'Coronanomics' amid the COVID-19 Outbreak: Sub Saharan African Socio-economic Effects and Lessons

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Abstract

Coronavirus disease of 2019 (COVID-19) is a virus causing mayhem across the globe. The virus first emerged in China in December of 2019 and has in a short span affected multiple countries. The World Health Organisation (WHO) declared COVID-19 a pandemic due to its massive spread over a short space of time. The COVID-19 outbreak raised exceptional ethical predicaments because it made demands on society from all sectors of life, not only in sub-Saharan Africa but across the globe. Owing to the COVID-19, a lot of negative impacts on human activities in terms of private and work-life have been affected and life as the world knows it, has changed. There is no doubt that the rapid spread of COVID-19 is having an impact on businesses around the world, and notably on the relationship between organisations and their respective employees. COVID-19 also resulted in social distancing, self-isolation, and travel restrictions. This forced a decrease in the workforce across all economic sectors and caused many jobs losses with some jobs projected to be lost after the pandemic is over. Globally, on one hand, many schools and institutions of higher learning had closed, and the need for commodities and manufactured products had declined. On the other hand, the need for medical supplies and amenities significantly increased. At the height of the pandemic, the food sector had also seen a great demand due to panic-buying and amassing of food products. In response to this global outbreak, this article summarises the socio-economic effects of COVID-19 on Sub-Saharan Africa. The article is conceptual since it collects data through reviewing existing literature, policies, and relevant reports. The article further proposes recommendations to adequately address the native effects of the pandemic.

Keywords: COVID-19, Sub Saharan Africa, Outbreak, Pandemic, Unemployment

Introduction

The World Bank Group (2020) reports that the COVID-19 virus first appeared in the Hubei province of China in December 2019, and spread rapidly to Asia, Europe, and the rest of the world. The World Bank Group (2020) further reports that on March 11, the World Health Organisation (WHO) designated COVID-19 a global pandemic amid the rapid spread across countries and the significant public health risk it posed to the world. Additionally, Nicola, Alsafi, Sohrabi, Kerwan, Al-Jabir, Iosifidis, Agha, and Agha (2020) highlight that the outbreak led the World Health Organisation (WHO) to declare the COVID-19 outbreak as a global emergency on the 30th of January 2020. With a distinct focus on the Sub Saharan Africa, this article sought to highlight the socio-economic effects of the COVID-19. The study is undertaken through the review of existing relevant literature.

Literature Review

Wuhan city in China's central province of Hubei was the origin of the novel COVID-19 virus before spreading to other countries and territories of the world. According to Lu, Stratton and Tang (2020), cases were all linked to Wuhan's Huanan Seafood Wholesale Market, which trades in fish and a variety of live animal species including poultry, bats, marmots, and snakes. Wellcome Trust (2020) reports that, given the urgency of the outbreak, the international academic community mobilised ways to accelerate the development of disease detection and intervention.

A statement by the research-charity-based Wellcome Trust in London gathered more than 100 signatories to ensure access to data and research findings on how the disease could better inform the public and save lives. These included leading publishers such as Springer Nature, Elsevier, or Taylor and Francis as well as prestigious journals such as the Journal of the American Medical Association, the British Medical Journal, the Lancet, and New England Journal of Medicine (Wellcome Trust, 2020). Nature (2020) states that, in these leading journals, editorials echoed a call for researchers to "keep sharing, stay open". In Nature Medicine, the editorial also stated that "communication, collaboration, and cooperation could stop the 2019 coronavirus" (Nature, 2020: 111).

Sub Saharan Africa's Response to COVID-19

Governments around the world braced themselves for the impact of the unprecedented crisis. The impact of the pandemics and the containment measures implemented to slow down contagion and "flatten the curve" inevitably affected levels of economic activities.

Different from previous crisis, the new scenario combined supply and demand-side shocks across multiple sectors (African Union Report, 2020:10).

Eichenbaum, Rebelo, and Trabandt (2020) point out that recent models that incorporate the interaction between epidemics and economic decisions argue that the decision to cut back on consumption and work (because of a lockdown) reduced the severity of the epidemic. Nevertheless, Eichenbaum et al (2020) add that the lockdown magnified the depth of the economic downturn. In addition, Piguillem and Shi (2020) mention that, the smoothing of economic costs of the lockdown reduced its intensity and extended it for a longer period. However, complementing the lockdown policy with random testing generated important welfare gains and eliminated the need for indiscriminate quarantines.

Greater testing with targeted quarantine policies mitigated the economic impact of COVID-19 and reduced peak symptomatic infections, which was important to relieve hospital capacity constraints (Berger, Herkenhoff & Mongey, 2020). The World Bank Group (2020) reports that with few exceptions, such as South Africa, self-quarantining and social distancing as practiced in China or other advanced economies were not effective mechanisms to slow the spread of the virus in Sub-Saharan Africa. Resources to set up quarantine rooms for suspected cases at airports and hospitals, or to trace contacts of confirmed COVID-19 cases were scarce. The lockdown entailed severe hardships in countries where most of the population worked as farmers or self-employed entrepreneurs in the informal sector and had to remain active to support their families. WHO Statistics (2019) adds that a multitude of factors (extensive poverty, imperfect private labor markets, and limited public financing) led to this paradox of service shortages while having underutilised talent in many countries.

The OECD (2020) reports that to cushion the effect of the crisis on households and firms, governments designed a wide range of policy responses, including direct income support, tax breaks extension of guarantees, and deferred interest payments on debt.

Sub-Saharan African Socio-economic Effects

The following are some of the socio-economic effects of COVID-19 in Sub-Saharan Africa.

Extended Bearing on Human Capital Growth

Globally, the impact of COVID-19 on human capital goes beyond the direct effects on the health sector (doctors and nurses, among others). School closures were mandated by 143 countries with 130 countries imposing countrywide closures, while 13 countries introduced localised closures. Billions of learners and students were affected due to closures of schools worldwide. World Bank (2020a) postulates that if localised closures were expanded nationally, the number of affected learners would have increased by 500 million learners and students. In addition to economic impact of supply disruptions and the collapse in aggregate demand, Orbach, Less, Kothari, and Rajagopalan (2017) assert that COVID-19 had important longer-term costs from a halt in human capital accumulation. Orbach et al (2017) further advise that to address distance education, remote learning programmes, and online training were put in place on a countrywide scale, and this was seen in 2020 as many countries opted to utilise this. This put into spotlight, the enormous potential that online learning has. Orbach et al (2017) highlight that, in India, for example, there is evidence that Indian children using the ***Mindspark app*** (a computer-based, online self-learning tool that helps children improve their mathematics skills which allow a child to follow a learning path suited to his/her needs) made more progress in basic language and mathematics skills after four and a half months than those in the control group.

Most of the countries all over the globe including in Sub-Saharan Africa had to finalise the academic year in approximately 7 months instead of the scheduled 10 months. Most of the learners only went to school for less than three days a week due to social distancing measures. Unlike private schools, public schools suffered a lot in this case due to their inability to afford technical resources and capacity such as WhatsApp®, Microsoft Teams®, Blackboard Learning®, EduBrite® and Google Classroom® to conduct further lessons when the learners are at home. Consequently, in 2020, both basic and higher education learners and students respectively had to finalise an academic year with only a little content taught.

The Global Markets

As the world's trade and markets shut down except for essential goods due to the COVID-19 outbreak, a direct impact on the global economy was noticeable through the trade channel. According to Baldwin and Tomiura (2020), supply and demand shocks impacted trade in goods and services in Sub-Saharan Africa because of the COVID-19 virus. Baldwin and Tomiura (2020) highlight that countries most affected by the pandemic account for a predominantly large share of world output, and they are at the center of global value chains. This introduced direct supply disruptions in African countries that were increasingly becoming more integrated into Global Value Chains (GVCs). This according to Baldwin and Tomiura (2020), reinforced the shocks as countries even not affected by the pandemic found it difficult to supply their firms with imported intermediate inputs. The manufacturing sector was the hardest hit due to these supply shocks emanating from its strong linkages. Subsequently, exports deemed to fall due to a shortage of intermediate inputs. The World Bank (2020a) concludes that the containment and mitigation measures introduced in the most-affected economies also meant recessions led to a slowdown in global demand and trade.

The Money Markets

The World Bank Group (2020) reports that foreign financing inflows into Sub-Saharan African countries amid the COVID-19 outbreak were expected to decline due to push factors. For example, The World Bank Group (2020) reports the main investment partners in the region experienced a sharp decline in economic activity; a sharp drop in the international price of energy commodities (especially oil) as well as mineral ores and metals; and the behaviour of global investors shifting their demand toward safe assets, which contributed to the lower financing inflows. In addition, the World Bank Group (2020) highlights that, pull factors contributed to lower foreign inflows, including the deceleration of economic activity in Sub-Saharan African countries, macroeconomic imbalances, and reduced impetus of structural reforms amid the COVID-19 crisis. To different extents, pull and push factors affected flows of foreign financing that were vital to the functioning of African economies, namely, FDI (mostly in extractive sectors and those related to infrastructure projects), remittances, and aid inflows. Tourism receipts also fell significantly.

Foreign Direct Investment

The UNCTAD (2019) report highlighted that, in 2018, FDI inflows into Sub-Saharan Africa increased to US$32 billion in 2018, after a sharp contraction of two years. Greater FDI into the region was primarily driven by an increase in resource-seeking FDI (thanks to rising prices and demand for some commodities) and recovery of inflows to South Africa (especially in the automotive and renewable energy sectors). The UNCTAD (2019) further states that this increases more than offset the significant drop in FDI inflows in several countries in the region due partly to political uncertainty and unfavorable economic fundamentals (for example, Nigeria and Ethiopia).

One of the countries with the largest increases in FDI inflows was Kenya, which included investments in sizable infrastructure projects. UNCTAD, 2019 reported that, The Republic of Congo recorded inflows mostly for oil exploration and production. In the case of the Democratic Republic of Congo, FDI inflows increased due to steady investment in minerals, especially cobalt. Mozambique also received higher inflows, with an 18 percent increase pushing FDI to US$2.7 billion. This increase was primarily attributed to intracompany transfers from companies already established in the country, mainly for oil and gas exploration (UNCTAD, 2019).

Remittances and Aid Flows

Frankel (2011) and the World Bank (2015) acknowledge that remittances has become an important source of foreign financing for Sub-Saharan African countries. In 2018, remittances reached US$46 billion (up almost 10 percent from 2017), supported by strong economic conditions in high-income economies. Frankel (2011) and the World Bank (2015) assert that, although the costs of transferring remittances had dropped over time, the average cost to send US$200 to Sub-Saharan Africa was 9.3 percent in the first quarter of 2019. Frankel (2011) and the World Bank (2015) concur that remittances are a more stable source of financing than other forms (such as FDI or portfolio inflows) as they are acyclical or countercyclical to the level of economic activity in the worker's country of origin (the recipient of the remittance). However, these flows are procyclical concerning the level of economic activity in the migrant's host country, meaning, the sender of the remittances.

Tourism

According to the World Bank Group (2020), international travel was discouraged via avoidance effects and was hurting tourism sectors in Sub-Saharan Africa. The extent of the disruption in travel and tourism depended on (1) the severity of the outbreak of COVID-19 within the region, and (2) the travel restrictions imposed by countries in the region on travelers from countries with greater numbers of COVID-19 confirmed cases (for example, China, the Republic of Korea, and other European countries). Tourism fell even if the region remained relatively less affected by COVID-19 as travelers avoided air travel in general. According to Altuntas and Gok (2021) and Yu Li, Yu, He and Zhou (2020), the deleterious impact of the ongoing COVID-19 pandemic on global tourism has been unprecedented. Travel and tourism are synonymous with the perceived risk of exposure to and the spread of disease (Li, hang, Nian, & Zhang, 2017). As a result, during health-related crisis events, the tourism industry is targeted with moratoriums and restrictions associated with constraining non-essential activity, which has a discernably negative effect on international and domestic tourism demand (Yu et al, 2020).

Tourism as an important sector of economic activities for many countries in Africa, was heavily affected by COVID-19 with the generalisation of travel restrictions, the closing of borders, and social distancing. IATA (2020) estimated the economic contribution of the air transport industry in Africa at 55.8 billion dollars, supporting 6.2 million jobs and contributing 2.6% of GDP. These restrictions affected international airlines including African Giants Ethiopian Airlines, Egyptair, Kenya Airways, South African Airways, etc. The first effect resulted in the partial unemployment of airline staff and equipment. However, in normal times, airlines transport around 35% of world trade, and each job in air transport supports 24 others in the travel and tourism value chain, which creates around 70 million jobs (IATA, 2020).

As a result, sub-Saharan African tourism started facing a loss of income. For instance, according to the World Bank Group (2020), the tourism sector contributed more than 20 percent of GDP in countries such as Seychelles, Cabo Verde, Mauritius, The Gambia, and São Tomé and Príncipe. The sub-Saharan African countries and international response to COVID-19 was more transparent and efficient when compared to the severe acute respiratory syndrome (SARS) outbreak of 2003. A report by Matiza and Slabbert (2022) shows that domestic tourism was increasingly being propagated as a primer for the global tourism industry's resuscitation in the era of COVID-19. Additionally, Tanina, Tashenova, Konyshev, Mamrayeva and Rodionov (2022) mention that the use of digital technologies in the context of limited social contact has made it possible to rebuild the mechanisms of interaction between tourism organisations and customers.

Nevertheless, numerous learning points should be taken away from COVID-19 in the event of future outbreaks (Table 1). Table 1 shows a presentation of lessons to be learned from the response to corona or COVID-19 virus in sub-Saharan Africa.

Table 1: A Presentation of lessons to be learned from the response to corona or COVID-19

Matters with the current response	Event	Consequence	Key learning points
Travel restriction delay	Air services, as well as land borders for most African countries, were halted in March 2020.	African citizens traveling from high-risk areas were put in a 14-day quarantine.	Many African countries lacked the capacity for screening citizens returning from high-risk countries, so, travel restrictions should have been implemented earlier.
Quarantine delay	14th February 2020 confirmed the spread to Africa with the first confined case in Egypt and sub-Saharan Africa was Nigeria.	Many Sub-Saharan African countries only instituted partial and/or total lockdowns in Mid-March and meanwhile, there were imported cases of corona or COVID-19 starting local transmissions in these countries.	As many Sub-Saharan African countries have informal economies, the delay in shutting down due to fear of loss of income costed Africa in terms of rapid transmissions of the virus. Sub-Saharan Africa should have instituted partial lockdowns at the beginning of the 2020 year.
Public misinformation	Lack of transparency allows rumors, speculation, and misinformation to be spread amongst the public and in the information age, there is a new term that	The misinformation led to panic in many sub-Saharan African countries through various social media platforms such as WhatsApp, Facebook, Twitter, etc.	Clear channels and modes of communication are important to avert problems related to misinformation. Sharing of correct information should be

	everyone is facing known as ***infordemic***.		encouraged to dispel misinformation.
Emergency announcement delay	The World Health Organisation (WHO) announced on the 30th of December 2019, that Covid-19 was a Public Health Emergency of International Concern.	Many sub-Saharan African countries only instituted partial and/or total lockdowns in mid-March of 2020 which showed a slow response to the concerns raised by the World Health Organisation.	Sub-Saharan African countries should have started preparing in December 2019 for what was to be the year 2020 in terms of putting in health centers to counter the eventual outbreak of the virus.
Research and development	Sub-Saharan Africa lacks funding for research and development of vaccines and treatment of COVID-19.	In Africa, 22,313 cases were reported with 1,124 deaths and 5, 492 recoveries as reported by Africanews services on the 21st of April 2020.	The World Health Organisation (WHO) should have set up contingency measures in Sub-Saharan Africa, given the deplorable state of hospitals on the continent.
Social-economic issues	China shut down from January 2020 to April 2020 with only food and medicine essentials sold. Having China as part of the global economy is a sign that what happens in China affects the whole world.	The fact that many Sub-Saharan African countries had their economies linked to China, affected them badly when China shut down from January 2020 to April 2020.	Sub-Saharan African countries should have used the time to learn and observe what China was doing to flatten the curve and ultimately have zero cases of the novel virus.

Source : Authors' self conceptualisation

As reported by The African Union Report (2020:10), even if African countries were relatively less affected compared to other regions, for now, the spillover effects from global developments or broken supply chains still led to faltering economic activities. Indeed, the high dependency of African economies vis-à-vis foreign economies predicted a negative economic spinoff for the continent, evaluated at an average loss of 1.5 points on economic growth in 2020.

Unemployment

The economic shock of the pandemic in Sub-Saharan African countries resulted in a high cost of living, severe corruption, and misuse of public funds allocated for emergencies (Transparency International, 2020). Many of the ordinary people could not afford the high cost of living brought about by the pandemic due to the high unemployment in many of these countries. The unemployment in South Africa was at 28.5% in 2019 compared to 16,9% in Zimbabwe, 12,1% in Zambia, 19.9% in Namibia, and 26,9% in Lesotho (World Bank, 2021). COVID-19 worsened the situation in most of these Sub-Saharan African countries. However, the impact varied from one country to another, particularly in the informal sector. Most of the jobs in the region (80%) were in the informal sector which were more vulnerable to the effect of the pandemic (World Bank, 2020b). More of these informal jobs were lost in the urban area as compared to the rural areas. Nigeria lost 56% of informal jobs in urban areas as compared to 40% in rural areas, while Uganda lost 29% versus 11%, and Ethiopia lost 12% versus 6%, whereas Malawi lost 8% versus 6% (World Bank, 2020b). This unemployment also has a direct or indirect bearing on the economy since governments collected way fewer taxes than they would have collected had more of their population being employed. Even worse was that some governments had to package relief measures to assist the severely affected. This category included those who were not employed even before COVID-19 and those who lost their employment because of the pandemic.

Corruption and maladministration

According to Transparency International (2020), the COVID-19 pandemic exposed the structural gaps, corruption associated with public procurement practices, and misappropriation of emergency funds in many Sub-Saharan African countries. Munzhedzi (2016) writes that public procurement and corruption are like inseparable twins. This means that there is no one without the other. The COVID-19 pandemic necessitated the procurement of personal protective equipment (PPE) and other equipment such as water tankers and fumigating and sanitising equipment. This public procurement amounted to billions of rands. The Auditor General of South Africa (2018) report that most state institutions overspent their allocated budget without following due processes stipulated by relevant policy prescripts. There were many instances in the case of South Africa where prices for the procurement of PPEs were inflated, fraud and corruption in Mpumalanga, Gauteng, and KwaZulu-Natal were the most of South Africa reported cases (EFF 2020; Munzhedzi & Phago, 2020). Many other cases were reported to the Special Investigative Unit (SIU), which is currently pursuing such cases. The former Gauteng member of the executive council (MEC) responsible for the health portfolio was also sacked with allegations of corruption and maladministration of PPEs.

It is, therefore, safe to say that the effect of the COVID-19 pandemic has been so severe even in the local sphere of government which is so vulnerable to corruption and maladministration. This challenge was an addition to many municipalities which already are largely rural and often lack the skills and capacity to implement their policies. Most of their Municipal Public Accounts Committees (MPAC) also lack the requisite political will and capacity to scrutinise financial statements and municipal performance reports (Munzhedzi, 2021). Most of these municipalities and other state organs in many of these Sub-Saharan African countries were severely affected by the COVID-19 pandemic precisely because of their weak systems of dealing with corruption and maladministration. Transparency International (2020) whose mission is to stop corruption and promote transparency, accountability, and integrity ranks Sub-Saharan Africa as the lowest in the region as far as corruption matters are concerned.

Public service delivery

Public service delivery refers to the provision of public services by state institutions, including government departments, municipalities, and state-owned enterprises. These state institutions are responsible for the provision of many services including but not limited to electricity, water, low-cost housing, and licensing of motor vehicles and potential drivers. Most if not all these services were not provided effectively and efficiently during the lockdown in many Sub-Saharan African countries. The pandemic and ultimately the lockdown restricted the unhindered provision of these public services on a sustainable basis. At some point, officials working for state institutions responsible for the provision of critical public services were either not going to their place of work or only going on a shift basis. Most governments alluded to the fact that only a reasonable percentage could go to work to avoid overcrowding in offices. It was only those officials under the essential services such as the doctors, nurses, and pharmacists who were offered permits to move to their respective places of work. As a result of these restrictions necessitated by the lockdown, there was a massive socio-economic effect in that certain necessary public services were not being rendered. These included the poor not receiving low-cost housing, a turnaround of the fixing of electricity, and water cuts not being attended timeously. In the case of South Africa, expiry dates for renewing motor vehicle licenses were extended by months to avoid overcrowding at most licensing authorities when the offices which were closed at some point finally opened. Owners of driving schools ultimately had to protest because only a few driving learners could be tested because of the backlog and the lockdown restrictions. Members of the public in many of these Sub-Saharan African countries agonised a great deal due to the pandemic as far as public service delivery is concerned.

Productivity

After an initial delay, the epidemic reached Sub-Saharan Africa (SSA). Export demand was dwindling, while caseloads were increasing. Governments had taken a variety of approaches to this challenge. Reduced infection rates were balanced against decreased economic production in an optimal approach. According to David and Emmanuel (2020), it is crucial to keep in mind that the COVID-19's effects and the concurrent responses by national governments and other actors to the pandemic are likely to negatively impact the poor and marginalised groups within societies who lack resources and capacity to bounce back after such catastrophic and unpredictable disruptions.

Sub-Saharan Africa was facing a growing health and economic burden of COVID-19, as the disease diffused widely across the world (African Union, 2020). In addition to the increased morbidity and mortality, the economic effects in the first three months of the pandemic in this region were severe. Externally, the epidemic provoked a worldwide recession resulting in a drop in demand for many of Africa's key export commodities (African Union, 2020). As in many high-income countries, African governments responded to the pandemic by implementing a range of policies to limit the spread of the disease as well as to provide some economic assistance to their population. (Mueller, Sheriff, Keeler & Jehn, 2021: 27). Lockdowns were costly, according to Sumner, Hoy, and Ortiz-Juarez (2020), both in terms of halting economic activity that maintained livelihoods and in terms of the fiscal impact of reduced revenue and higher spending on health and social protection. It was also obvious that the legacy of lockdowns, as well as the effects of the global recession, resulted in tremendous hardship for a long time to come. Domestic supply and foreign demand shocks wreaked havoc on Africa's low-income countries, jeopardising the continent's economic and developmental progress made over the last two decades. Mueller et.al (2021) conclude that African governments cannot "do whatever it takes". Limited revenue mobilisation limits the state's economic reach, while low savings rates and narrow financial markets limit potential domestic sovereign borrowing. With many nations in the region's fiscal positions, which is already limited, restoring fiscal balance solely through domestic means risk a prolonged weak rebound in output and consumption.

Materials and Method

An exploratory research study was conducted with an ethics clearance issued by the Research Ethics Committee at the university where the researchers are based under ethical clearance number **SMS/21/HRM/02/01189.** The article is conceptual in that it collected data through reviewing existing literature, policies, and relevant reports. The conceptual aspect of this article poses a unique restriction, but the researchers are optimistic that this will spur other scholars to challenge and problematise the claims stated in this article using actual data.

Conceptual Research Framework

Even though the pandemic effects in Africa were much less severe than in Asia, Europe, or North America due to the continent's lower volume of international migration arrivals and the strict precautionary measures taken in some African nations, it is crucial to evaluate the socioeconomic impact of COVID-19. African economies continue to be very extroverted, informal, and susceptible to outside pressures.

In terms of COVID-19, or the novel corona virus-19, the general populace of each country reacted within roughly two weeks of being aware of the virus's presence in their shores, to begin a stock-up mentality. As this mentality of preparedness kicked in, the following categories became a priority: medical supplies, rubbing alcohol, antibacterial wipes, first aid kits, antiseptics, cold and flu remedies, and cough remedies (Nielsen, 2020). , "For many, the scale of the coronavirus crisis calls to mind 9/11 or the 2008 financial crisis—events that reshaped society in lasting ways, from how we travel and buy homes, to the level of security and surveillance we' re accustomed to, and even to the language we use." (Politico magazine, 2020: 19).

Recommendations

The on-going COVID-19 crisis is here and real. The socio-economic effects are being felt all over the globe and it, therefore, becomes essential to inform the population of the impact, especially in this age of misinformation. The policymakers should be advised so that they better prepare and lessen the dire impact of the COVID-19 pandemic. In this regard, this study recommends two types of responses:

i) Responses to the immediate state of affairs

- As Sub-Saharan Africa lacks advanced health facilities as compared to more developed nations, any suspected cases should be treated with seriousness and isolated as soon as they have been identified.
- A lockdown of contaminated populations as soon as they have been identified.
- A collaboration between sub-Saharan Africa and the World Health Organisation to report the right figures and avert misinformation.
- The creation of emergency funds to fight the Corona or Covid-19 crisis by sub-Saharan African governments.
- Prioritising the health sector by increasing medical research funding by sub-Saharan African governments.
- Adequately address the continuous corrupt practices by ensuring that accountability measures are strictly adhered to. Rigorous accountability by

relevant structures lessons the chances of corruption and maladministration (Munzhedzi, 2021). Such structures include parliaments and courts.

- Protect small businesses by avoiding total lockdown without looking at the alternatives. Strict measures could be implemented for compliance without resorting to a total shutdown of the economy. Small businesses employ multitudes of people in Sub-Saharan Africa.
- Ensure that technology is infused in applying the delivery of some of the public services such as booking for license dates and paying municipal rates. Technology may assist a great deal in ensuring that there is less contact between members of the public and public officials.

ii) Responses to the aftershock of the pandemic

The fact that sub-Saharan Africa is part of the global village makes the continent susceptible to external shocks. The responses after the Corona or Covid-19 pandemic among others are:

- Sub-Saharan Africa should diversify their economies and have other industries play an integral part in its economies. As seen from the aspect of tourism dependency in some African countries which is leading to dire consequences for such industries.
- An increase in the agricultural sector to have food-secure countries in case of a future pandemic. Sub-Saharan African governments should not only support the agricultural sector in rhetoric but through workable mechanisms for advancing the sector.
- The governments working together with the private sector should develop industries to process agricultural products. This might assist greatly in creating employment in the sector.
- Innovative and modern methods of improving the health sector should be explored because the health system will look after the human capital of the country which will be a great thing.
- Invest in the digital revolution in Africa because this is an important aspect of the modern world. This will avert problems of misinformation as the population will have access to information. The digital revolution should also make online meetings, classes, and music festivals a new normal.
- Policy frameworks should be developed to protect small industries in case of future pandemics. For example, tourists may be allowed to travel in small groups.
- Sub-Saharan African governments should base their decisions regarding the management of the pandemic on science and not on political rhetoric. Scientists and experts should advise governments on the best way possible to manage the pandemics.

- Universities in Sub-Saharan Africa in partnerships with research councils and institutes should be funded and assisted to develop and test their vaccines to save their populace. This may save Africa many millions that are currently being spent on procuring vaccines from the international markets. Africa can in no way compete with the global north at the same level precisely because those are first-world economies.

Conclusion

Numerous harmful effects of the COVID-19 outbreak have been seen in people's life across the world. This devastating sickness has influenced many countries throughout the world in many different ways, but mostly on the economic front. The COVID-19 epidemic, which puts the world's health systems under attack, is widely acknowledged to have had an influence on global economic development. Humanity is currently battling the COVID-19 for its very existence. Sub-saharan Africa, coupled with other social-economic ills such as poverty, disease, and inequality now has to grapple with an additional disease. All is not gloom and doom as there are lessons to be learned from this global pandemic. The way of life has changed and will have to be changed. For example, Sub-Saharan Africa needs to reposition itself as a global player that strategises and not delay in making important decisions that will now cost it severely. The mortality rate in Africa has been affected due to the Coronavirus or COVID-19 which resulted in a loss of precious lives that could have contributed to the growth of the continent of Africa.

Disclosure statement

The authors declare that there is no conflict of interest.

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