



# **Post-COVID-19 Scenarios in the East African Community: Implications for Sustainable Development**

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## **Author's contribution**

*The sole author designed, analysed, interpreted and prepared the manuscript.*

## **Article Information**

DOI: 10.9734/SAJSSE/2021/v10i130255

### Editor(s):

(1) Dr. Ridwan Che Rus, Universiti Pendidikan Sultan Idris, Malaysia.

(2) Dr. Gerald Aranoff, Ariel University, Israel.

(3) Dr. John M. Polimeni, Albany College of Pharmacy and Health Sciences, USA.

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(1) Sadeq Jaafar Abul, Kuwait.

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(3) M. Ganeshwari, Bharathiar University, India.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/65797>

**Review Article**

**Received 15 January 2021**  
**Accepted 25 February 2021**  
**Published 15 March 2021**

## **ABSTRACT**

The Corona Virus Disease-2019 (COVID-19) pandemic with its lasting imprints on health, livelihoods and economies has plunged the world into complete disarray and staged an interregnum to the momentum of United Nations' Decade of Action. With some discovered vaccines for the causative virus being administered in some regions, the profound uncertainties are now the virus, its trajectory and the possible post-pandemic scenarios thereof that the world or its individual countries will trickle into. It is unclear whether the pandemic provides an imitable opportunity for futuristic sustainable development or it is a prefatory incidence to an otherwise worse tomorrow. These two (most-pessimistic and worst-case) scenarios have a common thread which depicts uncertainty of the future of humanity. Yet, the most optimistic discourses have undermined the negative realities that global communities predict. This study tables an analysis of

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the possible global post-COVID-19 pandemic scenarios and trickles down to the same in the context of the East African Community (EAC), (Uganda, Kenya, Rwanda, Tanzania, Burundi and South Sudan). At the very least, encountered reports indicate that global debates on the post-pandemic future are classifiable into (1) the most likely return to “business-as-usual”, (2) a *managed transition*, or (3) a discernible paradigm shift. For the East African Community, the post-COVID-19 scenarios are poised to be influenced by the new world order reconfiguration; the region’s trajectory to sustainable development in the post-pandemic era is hinged on a solution of a global nature that favors making long-term decisions. Otherwise, the region’s scenario is likely the “business-as-usual” one.

*Keywords: COVID-19; Post-pandemic era; Sustainable Development Goals; East Africa; East African Community.*

## 1. INTRODUCTION

The first ever highly contagious pandemic without precedent (Corona Virus Disease-2019; COVID-19) has for the past one year or so left its footprints on the social fabric of nations, causing severe global macroeconomic, health and environmental impacts [1,2]. Unquestionably, the world must expertly single out the profound lessons this ferocious pandemic has offered to leverage for a better, resilient and sustainable tomorrow [3-7]. The health impacts of COVID-19 seem to have attracted the most attention [8], particularly regarding vaccine development [9]. Yet, the future is uncertain—the pandemic has instilled fears in humanity—and its psychological impacts (that might well outlive the pandemic itself) are apparently underestimated [8,10,11].

### 1.1 The Optimists and Pessimists’ Views of COVID-19

Other than the direct impacts of COVID-19 unraveled, it has also shed light on the dangers of capitalism, globalization [8,12-14] and of an economic system which undoubtedly stand to threaten—or worse still, undermine—the universal language of sustainable development. Although, previous authors have examined the multifaceted impacts of the pandemic and the possible post-pandemic scenarios at both global and regional scales [10,15-17]; optimists on one end of the spectrum argue that the pandemic offers a unique opportunity to globally promote sustainable and resilient societies and economies, paradoxically interpreting the catastrophic experiences as a turning point for humanity [8,14,18-21]. The pessimists’ version—on the other end of the spectrum—holds that the post-pandemic era will have no dramatic change(s) in the rules of

the game but rather some adaptation strategies will, inevitably, be embraced [22].

The initial wake of the pandemic led to some “rushed” optimistic visions from central countries: most emphasized a future revolving around a changed global system without capitalism but the emerging solidarity [23]. Yet this is purely irrational; building more resilient and sustainable societies, or “seizing the opportunity” to perfect radical changes in the economic system sounds more feasible for the developed world than the straggling nations [24]. For instance, after COVID-19 overwhelmed Wuhan in early 2020, the pandemic’s center of gravity shifted westward from Seoul to Milan, Madrid and New York. The virus was more successfully contained in faster-responding and competent cities such as Berlin, Copenhagen, Hong Kong and Taipei, than others [8]. This attests to the fact that countries such as China, Spain and USA which had fairly well developed healthcare systems (or the capacity to buttress the same) contained the pandemic with a little ease as compared to underdeveloped countries [25].

### 1.2 The Need for an Earlier Probe into the Possible Post COVID-19 Scenarios

In an increasingly bipolar and unequal world [8,10], developed countries boast of a greater potential to respond to crises [5]. A looming risk is that the world could get yet more divided and conflictual post-pandemic, particularly if jingoistic nationalism crops up [8]. This cannot be disputed because history also pins that international agreements pertaining to climate change and sustainable development (such as the Paris Agreement and Sustainable Development Goals(SDGs) have been reached, advocated and promoted [26], yet compliance to such initiatives have remained zig-zag, due to the

disparities in country-specific natural and monetary resources. Developing economies specifically are dependent on unsustainable or fragile economic paths viz; most follow economic models that heavily depend on exploitative activities, agrarian economies and are battlefields for socio-political conflicts, or are vulnerable to natural disasters and extreme weather events [27,28]. For example, the emergence of COVID-19 was ensued by gigantic swarms of the desert locusts (*Schistocerca gregaria*) which devastated agricultural crops in Southwest Asia, East Africa and the Middle East [12,29]. Other regions such as East Africa were further stormed by perilous floods which killed or displaced many people during the peak of the pandemic [30]. Thus, we would prognosticate categorically that countries which have sailed through these calamities may feel the impact of the pandemic differently, and their post-pandemic scenarios will evidently present various challenges and priorities for sustainable development. Thus, post-pandemic scenarios could be better understood at the regional or country-specific levels.

From the foregoing, not all countries worldwide will be best positioned to cope up with transformations that the pandemic introduced in the economic system [8,31]. Various international communities and organizations have assessed, albeit at a global scale, the impacts of the pandemic on health, economies, communities and the environment [10,16,32]. Nevertheless, a holistic overview of the impacts of the pandemic on individual countries of the world is inadequately documented, particularly for developing countries with limited resources that constrain research on the same [10,15]. To bridge this gap, this paper analyzes post-pandemic scenarios of a consortium of countries from one of the least developed communities of the world: The East African Community (EAC). The EAC is a regional intergovernmental organization of six (6) partner states Fig. 1. In the African Great Lakes region of Eastern Africa namely: Uganda, Kenya, Rwanda, Tanzania, Burundi and South Sudan. Its headquarters is in Arusha, Tanzania [33].

The core objective of this review was to draw an analogy between global trends and identify the possible post-pandemic scenarios for the EAC. The analyses assessed whether EAC is prepared to uphold the transformational shift towards sustainability as advanced by the most optimistic views.

First and most immediate, the paper analyses the possible post-pandemic scenarios debated globally, with a bias to the starting points that the EAC will possibly have. This was addressed by providing a panoramic overview of the impacts of COVID-19 pandemic recorded in the EAC. The approach assessed the impacts of COVID-19, inclusive of the structural problems, socioeconomic situations and the characteristics of the prevailing economic model. Secondly, a vision of the post-pandemic scenario adapted to the context of the EAC was realized, with a redefinition of how the world order will impact the realities of East African countries. In addition, the study suggests the most possible future scenarios for the EAC and what would be the global necessary conditions to ignite a path towards sustainability, while appreciating some determining factors of the possibilities for the EAC to embrace sustainability models.

## 2. METHODOLOGY

This study is a non-systematic review which examined peer-reviewed articles and reports published between December 2019 and January 2021. The reviewed publications were sourced electronically from Science Direct, PubMed, Scopus, Google Scholar and Web of Science Core Collection. A more general search was further performed using the Google search engine to generate documents and reports from international, regional, national and sub-national organizations [15]. The salvaged documents were screened for the main terms "post pandemic scenarios", "post pandemic world", "post pandemic transformations", "post COVID-19", "COVID-19" and "COVID-19" using their names, abstracts and keywords AND impacts", "COVID-19 AND opportunities", "COVID-19 AND sustainability", "COVID-19 AND economic crisis", "COVID-19 AND Sustainable Development Goals", "COVID-19 AND environment", "COVID-19 AND East Africa" and "COVID-19 AND East African Community" [15].

Thus, the analytical process was divided into three stages: (1) debates on probable global post-pandemic scenarios, (2) impacts of the pandemic in the context of EAC, and (3) the possible future scenarios and challenges for sustainable development in the EAC. The study considered mostly reports and publications in English, giving utmost priority to the impacts of COVID-19 on the environment, sustainable development, geopolitics and the post-pandemic era. Here, reports hailing from international

agencies including the World Bank, United Nations and the International Labor Organization were reviewed with categorization of retrieved views as positive, negative or uncertain. Further, literature from East Africa by native authors was reviewed. Reports published by regional and national agencies, as well as regional divisions of international/non-governmental organizations (NGOs) such as the EAC, African Union (AU), Intergovernmental Authority on Development (IGAD), African Development Bank (ADB) and the United Nations Development Program (UNDP) were prioritized [15].

In digesting the retrieved literature, emphasis was placed on the regional impacts of the pandemic at socio-economic and socio-environmental levels. These were contrasted with evaluations and reports on the environmental crises, quest for sustainable development and the social and economic problems in the region. A nexal analysis of the possible post-pandemonium scenarios, effects of the pandemic and the intrinsic problems of the region led to the realization of the most likely future scenarios for the EAC. The nexal analyses, in addition, highlighted the primary challenges that need to be overcome in the pitched quest to realize Sustainable Development in the 21<sup>st</sup> century (SD21) in the EAC context.

### 3. LITERATURE REVIEW

#### 3.1 Windows for Sustainable Development in Global Post-COVID-19 Scenarios

Various debates play out with respect to the fact that the post-pandemic scenario is an uncertain one [8,15]. This stems from the fact that the impacts of the pandemic itself are hard to precisely estimate both in the crucible of the fight against the virus and post-pandemonium. It therefore raises a strong speculation that the future of humanity is equally uncertain [8,15]. Explosion in the monitored global infection cases and mortalities thereof made this more complicated, especially when it was being accompanied by strict containment measures such as lockdowns, and paralysis of economic and industrial systems [8]. The prints encountered in this review mostly placed it that the current economic system heavily relies on the forms of use and misemployment of nature (non-renewable resources). The results of such an economic path lined with high

carbon emissions are often onerous disasters [35]. Thus, imminent fiscal recovery packages should entrench or displace (partly) the current fossil-fuel intensive economic system [19].

Yet further, various epic reports have traced and superfluously examined the origin and the molecular mechanism of viral entry and replication of the novel severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) [36]. SARS-CoV-2 is the etiological cause of COVID-19, the seventh and most infective coronavirus that is uniquely, transmissible between humans [9,37]. Corona viruses: severe acute respiratory syndrome coronavirus (SARS-CoV), Middle East Respiratory Syndrome coronavirus (MERS-CoV) and SARS-CoV-2 causes severe symptoms but the earlier identified corona viruses (HKU1, NL63, OC43 and 229E) are typically associated with mild symptoms [36]. Most discourses initially tailored the SARS-CoV-2 to have been an outcome of climate change, yet no conclusive evidence up to date have been furnished to support the same [35,38]. Other debates disputed by genomic evidences [36] believed that SARS-CoV-2 is a laboratory construct or a purposefully manipulated virus. Previous coronaviruses witnessed in 2002 and 2012 (MERS-CoV and SARS-CoV) originated from horseshoe bats to cat-like civets and camels before infecting humans [9,39]. Therefore, if SARS-CoV-2 pre-adapted in a staging (intermediary) animal species as it is presupposed, then humanity is still at an existential risk of future re-emergence of such viruses [9,36]. In addition, the zoonotic nature of COVID-19 is suggestive that such pandemics are driven by habitat fragmentation, biodiversity loss, domestication or consumption of wild animal-based foods [39-43]. This aspect alone is emphatic of the importance of collective biodiversity conservation for our common good [25,44].

#### 3.1.1 COVID-19: A one-in-a lifetime opportunity or a prelude to a looming crisis?

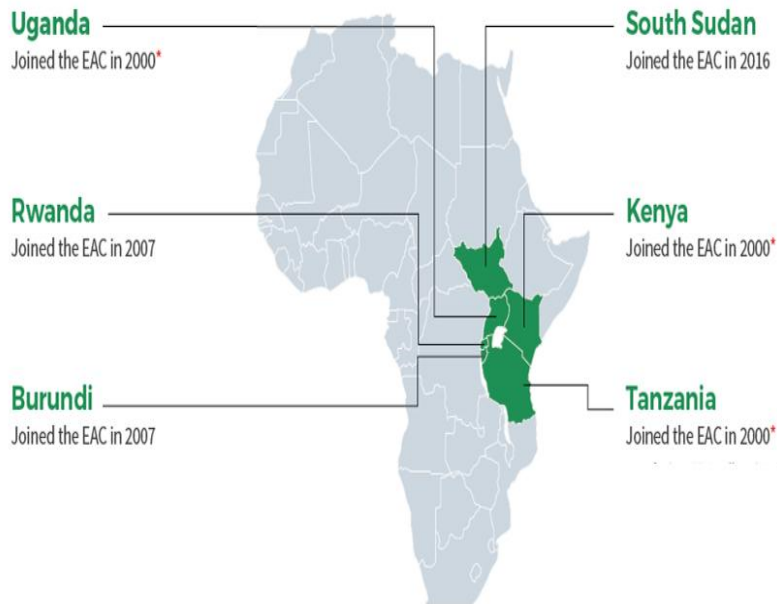
Scholars have outstretched intellectual imagination to reflect that the current pandemic is a generational opportunity to holistically rethink how to build forward (not probably back as many assert) better (with, and not against the environment), in a manner that encourages co-existence between humans, animals and plants [18,42,43,45]. This is convergent with the

existential idea that capitalism is an anti-planet system, and the pandemonium is a clear proof that the selfishness introduced by the former could only parade the world into discomfort and uncertainties [46]. These visions are strengthened by the argument that the magnitude of COVID-19 crisis will downsize consumer economy as well as fundamental changes in global production networks and supply chains [44,45,47-49]. Against this background, both national governments and intergovernmental organizations need to synergize and establish clear-cut strategies to accelerate the requisite changes [23,46].

Other discourses do not seem to accept out passing capitalism, globalization or any such jurisdiction, howbeit positive social partnerships and an outpouring of mutual aid and communal solidarity to assist the highly vulnerable [8,13,46,50], so as to reconfigure communities through integration of people with nature holds promise [46,50,51]. Pessimistic views cite the possibility of no major changes in the post-pandemic era, because not every crisis is a turning point [13,14]. However, the economic turmoil introduced by COVID-19 has plummeted unemployment to unprecedented levels [12,25,42]. Another distinct effect arising from, and accentuated by, the pandemic

is—poverty. In some communications, at least 71 million vulnerable people have been forced by COVID-19 into abject poverty in 2020 [16,17,52]. The International Labor Organization estimated that at least 585 million full-time jobs worldwide were lost in the first half of 2020, while the second half of 2020 had up to 590 million full-time jobs lost [10,53]. Other than the increasing job loss multiplier effect, a warning has also been issued of a possible looming famine of “biblical proportions” [8,54]. This implies that every nation must trickle into a pitched quest for sustainable development in the post-pandemic era.

Sustainable Development in the 21<sup>st</sup> century has been an overarching paradigm of the United Nations [55,56]. Nevertheless, transformation of the three main facets of sustainable development (environment, society and economy) is still an uphill existential struggle as it ought to be done within the context of the planet’s carrying capacity [57-60]. This transformational shift has been apparently driven further away by COVID-19 [31]. Despite the big shadow COVID-19 has casted, climate change is yet another great threat to achieving sustainable development which needs to be tackled both in the pandemic and post-pandemic era [35,61].



**Fig. 1. Map of Africa showing the location of East African community with member states history (Adapted from Trines [34])**

\* Country is a 1967 founder member

### 3.1.2 The conundrum of building forward better or returning to business-as-usual in the post- COVID era, and impacts on the achievement of SDGs

Appreciating the optimistic views first, COVID-19 has afforded some window of opportunity for promoting sustainable development. For instance, the National Aeronautics and Space Administration and the European Space Agency echoed that pollution in COVID-19 epicenters (Wuhan, Italy, Spain and USA cities) reduced by 30% during the pandemic [62-64]. The annual carbon dioxide emissions for 2020 was projected to be 4% to 7% lower than for 2019 while air and water quality have all improved [23,25]. This interim pollution reduction indicates that the world needs stimulus packages that prioritize low-carbon approaches in the post-pandemic era, with a shift to both clean and renewable energy [61,65]. Further, analyses of COVID-19 and its impact on ecological sustainability indicated that paralysis of economic activity and human movement afforded a resurgence of nature, probably due to reduced pressure on the pristine environment [25,51,66,67]. All in all, these intriguing planetary scenarios should be treated as temporary and consolidation of the benefits will come along way after maintaining some long-time stagnation of the global economy [15]. Unfortunately, inadequate funds, human resources and structure to continue with biodiversity conservation post-COVID-19 is an aspect to be reckoned on [67-69].

Debates on the post-pandemic scenarios as an opportunity for sustainable development should be fastened on in-depth evaluations utilizing sustainability indicators, precisely the 2030 Sustainable Development Goals (SDGs) prescribed by the United Nations earlier in 2015. A study examining the impacts of the pandemic on SDGs reiterated that “the pandemic negatively impacts the achievement of nearly 90% (144) of SDGs’ targets, with the remaining targets having the potential to benefit from the pandemonium [70], but contingent on appropriate decisions reached [51]. In spite of the threatening experiences witnessed by the world in achieving prosperity-related SDGs because of COVID-19, the latter has also exerted some positive effects on planet-related SDGs [25] such as reductions in the annual carbon dioxide emissions, water and general air pollution in 2020 [25,35].

It is worth mentioning that most countries were already lagging behind in achieving SDGs even prior to the COVID-19 crisis [10,44,71,72]. For example, SDG 1 (zero poverty) was prior to the onset of COVID-19 estimated to reach only 6% by 2030, and might not be attained within the time frame as of now because the pandemic has spiked the pre-current global poverty levels [16,17,52]. The spike in poverty levels in turn exacerbates the pre-pandemic income inequality (SDG 10) as well as wealth inequality between, and within nations. In other words, efforts to reduce hunger, poverty and inequality have been neutralized back to the 1999 levels by the pandemic, which from an economic perspective paint the crisis as an equivalent of two to three decades stolen from the world [10,44,73]. A fact attested to by the United Nations is that, only the initial impacts of COVID-19 on specific SDGs and targets are measurable due to health risks and hardships with researching amidst the highly contagious pandemic [12,71].

A closer analysis of COVID-19 pandemic instantly lays bare that the post-pandemic scenario is open and will be phenomenally based on both global and local decisions reached in the crucible of the fight against the virus itself [8]. These decisions will, either push the world to “seize the opportunity” presented by COVID-19, or drift the world further away from achieving the aspirational SDGs [8,25,46,61,70,74-76].

### 3.2 A Snapshot of Global Post-Pandemic Scenario Debates

The foregoing nexal analyses indicate that there is only a thin thread between the worst and most optimistic post-pandemic scenarios. Such discourses, as discussed earlier by Morea [15], can be better and more precisely categorized and digested in three great horizons: the return to “*business as usual*”, a *managed transition*, and a *paradigm shift*. The first discourse (return to “*business as usual*”) is an embodiment of less optimistic viewpoints which speculates that, with negligible changes, the magnitude of the economic crisis will trigger market recovery and fast economic growth outlooks [63,74,77-79]. A factual emphasis here is that the progression of the pandemic is the fuel for continuity of the current global economic crisis, and therefore, countries will unquestionably go for solutions that promote short-term economic gains. If such an approach supersedes the other two, the

“business as usual” post-COVID-19 scenario will be unavoidable [74].

On the other hand, “seizing the opportunity” for sustainable development—as it is called—will necessitate that critical voices and social demands that have sprouted should be consolidated in the post-pandemic period. If this prevails, the latter scenarios: a discernible *paradigm shift* coupled with more chaos as witnessed with phased reopening in the USA after the first lockdown [8], or the genesis of a planned transition will be inevitable [15]. Taking excerpts from COVID-19 and placing environmental and climate crises at the cynosure for changes to promote resilient and sustainability transformations could lead to a *paradigm shift* [35,80,81]. Thus, the post-COVID-19 scenario of this sort will involve (i) curtailing the wreckage of COVID-19, (ii) recuperation from the devastation, (iii) reposing further on the positive changes introduced to the healthcare, social protection and governance systems during the crisis, (iv) sustenance and bolstering of the positive gains realized regarding planet-related SDGs during the pandemic, and (v) re-energizing the general efforts towards sustainable development [25]. In other words, such a post-pandemic recovery would focus on strict measures that strikes a balance, and equally curtails the emergence of pandemics triggered by dysfunctional co-existence between nature, other animals and humans [44]. Such a scenario is apparently the hardest to execute, for the gravity of the requisite changes to effect it and the anti-sustainable development scars that will by then be left behind by COVID-19 [15].

COVID-19 also has the potential to generate a planned or *managed transition* or a managed de growth [15,74,82]. Here, COVID-19 may act as a starting point to alter some behaviors incongruous to the “business-as-usual” system. This interim position is the most available as per the retrieved reports, and is apparently founded on the integration of “Green New Deal” [15], and its components [8,46,47,74,75,79,83-85], with support from the Green and Blue Economies [86-89]. Folding back and reanalyzing the outstanding implications of a *paradigm shift*, the proposed gradual process of change—as seen with phased reopening of activities after total lockdowns [8]—is feasible in both interim- and long-runs alike. It is typically questioning of time as to how this transition process would come by, and how the

same will be manifested in various regions (countries) worldwide.

Owing to the disparities in resources across the globe, the current pandemic has severely impacted economically and socio-politically the less privileged segments of the world [24,31,90,91]. Against this background, the post-pandemic scenario in the context of EAC requires a localized attention, as it falls in the section of the least developed regions.

### 3.3 Impacts of COVID-19 on the East African Community

The footprints of COVID-19 in EAC are not incongruous to what have been ubiquitously recorded in other regions of the world [12,21,27,92-95]. The only spot of difference is that it was further hit by a hydrometeorological disaster (floods) and desert locusts (particularly Kenya, Rwanda and Uganda), which will exaggerate the impacts of the pandemic [12,29,30]. The reactions of the EAC to the pandemic generally followed global trends because the first cases of COVID-19 were in essence imported [27,96]. Kenya was the first to record its corona virus case on 12<sup>th</sup> March 2020 [97,98], followed by Rwanda and Tanzania on 14<sup>th</sup> and 16<sup>th</sup> March 2020 [98,99], Uganda on March 21<sup>st</sup> 2020 while Burundi and South Sudan registered their first cases on 25<sup>th</sup> March 2020 and 5<sup>th</sup> April 2020, respectively [12]. Of these countries, Rwanda and Uganda initially contained the pandemic quite well, compared to others [100,101]. These were thought to have been because they took lessons from the previous epidemics like Ebola and other infectious ailments such as Dengue Fever, Cholera and Marburg that in most member states are endemic [21,100,102]. At the time of this writing (Tuesday, 20<sup>th</sup> January 2021), at least 154,914 confirmed cases, 107,924 recoveries and 2,274 mortalities have been reported in the EAC [103]. The EAC (with the exception of Tanzania and Burundi) embraced the global COVID-19 containment measures including mandatory institutional and self-quarantines, social distancing, restriction of international flights to- and from- “high risk countries”, reduction of economic and social activities (lock downs and curfews) and intervention and support measures to mitigate the economic effects of the pandemic [100,101].

Taking an excerpt from Rwanda, it was the first country in Sub-Saharan Africa to implement total

lockdown [100]. In Tanzania, on the contrary, President John Pombe Magufuli declared the country “coronavirus-free” in June 2020, which forestalled access to full evidence on the pandemic impacts and mortality within the EAC [104].

### 3.3.1 Economic development

Lockdowns—as adopted globally—negatively impacted the region’s economic development and will necessitate laying down appropriate strategies to resuscitate the regions’ agrarian-based economies [21,105]. According to a report by the United Nations Economic Commission for Africa (UNECA) Sub-Regional Office for Eastern Africa [106], the region’s labour market has been the worst hit on the continent. Therefore, it was indicated that the region would barely grow in 2020, with only 50% of the EAC countries on track to experience “contracted” positive growth in 2020 [106]. These include South Sudan with 4.1% GDP growth, followed by Tanzania with close to 2% and Kenya with 1% [106]. In Kenya, projected GDP growth in 2020 was at 1% from 5.7% [98], triggered by declines in tourism, exports, and disruption in the supply chain. Similarly, the outlooks in Tanzania and Uganda show a similar trend with GDP growth being revised to 2% and 3.5% respectively (decline in 3.3% and 1.8% points) [98]. Burundi had 3% predicted GDP which reduced to -5.2% in the baseline scenario while Rwanda retracted from 8% to 4.2% [107]. Tanzania is showing waning demand for mineral exports considering global supply chain interruptions. The economy in Uganda is also faced with the disruption of supply chains and weakened global demand for goods [12]. For Uganda, growth is expected to decline to 2.5 percent in 2020 and 3.5 percent in 2021 according to United Nations Department of Economic and Social Affairs (UNDESA) and 3.5% in 2020 and 4.3% in 2021 according to International Monetary Fund [108].

### 3.3.2 The labour market

The COVID-19 pandemic has been an outrageous one; economies and labor markets in the EAC have suffered the largest contraction in the last ten decades with an estimated loss of about 38 million jobs [106]. Uganda for example, recorded 29% urban job loss and 11% rural job loss. In this case, more women lost jobs than men, which widened the gender inequality gap [109]. This is implicative

that post-COVID-19 recovery in the EAC will be slower, translated into several years to achieve the pre-pandemic conditions. This further plays forth the importance of encouraging productive integration in the EAC to synergize efforts in incentivizing investments and promoting employment [21]. The EAC also experienced an Integrated Phase Classification (IPC) v3.0 acute food insecurity phase, which was exacerbated by COVID-19 and desert locust infestations that hit food distribution efforts and increased losses [110].

### 3.3.3 Climate change and the environment

From a divulgated point of argument, the EAC has, and is experiencing both positive and negative effects of COVID-19. As reported in various parts of the world, containment measures such as lockdowns and curfews afforded interim reduction in emissions, pollution and appreciable improvement in air and water quality in EAC [111]. This has been witnessed in all major cities within the EAC but these will be inconsequential for climate change if not followed up with strong climate policy actions [112].

Crime waves of deforestation and poaching are increasing in the EAC due to the redirection of funds and resources or reduced surveillance, desperation and need for survival amidst the pandemic [113,114]. The case of Kenya has been a striking one, with deforestation risks spiking as COVID-19 restrictions challenge renewable energy projects [113]. In addition, there has been increased production of medical wastes and municipal wastes in the EAC [115,116]. In most urban centers, used masks are the eyesore, exemplifying poor disposal of such contagious medical wastes along with plastics and non-woven carrier bags.

### 3.3.4 Trajectory to attaining sustainable development goals

In the analysis of opportunities for sustainable development, COVID-19 in the medium term reinforces the community’s delay in attainment of the SDGs [12,92]. Uganda for example, embedded SDGs into its national development planning processes, and has increasingly aligned its budget to SDG-related spending, with close to 61% of budget in 2019/21 been directly contributing to SDGs. According to the Sustainable Development Solutions Network (SDSN) ‘2019 Africa: SDG Index and



Dashboard Report,' Uganda ranked 18th among 52 African countries based on 97 indicators across all SDGs, with an overall score of 54.88 vis-à-vis the regional average of 52.7. This indicates that Uganda is more than 50% towards achieving SDGs by 2030, which will require an accelerated progress to achieve the SDGs by 2030. Its industry innovation, and infrastructure and partnerships notably performance is stagnating when considering SDGs related to poverty, hunger, education, clean water and sanitation, affordable and clean energy, sustainable cities, life on land, and peace and justice [12].

Retrieved literature tends to reflect that the EAC (with the exception of Tanzania and Burundi) follows a global trend, with more profound impacts of the pandemic. The EAC will inevitably experience the COVID-19 crisis, with salient environmental effects as well as the difficulty in complying with legal frameworks for environmental protection due to economic losses. The bare truth is that COVID-19 pandemic clarified that at the leadership level, EAC's tenets of good neighborliness and solidarity are typically built on a fragile and 'shifting' foundation [21]. Though it is a known fact that the interests of the EAC are remarkably inimical of the individual partner states, it is imperative to institutionalize a culture that positions its interests as preeminent [21].

The dwindling role of the EAC in maneuvering the response mediums to combat the spread of COVID-19 has sired copious outcomes and challenges [21]. Other than the SDGs, the pandemic is expected to hamper the realization of the Africa Agenda 2063 [12]. With all these said, it is imperative to note that the UNECA estimated that at least US \$100 billion will be required to bridge the funding gap and propel the Decade of Action [12]. However, the currently available resources are likely to be diverted from implementation of SDG-related activities to economic recovery during and in the post-COVID-19 era [12].

### **3.4 Possible Post-Pandemic Scenarios in the East African Community Context**

From the views examined in the preceding section, it is now imperative to question which of the possible scenarios held globally will be the most likely in the context of the EAC. This is apparently an early probe into the future due

to the high probability that the pandemic will eventually table nature to the forefront of global geopolitical discourses [15,117]. This implies that in the EAC context, questions will center on natural resource management. Thus, the possibility of promoting a *paradigm shift* in the EAC calls for significant restructuring [21]. Further, the *paradigm shift* seems to be impeded by the role of the individual partner states. This implies that the main recovery concerns will inevitably be directed towards how the partner states can act as drivers of sustainability transformations [21].

Encountered reports on the social and economic impacts of COVID-19 points that the EAC, just like the rest of the world, is struggling with an unprecedented crisis of our time [102]. For most countries in the intergovernmental organization, short-term emergencies will promote continuity of the current model of development [21] and will be in full support that "*the business as usual*" is the most likely scenario.

Another aspect widely debated is, how the new world order will be reconfigured and the Sino-African relations (the role of China in the future of the EAC) [118]. It will be more elaborative to say that China is a major supplier to the East African market, accounting for around 20% of all imports into the region [119]. Dependency on imports from China and elsewhere has become excessive for EAC and an interruption to the surge of imports will oblige countries to find alternative strategies [119].

Most countries of the EAC rolled out measures against COVID-19 in a controlled manner without political posturing, and with reasonable time built in to set the guidelines in motion. For example, the region laid emphasis on international cooperation. These countries, which are part of Intergovernmental Authority on Development (IGAD), met on March 30<sup>th</sup> 2020 via a video-teleconference and resolved to jointly formulate a regional response, establish an emergency fund and mobilize support from the global community and from IGAD medical professionals in the diaspora [102]. Such an incidence fostered international cooperation which could translate to EAC following global trends in the post-pandemic world.

The region has also tied its future to extractive activities with high returns, a model that stands to continue in usage. If the relationship between

central and peripheral countries is not reconfigured in terms of greater equality and solidarity, it is unlikely that less favored regions such as the EAC will be able to establish a system change.

A vision of the post-pandemic era asserts that despite some movements being witnessed, there are those that do not exactly support the theory of the change of model by the political spheres [15]. In the event that the changed system is not feasible, it will be inevitable for the EAC partner countries to relinquish a matrix so dependent on the exploitation of natural resources. Given the absence of a mechanism for economic solidarity, EAC will clearly have inadequate resources to face a change in the economic model. Taking excerpts from views of the post-pandemic debated globally, the future scenario that gathers the most consensus is that of a *managed transition* [15]. For the EAC, embracing this mechanism is inevitable in the verge to initiate a transition.

Along this line, the world has seen pandemic signals that have never been witnessed before. For example, The World Bank placed 160 billion dollars for pandemic response in low-income countries while the United Nations has called for a Euro 2.5 trillion coronavirus package for developing countries [120]. Given the impacts of the pandemic, it is clear that developing and the developed countries alike, will struggle to get back on their economic feet post-pandemic, leaving countries with no magic money to address the same [120].

In another scene, a spirit of solidarity has brought forth the possibility of establishing a universal income pool [121]. This is ideally an old practice that has only received great attention because of the pandemic, and such would lead to a commensurate action for the six billion people living outside the core Group of 20 leading economies (G20) [15,121]. In the early days of the pandemic, advanced economies and China pooled massive government packages which, according to the G20, will extend a \$5 trillion lifeline to their economies [120]. The United Nations Development Program proposed to apply this income temporarily to some 2,700 million inhabitants around the world [120], and countries such as Germany have begun the first tests to study its effects on the behavioral practices of the population and establish its viability [122]. This particular form of collaboration would allow most EAC partner

states to cater for the most basic needs of their citizens, and resolve urgent demands to concentrate on building development models backed up by sustainability transformations.

Analogous initiatives will be imperative in disadvantaged regions of the world such as the EAC. The post-pandemic recovery is poised to come along with universally similar difficulties in Africa, the Indian Sub-continent, or countries that are in wars or regional conflicts such as Rwanda and Uganda (over Katuna-Gatuna border post), Lebanon, Palestine and Syria, to mention but a few [15,28]. Due to the apparent magnitude of the COVID-19-induced economic crisis and the socioeconomic structural problems, consolidation of this type of mechanism is essential to initiate a *managed transition*. Otherwise, generating a fundamental change would imply a kind of social revolt that forces the political power to divert its course. Thinking about social revolutions or profound transformations are unlikely but the pace at which events have been unfolding between 2015 up to now between Uganda and Rwanda, and Uganda and South Sudan is suggestive that it would not be something impossible [28,123]. Social and political instability in the region has regained momentum with social protests becoming increasingly witnessed in Uganda. The possibility of promoting a *paradigm shift* may be associated with this type of background, in view of the pressure that has been exerted to mobilize structural changes.

Most likely, the post-pandemic outlook for EAC will deviate from global trends as the circumstances accruing from the foregoing three global post-pandemic scenarios are markedly different. Constant economic crises, high dependence on the extractivist model and the socio-political conflicts are some of the required drivers. Although the measures and related actions to contain COVID-19 unfolded slightly different in every country of the EAC, it is not impossible to paint a single picture of the region (particularly excluding Tanzania and Burundi) [124]. Therefore, the most likely scenario of the EAC seems to be a return to *“business as usual”*, though some circumstances prevail on both global and local scales that have the potential to redirect this trajectory.

#### 4. CONCLUSIONS

The COVID-19 pandemic has brought to the forefront existing governance challenges that impede attainment of SDGs in the EAC.

Encountered literature revealed that the post-pandemic scenario of the EAC is poised to be primarily conditioned by how the new world order will be reconfigured. The most likely scenario seems to be a return to the “*business-as-usual*”, but there are circumstances that threaten to deviate such as dreadful trajectory at both global and local levels. The key thing apparently is to tilt this mixture further in the direction of cooperation, which could tie it to global solutions availing the possibilities of establishing significant changes. It is therefore suggested that, unlike the lackluster responses accorded by Tanzania and Burundi to COVID-19, the EAC member states will need to remain in solidarity and devise solutions that could lead the region into achieving sustainable development in the post-COVID-19 era.

## DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

## ACKNOWLEDGEMENTS

Sincere thanks to Timothy Omara (Moi University, Kenya) for the insights offered in building and for English proofreading of this article.

## COMPETING INTERESTS

Author has declared that no competing interests exist.

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