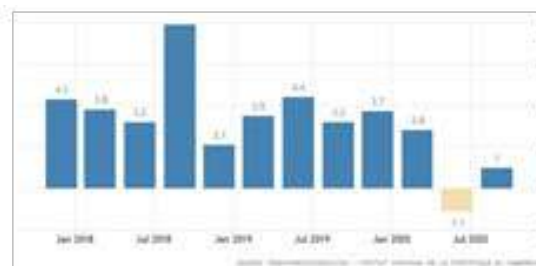
"The occurrence of the COVID-19 pandemic has highlighted the limited revenue mix and pre-existing structural economic deficiencies of SSA economies"

SSA countries implemented lockdown measures which forced many factories, mines, shopping malls, and oil companies to close. After the lockdowns and closure of factories, nearly all industries experienced a massive drop in output and this led to a contraction of their constituent contributions to their sectors of the economy (through GDP). In Figure 11 below it is evident that SSA countries experienced negative GDP growth rates during the period of 2019/2020 and this can be attributed to reduction in production levels of various economic sectors as COVID-19 disrupted demand and supply. Moreover, many of the SSA countries are resource/mineral-based/dependent economies. For example, Nigeria's economy is largely oil dependent so much so that petroleum exports account

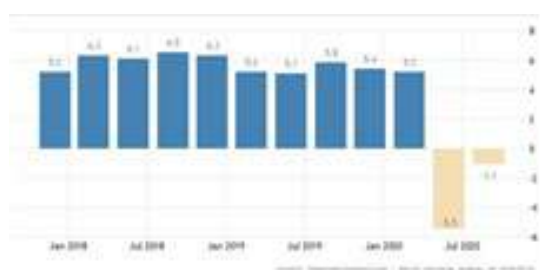
for 10% of GDP and exceed 80% of export revenue. In 2020 alone, Nigeria saw the price of oil dropping by more than 50%². Botswana’s mining industry contributes a significant amount to the GDP more than any other sector. A shutdown of international airports meant that investors and mineral buyers could not travel to buy the mineral commodities in such economies and sales were postponed for the duration of the lock downs hence a sharp cut in mineral revenues.



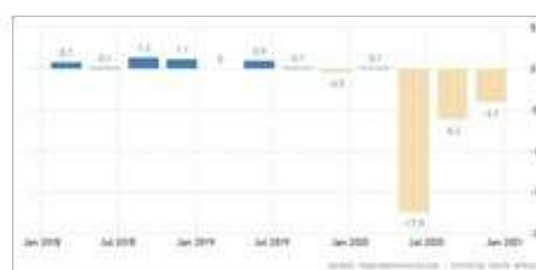
(a) Nigeria q-o-q GDP Growth Rate



(b) Cameroon q-o-q GDP Growth Rate



(c) Kenya q-o-q GDP Growth Rate



(d) South Africa q-o-q GDP Growth Rate

Figure 11: Annual GDP Growth Rate for sample sub Saharan African Countries

A key revelation of the GDP contractions for many economies of the SSA countries is that the COVID-19 pandemic has highlighted the lack or limited revenue mix. The pre-existing structural deficiencies were highlighted and exposed more by the COVID-19 pandemic. Amongst these challenges are the inadequate structures to unlock revenue from non mineral oriented industries (such as manufacturing and agriculture), an underdeveloped digital economy and high levels of external debts. Therefore this key revelation should be taken to be a path paver to seriously advocate and plan for structural transformation in SSA economies.

4.2 Increasing levels of Unemployment

Schwettmann (2020) pointed out that close to 90% of the sub-Saharan African labour force works in the informal economy. Informal economy workers, who are mostly self-employed, are particularly

² [How COVID-19 has Impacted Africa’s Wealthiest Countries by GDP - IT News Africa - Up to date technology news, IT news, Digital news, Telecom news, Mobile news, Gadgets news, Analysis and Reports](#)

vulnerable to health shocks since they are mostly not covered by social protection systems and earn their livelihood from low and/or irregular incomes.

The lack of insurance coverage for informal sector workers means that they are highly susceptible to the immediate loss of income when their businesses close down due to COVID-19 restrictions. Moreover, these temporary business closures of the informal sector effects on business owners such as hawkers, marketplaces owners and street sellers of second clothes means that owners may have to replace lost income by selling their business assets.

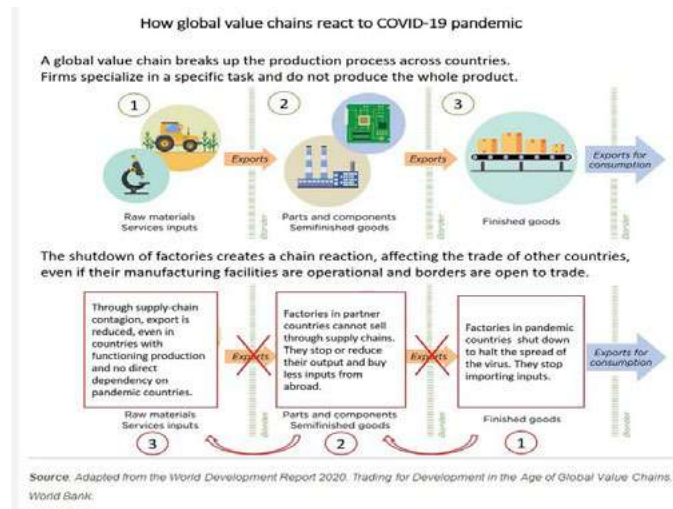
Naidoo (2020) stated that across SSA, 53% of the labour force is employed in agriculture, as per the latest available data from the World Bank's World Development Indicators (WDI). Therefore disruptions to supply chains as a result of COVID-19 lockdowns, could lead to a loss of earnings for agricultural workers, and the cut in employment hours could ultimately lead to cut off the farm workers.

The COVID-19 pandemic has uncovered the precarious interdependence of health, employment and economic activities. The intertwined interdependencies have also shown the structural inadequacies of social protection policies and packages for the masses losing their employment during pandemic outbreaks.

4.3 Supply chains, market access and trade

SSA countries make up a high proportion of primary commodity exports and imports and are therefore vulnerable to international price and demand shocks related to these commodities. According to the FAO report (2020), African countries make up 65% of high commodity-export, low-commodity-import dependent and 44% of high commodity import and export-dependent countries (HE-HI). As such, it was inevitable that COVID-19 will significantly disrupt the manufacturing and production process, which has led to pressure on supply chains.

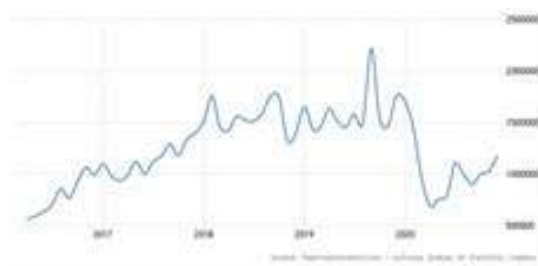
Value chains involve production where the output of one firm in one country is used by another firm in another country to produce a more complex product which in turn may be used by another firm for further processing (IDE-JETRO et al. 2019). SSA's total participation in the global value chain (GVC) has declined substantially since the outbreak of the COVID-19 pandemic. For example, in Cameroon, some tomato farmers who sold their produce both on the local market and in other countries of the sub-region found themselves with surpluses that could not be absorbed by local consumers, as their access to regional markets was partially shut down. Figure 12 depicts the chain reaction of disruptions of COVID-19 on the global value chain. Raw materials and services inputs are inhibited from being exported to markets where production processing takes place and consequently, export for consumption is impeded. The closure of factories (due to the lack of intermediate inputs) not only results in job losses but also has an adverse effect on the contribution on a country's GDP.



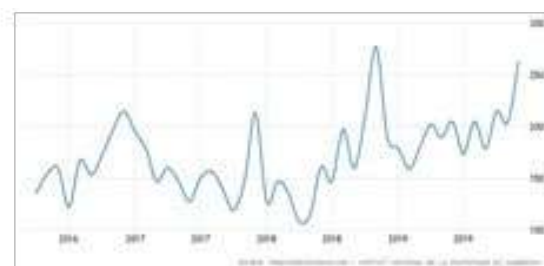
Source: International Trade Center, Blog: *The Great Shutdown: How COVID-19 disrupts supply chains.*

Figure 12: COVID-19 disruption of value chains

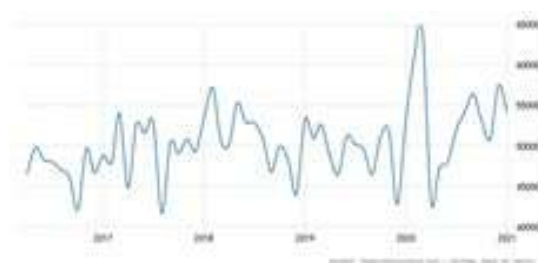
Solleder (2020) stated that African exporters may lose over 2.4 billion USD in global manufacturing value-chain exports due to the shock caused by factory shutdowns in the G3. About three quarters of this loss is caused by the temporary disruption of the supply chain linkages with the EU, while the remaining quarter of the reduction is caused by the shutdowns in China and the United States. Panels (a)-(d) in Figure 13, all show a decline in the level of exports for a sample of SSA countries (Nigeria, Cameroon, Kenya and South Africa) since the out-break of the COVID-19. This is a clear indication that the break in the chain flow of inputs, raw materials, and intermediate inputs all led to a reduction in country's outputs.



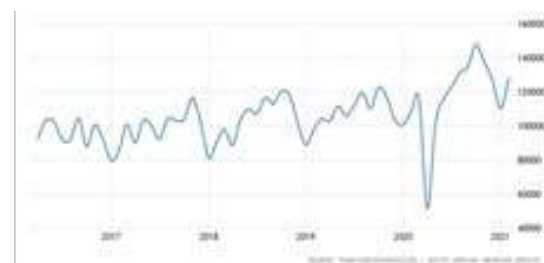
(a) Nigeria Exports 2005-2020



(b) Cameroon Exports 2005-2020



(c) Kenya Exports 2005-2020



(d) South Africa Exports 2005-2020

Figure 13: Exports 2005-2020

Trade could play a vital role in the economic recovery of poor/middle income countries. The disturbance of global value and supply chains extends to the delivery of health supplies, and it is obvious that COVID-19 containment and restriction measures halt the export and import of crucial health material. Since African countries are dependent on global trade, the restrictions on export material from exporting countries would hugely affect not only its economy but also its health sector. Moreover, these restrictions could also lead to a reduction in the commodity price, which further reflected in the negative or very low economic growth for non-oil exporter countries. However, the projection from the IMF and World Bank seems to suggest that the global trade, especially that of developing countries, will slowly rise up from 2021. The impact on SSA can be summarised into the following bullet points:

- The restriction of trading partners reduces the commodity export by many African countries.
- Since the import of these countries is composed mainly of capital goods, the reduction in import is not as strong as the reduction in export which in turn increases the trade deficit, which is already negative.
- The reduction in the price of the commodity could be reflected in the term of trade as well as the reduction.

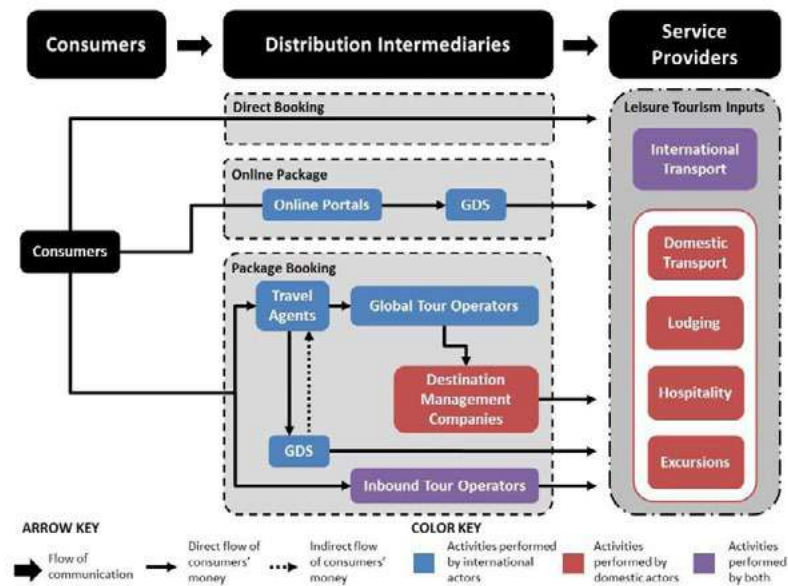
4.4 Tourism

Without a doubt, both intra and international tourism in the SSA region act as a catalyst for wider and more rapid economic growth and socioeconomic integration. The COVID-19 pandemic adds an extra hurdle to the already existing challenges faced by the tourism sector in sub Saharan Africa; physical containment measures of the COVID-19 virus such as lockdowns, social distancing, and limitations on travel have significantly affected tourism industries of many SSA countries. In early March, the UN World Tourism Organisation (UNWTO) revised its 2020 prospects for international tourist arrivals to a negative growth of 1% to 3%, translating into an estimated loss of USD 30 billion to USD 50 billion in international tourism receipts.

The Travel and Tourism Competitive Index report (2019) indicated that Southern Africa is the most competitive of the sub regions of SSA but experienced slow growth in competitiveness over the past two years. Containment measures such as social distancing, quarantine rules, and ban on travels (especially the shut down of ports of entry and air travel) has led to decreased demand for services like leisure travel and hotels within the SSA region.

The largest African economies in terms of travel tourism contribution to GDP in 2019 were Egypt (USD 29.5 billion), South Africa (USD 24.6 billion), and Nigeria (USD 18.1 billion). The World Travel and Tourism Council's Annual Research Report (2020) has indicated that tourism is supporting an estimated 330 million jobs globally and 19.9 million jobs in sub Saharan African region (6.4% of total employment). There is a variance of the economic consequences of tourism in different countries

and the subregions of SSA. While we have shown the significance of the tourism sector, the hurdles presented by COVID-19 can lead to drastic cuts in GDP contribution of tourism, if policymakers do not recognise and design strategies to alleviate many challenges for firms and other stakeholders in the tourism value chain shown in Figure 14.



Source: *Tourism global value chains and Africa* drawn by Jack Daly and Gary Gereffi (2017).

Figure 14: Tourism value chain

The tourism value chain in Figure 14 indicates how various economies interact to bring about tourism. Notable from the diagram is the estimate of the number of jobs created along the tourism value chain. The COVID-19 restrictions would limit consumers from accessing the distribution intermediaries, and booking tourism packages, and in turn, service providers in inbound countries will not make any proceeds.

Table 6 depicts the significance of tourism to GDP for a sample of SSA countries all ranging above 2.5% of the GDP. Tourism also has significant contributions to the employment rates in the SSA countries (for example it accounts for 10.9%, 11.1% and 12.6% of employments in Botswana, Tanzania and Lesotho respectively). The majority of the tourism related jobs fall under the informal sector and are low-skilled in nature. What is worrying is that the UN (2020) asserts that up to 20 million jobs in the formal and informal sectors in Africa could be lost because of COVID-19. Seychelles has the highest contribution of tourism to GDP (40.5%) and the employment and export share are at 43.8% and 41.4% respectively. This clearly shows that any restrictions in movement, flight bans and border closures will have devastating consequences for the economy and livelihoods in Seychelles. This is exacerbated by the fact that International spending accounts for 90% of the tourism receipts

whereas domestic spending accounts for 10%, (showing the heavy reliance on access to an international pool of tourists).

Table 6: Global Economic Impact of Tourism on SSA countries

Global Economic Impact of Tourism					
Country Name or Region	Contribution of Travel and Tourism to GDP	Contribution of Travel and Tourism to Employment	Domestic Spending	International Spending	Visitor Spending share of total exports
Sub Saharan Africa	6.5%	6.4%	59%	41%	8.5%
G20	9%	9.5%	77%	23%	6%
Botswana	12.6%	10.9%	30%	70%	16.1%
South Africa	7%	9.1%	55%	45%	8.6%
Lesotho	12.3%	12.6%	93%	7%	2.1%
Zambia	7%	7.2%	43%	57%	10%
Zimbabwe	6%	6.2%	80%	20%	4.4%
Eswatini	5.5%	5.8%	95%	5%	0.5%
Malawi	6.7%	6.8%	91%	9%	2.2%
Tanzania	10.7%	11.1%	32%	68%	32.7%
Uganda	5.6%	5.8%	32%	68%	16.6%
Togo	7.5%	7.7%	25%	75%	15.1%
Rwanda	10.2%	10.4%	40%	60%	10.4%
Seychelles	40.5%	43.8%	10%	90%	41.4%
Republic of Congo	2.8%	56.5%	77%	23%	0.7%
Nigeria	4.5%	4.7%	80%	20%	4.1%

Ghana	5.0%	5.2%	66%	34%	4.1%
Guinea	4.2%	4.3%	99%	1%	4.1%
Gambia	17.7%	18.2%	28%	72%	71.6%
Chad	3.7%	3.8%	71%	29%	1.9%
Central African Republic	5.3%	5.4%	83%	17%	5.3%
Cape Verde	37.2%	39.3%	12%	88%	50.8%
Burundi	3.5%	3.5%	94%	6%	4.1%
Angola	3.1%	2.2%	73%	27%	1.3%
Algeria	5.7%	6.0%	97%	3%	0.5%
Benin	5.1%	5.3%	58%	42%	4.7%
Burkina Faso	3.3%	3.4%	52%	48%	4.5%
Ethiopia	6.7%	7.0%	30%	70%	49.5%
Cameroon	8.0%	8.3%	76%	24%	9.3%
Namibia	14.7%	15.4%	74%	26%	8.1%
Mozambique	6.6%	6.7%	72%	28%	4.6%
Niger	5.2%	5.3%	75%	25%	7.0%
Madagascar	11.8%	12.2%	19%	81%	34.3%

Source: Compilation by authors using the data from World Travel and Tourism Council

In East Africa, Zimbabwe receives the highest share of international arrivals, followed by Mozambique and Kenya; in Southern Africa, South Africa is the leading destination, receiving the highest proportion of all tourist arrivals to the region ; in West Africa, Senegal and Nigeria are the dominant destinations, together accounting for over 78% of visitors to the region. The primary international source markets for Sub-Saharan African countries are France, the United Kingdom, the United States, Germany, and Portugal. Due to the fact that travel and tourism touch all sectors of the economy, tourism's total direct and indirect impact on employment in Sub-Saharan Africa is 12.8 million jobs. A cut in the number of flights from the major outbound countries had led to a very sharp decline in tourism revenues in the SSA region. According to the UN (2020) the tourism and oil sectors represent about 25% of the GDPs of Africa's top five economies—Nigeria, South Africa, Egypt, Algeria

and Morocco. The study emphasised that, “The level of the impact of COVID-19 on these five economies will be representative for the whole of the African economy.

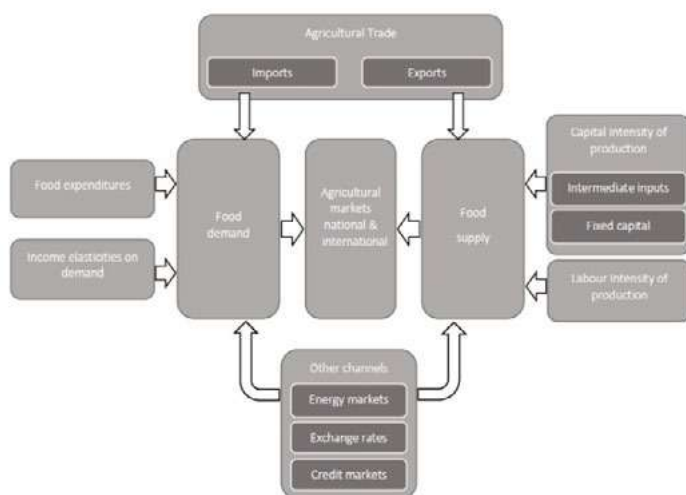
ILO (2018) indicated that within the SSA region unemployment would especially affect workers in the large informal sector accounting for 80% of all non agricultural employment in the region. The informal sector workers are at higher risk as they rely on daily takings/sales, and their business thrives on human contact activities. As a result, social distancing measures put in place to reduce the spread of COVID-19, will mostly harm restaurants, tour guides, transport operators, retail stores and all actors who occupy positions in the tourism value chain.

4.5 Food Security and Agricultural Production

The World Bank (2020) highlighted that as the pandemic started spreading throughout the region, one concern has been the possible negative impacts on food security as the crisis has the potential to exacerbate an already fragile food security environment. Sustainable development Goal 2 (hereafter, SDG2) concentrates entirely on food security. Current discussion of the SDG2 focuses on Africa in recognition of complex and manifold factors that the continent faces due to its growing population.

The state of food security in SSA was already in an alarming state before the COVID-19 pandemic. According to van Ittersum et al., (2016), SSA is the region at greatest food security risk because by 2050 its population will increase 2.5-fold and demand for cereals approximately triple, whereas current levels of cereal consumption already depend on substantial imports.

The lockdowns, which restricted movement as part of the control measures put in place by countries in Sub-Saharan Africa, affected the transportation of food imports and exports and hampered planting seasons in many of the SSA countries.



Source: FAO

Figure 15: Flow diagram of food security and agric-production

In the same vein, the F.A.O (2020) stated that Africa’s food system is more vulnerable than any other region to the COVID-19 pandemic, due to several ongoing food crises, natural disasters and conflicts.

5. Health Impacts

The health systems of many countries are put under stress by the COVID-19 pandemic. As a result the supply chain disruptions brought about by the restrictions in movements have affected the inventory of medical supplies such as medicines, masks etc. Figures 16 and 17 below illustrate the proportions of nurses and physicians per 1000 people in sub-Saharan African countries versus their confirmed cases per 1000 people.

Except for Ghana, Botswana, Seycheles, and Eswatini, 91% of SSA countries have a ratio of less than 4 nurses per 1000 people. Almost 93% of all SSA countries (43) have a ratio of less than 1 physician per 1000 people. These figures imply that the existing limited medical workforce will be even more stretched in their attempts to address the surge in demand for treatment and care arising from the COVID-19 pandemic.

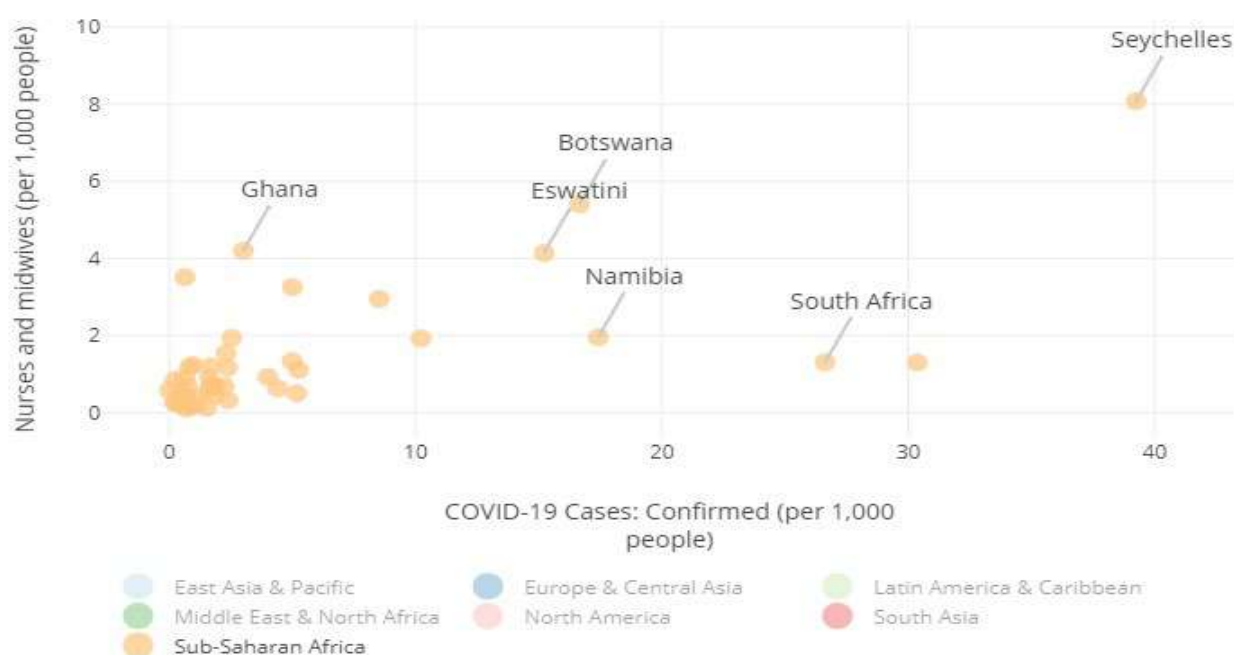


Figure 16: Nurses per 1000 people vs Confirmed Cases per 1000 people in SSA

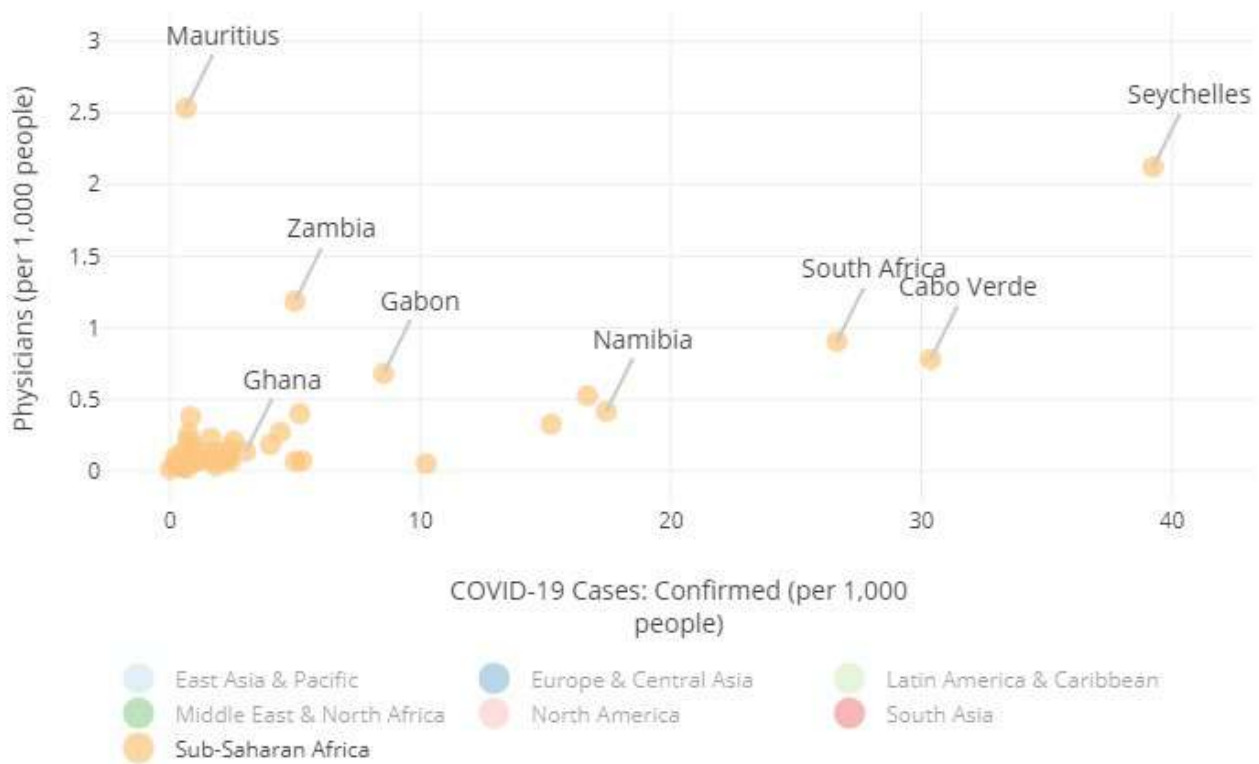


Figure 17: Physicians per 1000 people vs Confirmed Cases per 1000 people in SSA

For example, approximately 81% of the population in Rwanda do not have access to a functional health centre within two hours of their home, and the situation is getting worse, as some clinics are closing during the pandemic. We illustrate with a plot of health expenditures per capita that large economies of the SSA region had the highest number of confirmed and death cases, although they have the highest health expenditures per capita. To improve the allocation of medical personnel per 1000 people, SSA countries must seek to mobilise community health workers who are inactive. A quick study of Figure 16 and 17 in comparison to Figures 18 and 19 shows that countries with less health expenditures per capita generally have fewer doctors and nurses per 1000 people.

The big economies of SSA are not exempt from the devastating aftermath of the pandemic as countries with higher GDPs per capita report the highest deaths per 1000 people in the SSA region. For example, Gabon, South Africa, Botswana, and Egypt share GDP per capita PPP of around 15000 USD and also recorded higher deaths per 1000 people in comparison to poor SSA countries. Economic advancement has led to more economic activities and more movement of people. As a result, the incidence of COVID-19 rates and exposure increases. In support of this view, an empirical study by Farzanegan et al., (2020) found out that the effect of globalisation is not only statistically significant, but also it has a meaningful size effect on COVID-19 fatality rate and cases.

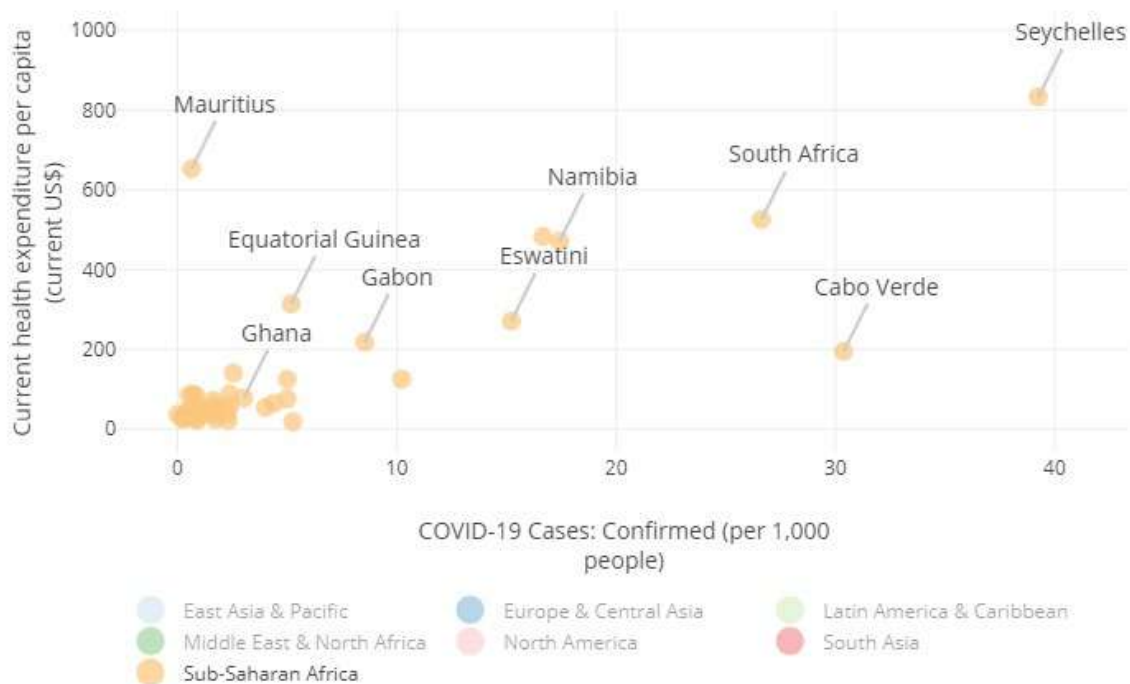


Figure 18: Health Expenditure per Capita vs Confirmed Cases per 1000 people in SSA

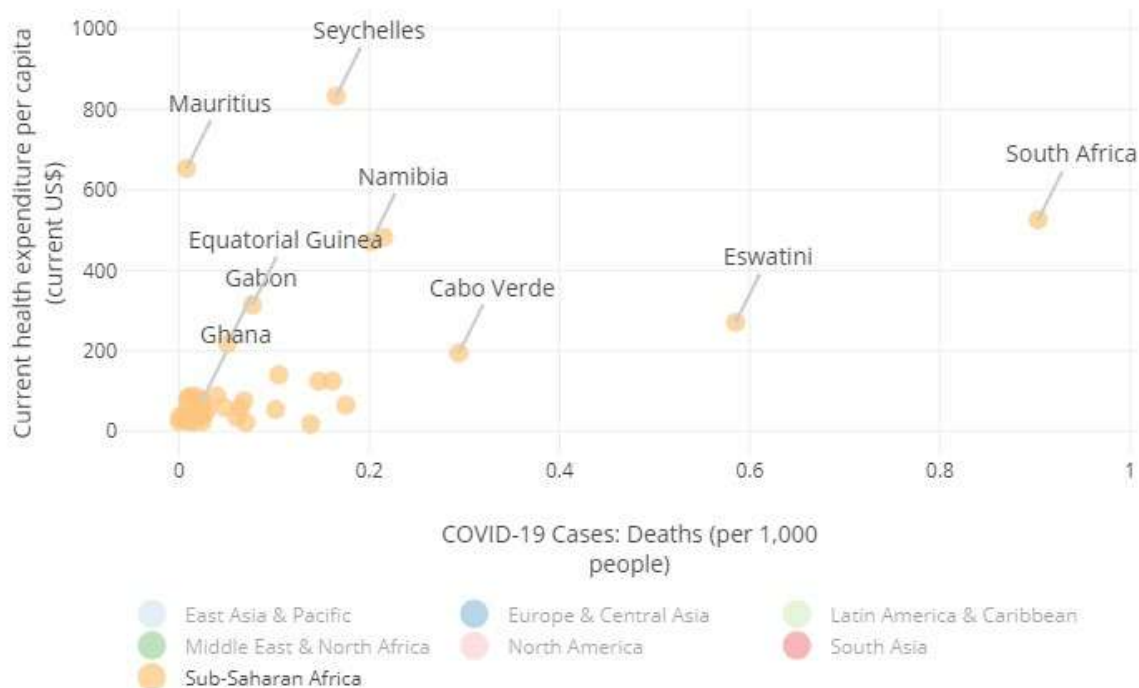


Figure 19: Health Expenditure per Capita vs Death Cases per 1000 people in SSA

The authors mentioned are in line with our conclusions, namely that while economic openness has a favourable impact on economic growth and employment, the adverse effect of a large number of confirmed COVID-19 cases could show its dark side during a disease pandemic.

On the other hand, countries that have relatively low GDP/per capita are usually characterised by poor health care systems and are too economically challenged to provide health equipment like testing kits, personal protective equipment (PPE), and ventilators, hospital beds and qualified medical personnel.

6. Education Impacts

The World Bank reported that 53% of young people in low-and middle-income countries live in "learning poverty". Learning poverty means "being unable to read and understand a simple text by age 10" (World Bank and UNESCO). Therefore the current pandemic, and movements restrictions and school closures used to respond to it, are likely to aggravate existing inequalities in access to quality education in SSA. Figure 20 shows that almost all African countries implemented school closures in the first wave of COVID-19. Even after the lockdown a great challenge for most SSA countries was finding strategies to impart education in segregated classes where the prime focus remains maintaining COVID-19 protocols. The impact of COVID-19 on the educational sector underlines the fact that there is not only a digital divide (internet connection, radio, television access), but also a concern that education is a function of the socio-economic status of learners.

One plausible mitigating strategy will be to allow distance learning during school closures. However, the establishment of distance learning requires a certain level of preparedness in terms of electricity and ICT infrastructure, which are in many cases rarely accessible to the majority of populations in poor rural settlements in SSA countries. In the same frame of mind, UNESCO, Global Education Monitoring (GEM) Report, 2020 stated that an estimated 40% of the poorest countries failed to support learners at risk during the COVID-19 crisis.

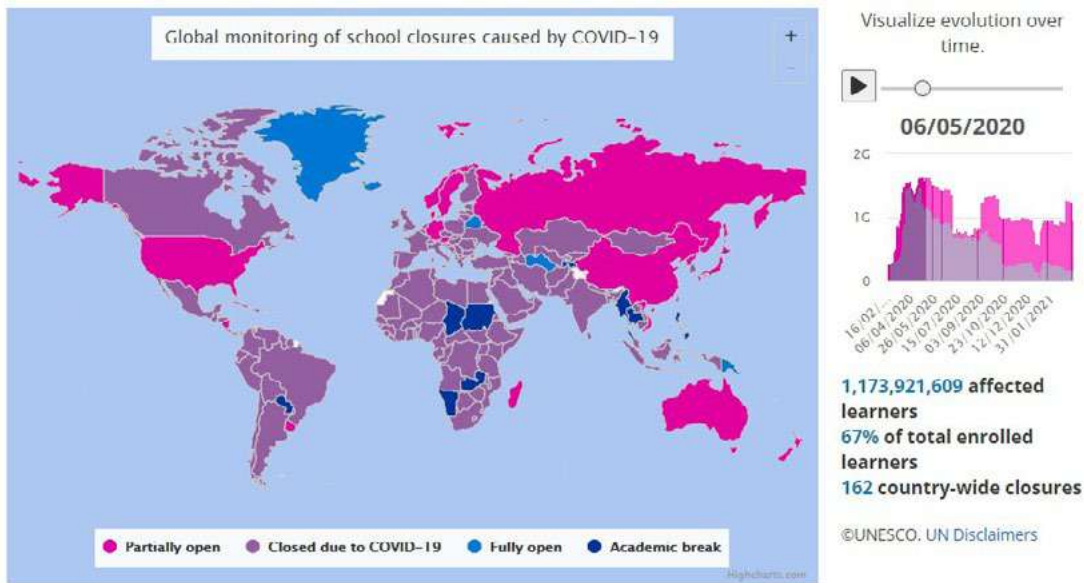


Figure 20: Global Monitoring of School Closures

6.1 Education demand-side impacts

Lock-downs and school closures have the propensity to widen the education inequality gap because not all learners have equal access to the online platforms they need for distance learning. For example, due to poor ICT infrastructure in low and middle-income countries within the SSA region, teachers and students in remote areas are less likely to access the (mobile) internet, TVs, or radios in their homes, so remote programming and learning are difficult. The lockdowns did not also envisage the education-gender consequences.

The Global Partnership for Education (GPE, 2020) reported that school closures make girls and young women more vulnerable to child marriage, early pregnancy, and gender-based violence – all of which decrease their likelihood of continuing their education. Therefore, sub-Saharan Africa should expect an increase in dropouts, especially for the disadvantaged and a decrease in educational investments by parents.

There are examples of SSA countries using resources to mitigate these problems. In Cameroon, during lockdowns, primary and secondary schools' children who will sit for a national exam during the year were taught via national television. In Botswana, learners at the University of Botswana were provided with data sim-cards to access online platforms during lockdowns. In Rwanda, education responses to COVID-19 include providing teachers and schools with laptops and batteries, digitising training sessions or delivering school lessons via TV and radio stations.

6.2 Education supply-side impacts

Education supply-side shocks have received limited attention during the COVID-19 pandemic. Teachers as significant custodians of the education sector are challenged by disruptions to their professional development and these include the lack of opportunities to practice their teaching skills, delay in further training, and the lack of supervision on knowledge delivery to students. Furthermore, distance learning programmes do not take into account that teachers in low and middle-income countries of the SSA region do not have any experience with online teaching and remote learning platforms. According to the International Task Force on Teachers for Education (2020), in sub-Saharan Africa, only 64% of primary and 50% of secondary teachers have received even minimum training in terms of teaching alone, which often does not include basic digital skills. Consequently, this affects the quality of education delivered to their students via online tools and platforms.

6.3 Nutrition and safety impacts

Teachers and learners' physical health were put at risk when required to provide face-to-face education, even post lockdowns. The closure of schools during and after lockdowns has halted the normal channels of distribution through which school meals usually benefits many children leaving them without this vital source of food. The importance of these meals cannot be left unstated, as Adelman et al., (2019) performed a study in Uganda and showed that school meal programmes reduced anaemia in primary-school-aged girls and adult women. Additionally, Bundy et al., (2018) also illustrated that school feeding programmes have significant benefits for families and may represent up to 15% of daily family income.

A paper by the Centre for the Study of the Economies of Africa (CSEA) on the impact of COVID-19 on education in Nigeria showed that during lockdowns million of public school children (primary and secondary levels) were sent home and the authors lamented the fact that a large percentage of these kids normally rely on the school meal offered by the government to feed themselves. Based on the above evidence, it is highly likely that this loss of education caused by school closures can impact the health and nutrition of children in the long term.

7. Importance of Strategic Communication during the COVID-19 Pandemic in Different Sectors

The COVID-19 pandemic is a global challenge that has severely impacted the livelihood of millions of people. It is an unprecedented crisis for governments and various sectors of the economy such as the tourism industry, supply chain, education sector, as well as vulnerable communities such as those with developmental problems, personal incapacities, disadvantaged social status and societies at large. This status quo has cost loss of lives globally and affected economic activities adversely in Sub-Saharan Africa, as indicated in graphic devices and analysis in this report.

At the centre of the current COVID-19 pandemic is communication, which is an essential tool that is critical in addressing the continually unfolding dynamics of the pandemic. Communication should invariably be a two-way engagement between those responsible for making policies and all the people/groups affected, including the diverse publics or communities. For instance, there has been evidence of bad communication in the form of information overload, miscommunication, and the use of wrong media and channels in many Sub-Saharan countries, that have led to many problems associated with addressing COVID-19 (Ataguba Ataguba, 2020). The main problem is that in many countries, communication on COVID-19 matters is done in a disjointed and haphazard manner, and it lacks strategic direction and planning. Therefore due to insufficient information, social media has played a major role in the poor communication disaster. Also, more often than not, communication on COVID-19 matters is not done professionally but rather popularly due to the non-engagement of communication experts in some cases. But the effectiveness of the COVID-19 messages largely depends on how government communication is channelled and the quality of messages sent requires expertise. This has a bearing on how fast and effective COVID-19 messages are transmitted, and also influences outcomes on the ground.

Therefore, this section of the report will discuss theories and principles of effective strategic communication and whether these were applicable in communicating messages about COVID-19 various economic sectors as listed above and vulnerable communities. Additionally, to discuss how poor communication, which is disjointed, may have adverse effects on the economy of a country during the pandemic.

7.1 Overview of Strategic Communication

Effective communication is critical to the management of any pandemic, including COVID19. We have noted misinformation about COVID-19 and conspiracy theories during the pandemic even from the highest levels in government administration. Such blunders, in some cases, have led to thousands of deaths, and unfortunately includes a president in a sub-Saharan country who likely died from COVID-19 after announcing to the nations that there is no COVID-19 in his country. Ritchie Jiang (2019) asserts that little research has been done on the interrelationships between media coverage and the pandemics due to the negative media coverage which generally during the COVID pandemic has influenced the content of social media communication overall (Luo Zhai, 2017). For example, in Botswana, there was a wide spread of fake news and exaggeration of media reports about COVID-19, and the police had to write a press release warning people that they will be prosecuted for spreading fake news about COVID-19. Around the same time in Kenya, even before the first case of coronavirus was reported on the 13th March 2020, an audio recording was circulated via WhatsApp stating that there were 63 cases of coronavirus in the country.

Immediately the Ministry of Health responded by issuing a press release setting the record straight and stating that recording was part of a simulation exercise during a crisis communication training programme on COVID-19. However, the press release had very little impact by then, because conspiracy theories had already begun to spread like wildfire, and the government was accused of concealing the truth. To avoid miscommunication, the grape vine or unfounded rumours and

communication gaps, communication should be strategic. Strategic means communication that is deliberate, focused, planned and has clear goals.

Paul (2011) maintains that strategic communication is about determining how the existing audience's behaviours, attitudes and perceptions will support the set objectives and goals of the communication strategy. The principles of strategic communication require that messages to be communicated are carefully thought of and developed in order to determine key messages for the targeted audience. This is also a two-way process that entails sending clear messages, selection of appropriate platforms, specifically crafted for diverse audiences, and dissemination by credible people. That also includes selecting the people responsible for passing the messages carefully to capitalise on their level of understanding of the critical message to be passed, which requires high levels of planning and research. The rationale being that the messages to be conveyed should be aimed at a specific audience in mind and not a 'one size fits all'. This is done after carrying out a rigorous audience analysis to determine what information the audience needs to know and then selecting the relevant media and channel to convey the message.

These attributes therefore render strategic communication multidisciplinary in nature given the fact that it draws from a variety of methods and subject areas. Hyland-Wood et al. (2021) argue that scholarship in multiple social science disciplines is required to come up with an effective communication strategy during a crisis. For example, by using principles of strategic communication, crisis communication, public health communication, and the fourth industrial revolution (that explores emerging digital technologies), an effective communication strategy can be delivered to all stakeholders during the crises. Similarly, Ataguba and Ataguba (2020) argue that an effective communication strategy for communicating COVID-19 messages uses effective communication, which includes crisis and risk communication principles. What follows is the discussion on strategic communication and how it plays a vital role in economic development. Additionally, communication with different sectors of the economy in various SSA countries and publics will be critically evaluated in terms of how governments package information on COVID-19 and whether this information sharing is consistent and reliable.

7.2 The importance of Effective Communication in the Supply Chain during COVID-19

COVID-19 has had a major impact on the supply chains of all manufacturers, retailers, and wholesalers, and that disrupted the economy as suggested above, causing a sharp decline in international and regional trade across a broad range of industries and manufacturers. As a result, manufacturing and retail companies were struggling to maintain a steady flow of goods and services. This situation necessitated the need for more effective and planned communication between customers and suppliers. For example, many suppliers for SSA customers did not communicate well, especially those in China where the pandemic struck first. Many suppliers could not be contacted for several weeks due to the pandemic, as factories were shut down and suppliers were also simply

overwhelmed. The COVID-19 situation caused a lot of anxiety and uncertainty on the delivery of goods. This situation was caused by travel bans, closure of borders and curfews. After these growing problems, there began the bankruptcy of businesses and the loss of profits. In this situation, there was a need for frequent communication, more than ever before, to communicate issues, delays or adjustments to payment methods and systems. Good communication between suppliers and customers during COVID-19 was critical in order to establish and maintain long-term relationships. Customers had an obligation to state what their needs are and if they have been met. On the other hand, the supplier had an obligation to be transparent by maintaining open lines of communications with customers, particularly communicating an issue, especially failure to deliver promptly. That way it gave the customer time to explore other supply options in order to circumvent losses. In some cases where the supplier and customer did not have a clear communication plan and system of follow-up in place, businesses collapsed, which affected the economy significantly.

7.3 Education Sector and Communication Dynamics during the COVID-19

During the height of the COVID-19 epidemic, in many parts of the world, including SSA, schools were closed, and remote learning activities were put in place. In most countries, children living in villages and those from poor backgrounds could not access learning due to more limited access to the internet. Azubike (2021) reveals how during the COVID-19 pandemic, educational systems adopted new methods of learning, that is online, but children in rural and underprivileged communities in Nigeria were mainly left out of this digital transition. There was a global view that there is a need to maintain a delicate balance between reviving the economy and easing social pressures while ensuring that further infections are averted, which led to the reopening of schools. Immediately when schools reopened, there were numerous reports by the media on non-adherence to protocols. This applied to primary schools, secondary schools and even higher learning institutions. What was clearly missing was a communication strategy aimed at conveying messages to the school children and tertiary education outlets on COVID-19 protocols and critical information like social distancing, proper use of personal protective equipment, frequent handwashing or sanitising, staying or working from home, self-isolation and stigma. All that was required was strategic and ongoing communication between the schools and institutions of higher education as well as with students and their parents. This leads to more relevant tailor-made and packaged information on COVID-19 context for each type of person and group that needs to be addressed.

7.4 Communication and Tourism during the COVID-19 pandemic

Tourism, as suggested above, has been one of the fastest and hardest-hit sectors of the economy (UN World Tourism Organization) as it has almost come to a complete standstill due to the COVID-19 pandemic. Just like in other parts of the world, tourism in SSA also suffered because as soon as the virus was discovered, SSA countries imposed measures to cut down the flow of tourist through lockdown and curfews that led to closed borders, traffic bans and other travel restrictions with the

aim of controlling the spread of COVID-19 (Gössling et al, 2020; Baum Hai, 2020). For many years many SSA countries have mainly relied on tourists from various overseas countries in Europe, North America, Asia etc. Therefore during the outbreak of COVID-19 governments concentrated on disseminating information that bans travel and communicates the risk of travelling.

In some cases, these messages were communicated through instilling fear about travelling to destinations. With such negative messages, one wonders how long it will take the tourism industry to recover in SSA. Gössling et al, 2020 and Jamal Budke, 2020, argue that the post-pandemic tourism era is going to be made difficult because of the negative messages communicated during the pandemic. The question is whether tourism activities will be recovered back to original levels or not. However, in order for the sector to prepare for the economic recovery, there is a need for a robust strategic communication plan that seeks to package information that would be aimed at restoring traveller confidence and repackaging the tourism sector for the future by giving the assurance that COVID-19 protocols are in place in tourist attractions including hotels. The communication strategy that takes a multidisciplinary approach would be a valuable instrument towards re-branding and marketing tourism. A planned, deliberate, focused, and relevant post-COVID-19 crisis communication plan can mitigate the impact of the previous lockdowns and accelerate recovery in tourism (which could be possibly mitigated in the short-term by promoting a shift from international to domestic tourism until the situation stabilizes).

7.5 Communication with people with disability and Special needs during COVID-19

According to the World Health Organisation (WHO), 15% of the world's population experiences some type of disability, with a higher prevalence found in developing countries like many in the SSA region. The organisation also reports that people with disability may be impacted more significantly by COVID-19. This is supported by evidence from recent research that suggests there are adverse effects experienced by people with disability and people with special needs. While COVID-19 continues to spread, there is growing concern that persons with visual and hearing impairments do not access important messages about the pandemic that are conveyed by health authorities, telecommunication companies, and broadcasters. The question is, how do various governments in sub-Saharan Africa mitigate these effects? For example, in Uganda, most of the messages and platforms are conveyed via electronic channels that persons with disabilities have limited access to, namely radio, television, social media and telecommunication messages (Mbazzi et al., 2020). This calls for the need to explore appropriate actions taken in terms of keeping this section of the population informed about COVID-19 in line with protocols stipulated by WHO, such as public health information they require about the COVID-19 outbreak. According to reports by WHO, people with disability may be at greater risk of contracting COVID-19 due to barriers to accessing public health information, such as relevant hygiene, respiratory etiquette, and physical distancing. Persons with disabilities could be at more risk of contracting COVID-19 because all the information about the disease are not provided in user-friendly formats such as print materials in Braille, captions, interpretation of Sign language, graphics and other audio modes (WHO). However, these

communication barriers experienced by people with disability can be reduced if key stakeholders or government agents take appropriate action to ensure that public health information communication, coupled with crisis communication, is strategic in the way it is packaged for people with disabilities. This strategy should cater for inclusion and equity for all stakeholders aimed at educating them with COVID-19 protocols.

7.6 Communicating with the Vulnerable and Disadvantaged during COVID-19

There is also evidence that marginalised groups are among people the hardest hit by the COVID-19 pandemic, and unfortunately, continue to be one of the least protected by governments in the SSA region (but of course varies from one country to the next depending on the level of development as well as other factors). According to reports by the World Bank; (The World Bank 2018; The World Bank 2020c) Sub-Saharan Africa is home to 60% of the world's population living in extreme poverty. Studies have explored communication with the marginalised groups in this region during the COVID-19 pandemic and concluded that there are inequities and injustices in relation to access to information for the marginalised peoples in disseminating public health information about COVID-19. Lustig (2020) states that communities that are poor are disadvantaged in the way that COVID-19 messages and communication are packaged to exclude them. This situation is evident in Botswana, for example, as the most critical messages are communicated orally or live via social media, particularly through the use of Facebook, Twitter or national television. On the other hand, written communication is channelled through the government gazette and the Government of Botswana website. The national radio station is also used to broadcast COVID-19 messages and target rural communities; however, there are media reports citing the lack of accessibility to COVID-19 messages because there are communities that are still ignorant about COVID-19 protocols because they cannot afford a radio. Clearly, the one size fits all approach disadvantages the vulnerable and disadvantaged communities. Another issue that WHO pointed out is how the COVID-19 pandemic may trigger symptoms of mental disorders and anxiety in both adults and children. Some people have depression and/or other mental disorders, and react to any situation that disrupts their routines and daily patterns of lives. Such vulnerable people need routine and social interaction to be able to maintain a healthy mental state. A communication strategy that includes messages to these vulnerable people and where they can be assisted is what is required. This situation shows how misinformation and rumour, particularly through social media, can trigger fear of the unknown and anxiety; and ultimately trigger Post Traumatic Stress Disorder (Neria, 2011). During the lockdown, there were media reports about depression that leads to domestic violence and conflicts in many SSA countries such as South Africa, Botswana and Zimbabwe.

8. Recovery post the pandemic

“You cannot solve a global pandemic with national policies” Minouche Shafik

At this point, no one is sure when this pandemic is going away. In recent weeks (since the last week of March, 2021), the world is experiencing the third wave of the pandemic, where as many SSA countries like Ethiopia, Kenya and Cameroon are experiencing increasing daily cases³. Thus, it is natural to ask whether the policies by individual countries like curfew, mask, social distancing and even national lockdown can help to contain the spread of the virus. Since the virus respects no border, the role of regional and international cooperation is so crucial.

Even though it is woefully inadequate, there is an effort from different organisations to play a role in containing the spread of the virus and also to redistribute the effects. In Africa, the regional and continental organisations are moving relatively slowly and the member countries mainly depend on international organisations and other developed nations.

8.1 Role of the regional cooperation to control the pandemic and help the recovery post COVID-19

Regional cooperation among neighbouring countries is vital to form collaboration either formally or informally to set up joint projects, coordinate policies and regulatory frameworks, and shape joint policies and institutions. Even though the focus is on economic cooperation, RCs in Africa are also playing a key role to deal with the virus. The African Union (AU) is working towards securing the vaccines and helping the member countries with the necessary support. Though the primary responsibility regarding health and other policies lies in the hands of the individual member countries themselves, it is important for the AU to continue strongly coordinating efforts amongst member countries. Especially now, the economic recovery post COVID-19 would be unthinkable without the role of national and regional cooperation. The downward growing economy, and the negatively moving export and import needs stimulus which is beyond national policy.

8.2 Is vaccinating Africa a choice?

When thinking about COVID-19 the one thing that brings back our hope are vaccines. According to the information on the page of “Regulatory Affairs Professionals Society (RAPS)”⁴ as of April 4th, there are 13 fully approved vaccines with 59 still in the development process. Nigeria and South Africa are among countries trying to develop the vaccines too.

³The Ethiopian Ministry of health report shows of the daily samples more than half return as a positive cases, reaching 80% in some cities like Hawassa.

⁴<https://www.raps.org/news-and-articles/news-articles/2020/3/COVID-19-vaccine-tracker>

The COVID-19 Vaccines Global Access (COVAX) initiative could help SSA and other developing regions have access to the COVID-19 vaccines. The supply of the vaccines through the initiative started in early February 2021. So far, 31 countries received 16 million doses, and according to the WHO this is not nearly enough (<https://www.bbc.com/news/56100076>). Furthermore, some countries like Tanzania and Burundi are not part of the programme and did not show any sign of getting the vaccine soon; Madagascar, which was an absentee at the beginning, currently shows interest. As of 12th April, WHO says only 2% of total global vaccines has been administered in Africa.

The nature of the virus makes it important for no one left behind. Even though the COVAX initiative makes sure developing countries have access to the vaccines, it is still important for the advanced countries, especially for those in the G-20, to play a vital role. The USA and Russia at the beginning, for example, refused to sign the initiative, though president Joe Biden did it in his first week in office. Generally getting Africa vaccinated is crucial in fighting and controlling the pandemic and promoting the global economic recovery post COVID-19.

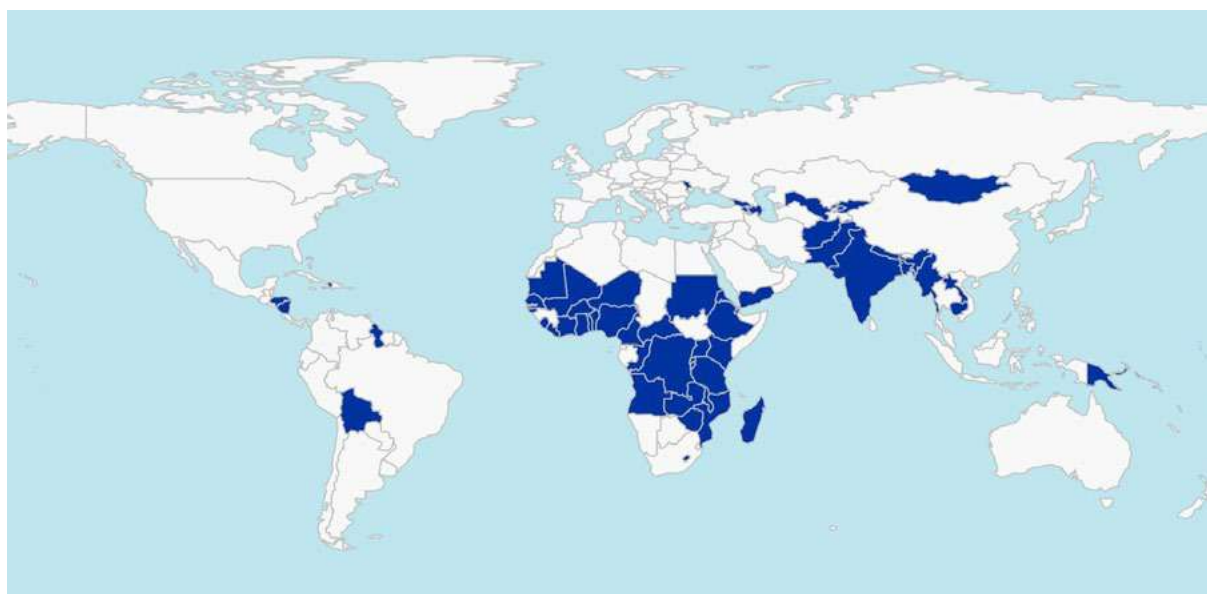


Figure 21: Countries approved for support

Source: Gavi, the vaccine alliance

9. Policy Implications and Recommendations

The COVID-19 pandemic responses, lockdowns and movement restrictions in specific, have had severe impacts in SSA. The impacts are a function of each individual country's trade position in the world supply chains, state of health and education infrastructure, ICT developments, core economic activities of both formal and informal sector and the political state of affairs.

[1] Supply chains, trade and market access

- The COVID-19 pandemic provides an opportunity to further accelerate integration across the African continent. This necessitates a speedy deepening of intra-African trade and faster execution of regional and continental trade agreements such as the African Continental Free Trade Area (AfCFTA).
- The occurrence of the COVID-19 pandemic has exposed the vulnerability of SSA food supply chains and has highlighted the need to coordinate and monitor a regional plan for food supplies. Furthermore, SSA should strengthen their global value chain position by making deliberate attempts to stimulate domestic manufacturing for export markets.
- Improve the connection between businesses and market places by cutting costs of information and communication technology and enabling e-commerce infrastructure (e-payments, e-contracts, regulatory environments for such trade) to boost regional and international trade.

[2] Food and Agricultural production

- In order to cushion the negative impacts of COVID-19 on all the different aspects of food security, SSA countries should strive to integrate interventions such as public food hampers and nutritional supplements for vulnerable groups. Such programmes should target the beneficiaries and establish a regularisation of such support for the time period of the pandemic.
- Distributions of agricultural inputs such as quality seeds (if too expensive to be afforded by the average smallholder), land, training, and farm implements to both smallholders (ready to scale up their businesses) and agricultural school graduates are needed to improve food security in the long run.
- Efficient use of early warning systems for monitoring food and nutrition security could help reduce the gravity of the negative impacts on SSA countries.

[3] Control measures to curb infection rates

- SSA countries at the national level could also establish containment zones that will be used to restrict movements by specific areas within the country; this, will enable swift responses in the event of COVID-19 outbreaks.
- The implementation of lockdowns, quarantines and social distancing should continue to be an important tool to reduce the number of COVID-19 cases.

- A dedicated team that models country level parameters for studying the impact of lockdowns, isolations and quarantines taking into account symptomatic and asymptomatic probabilities. These analyses and predictions which are country specific can better inform individual countries' health, economic and social policies in addressing the aftermath of the COVID-19 pandemic.

[4] Media and information dispersion

- Setting up of partnerships between governments and public media relations departments with medical expertise and researchers to enable accurate COVID-19 data exchanges and data driven policy responses. Access to detailed, timely and accurate health information is critical to minimise misinformation about the COVID-19 pandemic in SSA and improve trust of the public on state actions.
- SSA countries should consider opening a data centre that records and maintains relevant and more detailed data on COVID-19 within the region and share them with all of the 48 member countries. Analysis of the data should help understand the mutations happening in the virus that will affect our economy, society and environment. Findings can help improve response to a new outbreak via targeted interventions in our economy and society, which are effective and affordable.

[5] Health

- SSA countries should also expedite training and mobilise students in medical, nursing and other health education programmes nearing the end of their studies to provide services to patients or to help in responding to public concerns through telephone hotlines.
- Massive screening campaigns should be undertaken across all the countries, while implementing measures to ensure that citizens have sufficient clean water and sanitation services.
- In the long run, governments should aim to allocate a budget to construct testing laboratories for infectious diseases and expert capacity building in addition to vaccine and other medical manufacturing facilities.
- Optimise the use of community health care workers in order to alleviate shortages of medical personnel as suggested above.

[6] Education

- Education investments: In hindsight, the aftermath of COVID-19 has shown the importance of channelling funding in the education sector geared at providing platforms

for online learning, improving the internet speed, and providing cheaper or even free internet packages during the pandemic.

- Education equity and inclusion: An early assessment of the expected increase in the educational inequality gap highlights the need for targeted strategies to support learners in remote areas and disadvantaged categories (special needs, disabled, low socio-economic status).
- Digital readiness of teachers: Improve teaching capacities regarding their digital readiness even beyond COVID-19 as attempts to also catch up with early stages of the 4th industrial revolution.

[7] Strategic Communication and COVID-19

- Create a deliberate, planned, and focused public health communication strategy, which is effective in engaging maximum public support and participation. This strategy needs to be sensitive to the concerns and values of diverse publics, e.g people with disability and mental health challenges, and also utilise different modes of information sharing.
- A formation of a task force which comprises health experts, governments officials and communication experts to deliver a robust multidisciplinary team for establishing and maintaining effective strategic communication in order to earn the reputation of being trustworthy, empathy and consistent sources of information to various stakeholders and including the general public.
- Recognising that what is communicated about the COVID-19 is just as important as how it is communicated. Governments, health professionals, communication experts and the media need to take into consideration the diverse nature of people with different needs and others while communicating so everyone has access to balanced information.
- Using traditional media suitable to each community, to engage with the community at grass roots so that everyone plays a part in managing outbreaks. This enhances sharing factual information, keeps everyone informed and also promotes trust, honesty and ownership.
- Meaningful engagement of opinion leaders such as political, religious and civil society in order to raise awareness and also to ensure that the major preventive messages are transmitted using appropriate media and channels so that they are and acted on by the people.

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