

Impact of Covid-19 on Domestic Health and HIV Financing in EAC

Rapid Assessment and Recommendations

**Draft prepared for
East African Community
Supported by UNAIDS RST ESA**

October 2020 Update

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Abbreviations and Acronyms

AFDB	African Development Bank
AFCFTA	African Continental Free Trade Area
AIDS	Acquired Immune Deficiency Syndrome
AML	Anti-money Laundering
AU	African Union
BIF	Burundian Franc
BOT	Bank of Tanzania
BSS	Bank of South Sudan
BUILD	Better Utilization of Investments Leading to Development
CAM	Carte d'Assistance Médicale
CBHI	Community Based Health Insurance
CCRT	Catastrophe Containment Relief Trust
CDC	Centers for Disease control and Prevention
CFT	Combating the Financing of Terrorism
CIT	Corporate Income Tax
COP	Country Operational Plan
CNN	Cable News Network
COVID-19	SARS Coronavirus disease
C19RM	Covid-19 Response Mechanism
EA	East Africa
EAC	East African Community
EWG	Expert Working Group
EU	European Union
FATF	Financial Action Task Force
FY	Financial Year
GDP	Gross Domestic Product
GHED	Global Health Expenditure Database
GHIS	Global Health Information System
GIZ	German International Cooperation
G20	Group Of Twenty
HIV	Human Immunodeficiency Virus
ICRC	International Committee of the Red Cross
IMF	International Monetary Fund
IP	Intellectual property
KFF	Kaiser Family Foundation
KNOMAD	Global Knowledge Partnership on Migration and Development
M&E	Monitoring and Evaluation
MFI	Micro finance Institution
MIGA	Multilateral Investment Guarantee Agency
ML	Money laundering
MOH	Ministry of Health
MOF	Ministry of Finance
NASA	National AIDS Spending Assessment
NCDs	Non-Communicable Diseases

NHA	National Health Accounts
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme
NSE	Nairobi Securities Exchange
OECD	Organization for Economic Co-operation and Development
OOP	Out of Pocket (expenditure)
PAYE	Pay As You Earn
PEPFAR	Presidents Emergency Plan for AIDS Relief
PIT	Personal Income Tax
PLHIV	People Living with HIV / AIDS
PPP	Public Private partnership
PSM	Procurement and Supply Management
P4H	Partners for Health
RWF	Rwandese Franc
SAGE	Social Assistance Grants for Empowerment
SGBV	Sexual and Gender Based Violence
SDG	Sustainable Development Goals
SFI	Supervised Financial Institution
SINOSURE	China Export Credit Insurance Corporation
SME	Small and medium sized enterprise
SSP	South Sudanese Pound
TB	Tuberculosis
TF	Financing Terrorism
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UDC	Uganda Development Cooperation
UDB	Uganda Development Bank
UGX	Ugandan Shilling
UHC	Universal Health Coverage
UHC	Universal Health and HIV Coverage
UNICEF	United Nations Children's Fund
UNAIDS	Joint United Nations Programme on HIV /AIDS
USAID	United States Agency for International Development
USG	United States Government
USD	United States dollar
VAT	Value Added Tax
WB	World Bank
WHO	World Health Organization
WITSA	World Information Technology and Services Alliance
WTO	World Trade Organization

Executive Summary

1. Executive Summary

i. Introduction:

The East African Community (EAC) is a regional intergovernmental organization comprised of six Partner States¹, namely: the Republic of Burundi, Republic of Kenya, Republic of Rwanda, Republic of South Sudan, United Republic of Tanzania and Republic of Uganda, which cooperate on health sector and HIV AIDS planning, service delivery and review, among other areas, guided by Article 118 of the treaty establishing the community. The region began shifting towards Universal Health Coverage in 2008, and upon the launch of the Sustainable Development Goals (SDGs), developed a joint resource mobilization strategy towards attaining Universal Health and HIV Coverage by 2030. The strategy aims to mobilize an additional \$23 Billion towards health by 2023, with majority of the funding originating from domestic sources (government, public health insurance schemes, private corporate sector) and progressively reduce out of pocket (OOP) spending on health to below five percent of current health expenditure.

Of the additional funds to be raised by EAC Partner States through the UHHC resource mobilization strategy, at least \$5 Billion targets public sector budgets resourced through indirect taxation, with a 10% annual progressive increase in health sector budgets; and a further \$8 Billion from social development and protection schemes including national health insurance schemes (National Hospital Insurance Funds, National Health Insurance Scheme, Mutuelles de Sante) in Kenya, Rwanda, Tanzania and Uganda, and other forms of health insurance currently in development within Burundi and South Sudan. In addition, states agreed to increase HIV financing progressively towards filling the 27% global HIV financing gap, through domestic financing, and include more HIV/AIDS interventions in the UHHC and health insurance service package. These results were all on course to being met, with governments having increased health sector budgets by more than \$1 Billion since 2018 to a cumulative \$3.5 Billion by July 2020, and annual health insurance scheme collections now estimated at more than \$ 1 Billion with over 10% growth during the first two fiscal years. Domestic HIV spending had risen close to \$350 Million in the region by 2019. However, the advent of COVID-19 in the region beginning February 2020 has affected all economic sectors and may impact implementation of all the domestic resource mobilization strategies that EAC Partner States had adopted.

This report analyzes the potential impact of COVID-19 on domestic HIV and health sector financing in the EAC States under optimistic and pessimistic scenarios, and formulates actionable short- and long-term recommendations to mitigate the pandemic's further effects and boost Domestic Resource Mobilization for UHHC during the remaining term of the EAC Resource Mobilization Strategy 2018-2023.

¹ The Democratic Republic of Congo has formally requested to join the EAC and entered into collaborative frameworks on some diseases. Full membership may be ratified by end 2021.

ii. Methodology

This rapid assessment was conducted remotely, during the second half of 2020. A combination of primary and secondary sources and methods were used. Primary methods included data collected from individuals within treasuries and UHHC committees, EAC Expert Working Groups on health and communities,² while secondary sources included reports published by a range of actors, including government sources (ministries of health, finance and planning, statistics bureau, community led observatories, civil society, others); bilateral agencies, multilateral partners (UNAIDS, WHO, Global Fund, IMF, World Bank/ African Development Bank, others) and other development agencies; private sector, including foundations, asset management corporations, sovereign wealth funds, individual researchers, among others. In addition, a number of teleconferences were held, while the researchers attended and interacted at several relevant online meetings hosted by the IMF, World Bank/ Africa Development bank, Global Fund, civil society networks and other partners. A brief questionnaire was shared by social media to the EWGs in EAC, while one-on-one discussions were held with health, finance and planning ministries from the EAC region Partner States. Sampling was non-probabilistic, purposive, with the sampling frame consisting of the same groups that reviewed and validated the UHHC Resource Mobilization strategy and its harmonized tracking measures. Recommendations were subjected to a review by EWGs for practicality, and a rapid legal assessment undertaken to evaluate readiness or progress in their implementation across each EAC Partner State.

Fiscal space analysis: Expanding fiscal space to enable increased domestic spending; and building sustainable mechanisms (public health insurance and similar schemes to which all contribute) are the region's prime domestic resource mobilization strategies towards attaining Universal Health and HIV Coverage. Simplified, Fiscal Space is the budgetary room that allows government to spend sustainably. It is calculated as the tax gap between the sustainable and the current tax-to-GDP ratio, where the sustainable tax rate is the constant tax rate that would achieve an unchanged debt-to-GDP ratio during a specific timeline, for a given projection set of public spending. This method is used where the interest rate to growth differential is positive. Higher revenues expand the amount of disposable income available to all. Higher tax revenues allow EAC Partner States to spend more on health, housing, education, infrastructure, and other recurrent and development objectives. Tax-to-GDP ratio is used to determine how efficiently government allocates resources, and longitudinally, to estimate the expected change in tax revenues due to the expected change in GDP. For computational purposes, overall fiscal space is taken as the net internal financial flows, including internal interest rates; and calculated as: tax and non-tax revenue (excluding external grants); + external grants; - Total non-priority non-interest expenditure; + External debt disbursements - External debt service.

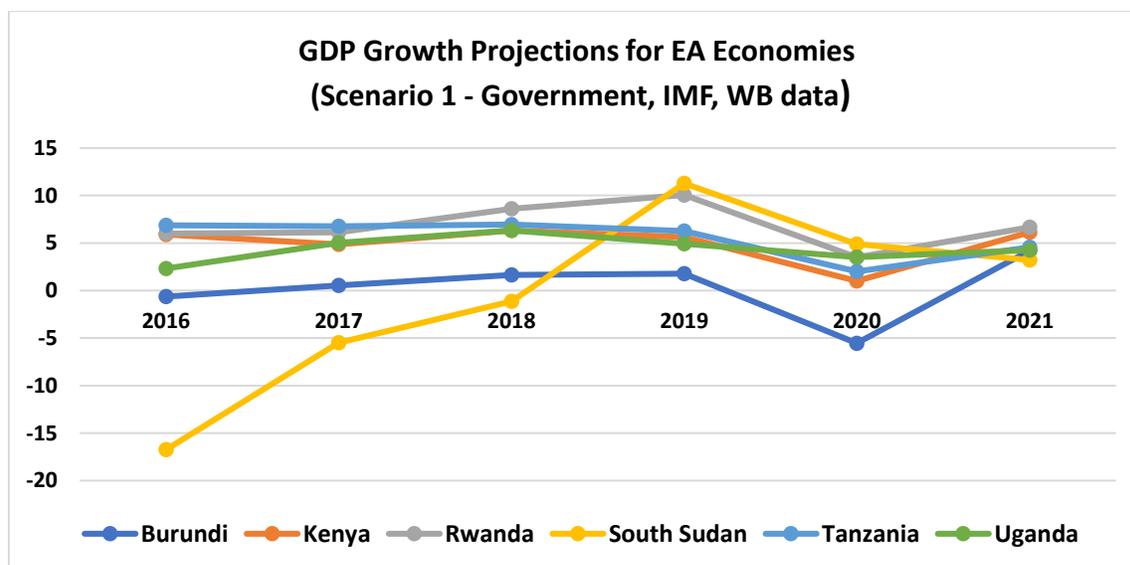
Scenarios used in this assessment:

While the IMF projects that global economic growth will fall by 4.4% (October 2020), and advanced economies are set to shrink at -5.8 %³, East Africa's 2020 economic growth post

² Data collection ongoing until end October.

³ IMF, World Economic Outlook, June 2020 – IMF updated its data in October 2020, estimating a shrinking of 4.4% in the global economy, up from -4.9% in June; and to -5.3% from -8% in June.

COVID-19 is expected at 1.2% compared to the pre-Covid-19 projection of 5%⁴ assuming that the virus is contained by end September 2020. The first scenario involves estimating COVID-19 pandemic effect on domestic health and HIV spending using IMF and World Bank data (Optimistic Scenario), assuming that the above positive factors are true.



A number of mitigating factors inform an optimistic outlook for future health and HIV funding: These include:

- Recent increases in budgets for the health and HIV sectors during the 2020/21, budget readings in five of the six EAC Partner States;⁵
- Fiscal, monetary, and other policy measures taken by the EAC heads of state and their governments.
- Positive trends in GDP growth in the years leading to the pandemic with four economies – Tanzania, Rwanda, Kenya, and Uganda featuring among the top ten fastest growing in Africa within the three preceding years.
- Adequate economic diversification of revenue sources by five of the six countries.
- Predictability of Global Fund support, with all six countries having received HIV allocations for the years 2020-2022 totaling \$1.1 billion with the possibility of more than \$300 million above allocation.

Under this scenario, the equation used to calculate the change in domestic health spending is :

$$Y = x[(ak) + d], (b/100)]$$

where y is the total change in disposable income for domestic health expenditure

x = GDP 2019

k = tax to GDP ratio

⁴ African Development Bank's East Africa Regional Economic Outlook, July 2020

⁵ Republic of South Sudan did not publish a budget by September 2020

a = Government health expenditure as a percentage of GDP
 d = Other domestic health expenditure as a percentage of GDP
 b = Gap between the previous year's and 2020 projected GDP growth using World Bank/IMF estimates

While the equation used to calculate the change in domestic HIV spending (Y^1) is

$$Y^1 = x [(a^1k)+d],(b/100)]$$

where y is the total change in disposable income for domestic HIV expenditure

x = GDP

k = tax to GDP ratio

a^1 = Government HIV expenditure as a percentage of GDP

d = Other domestic HIV expenditure as a percentage of GDP

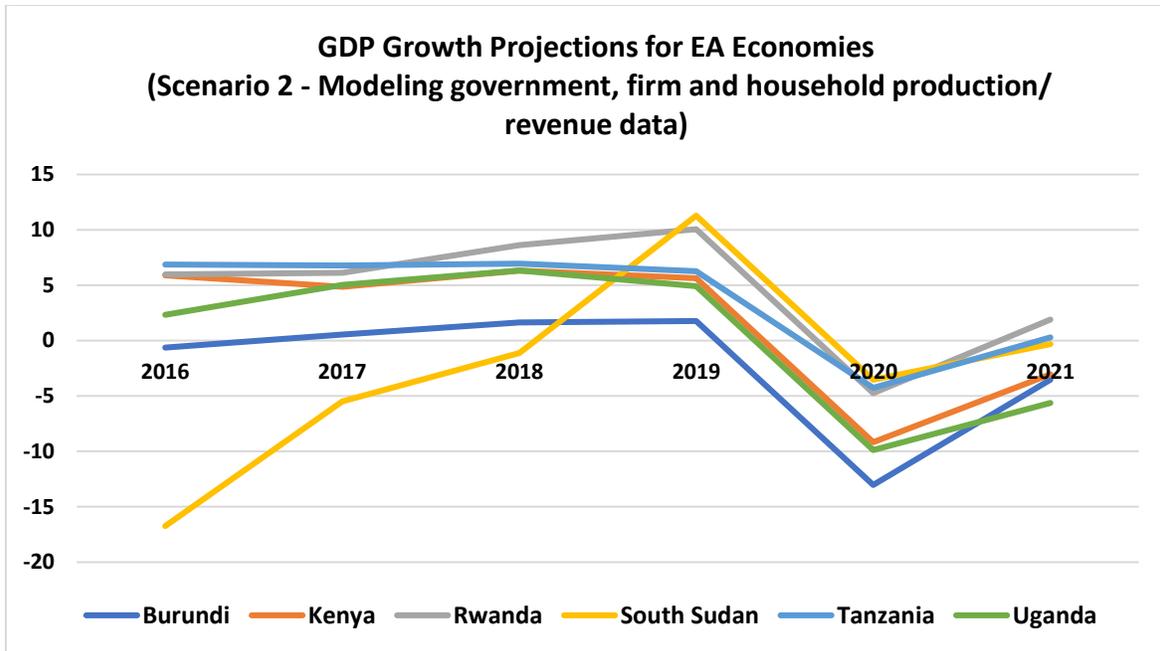
b = Gap between the previous year's and 2020 projected GDP growth using World Bank/IMF estimates

Under this scenario, GDP growth trends for EA economies assumes IMF/ WB data, as below.

Scenario 1: GDP Growth Projections for EA Economies (Scenario 1 - Government, IMF, WB data)						
	2016	2017	2018	2019	2020	2021
Burundi	-0.63	0.54	1.65	1.77	-5.54	4.21
Kenya	5.88	4.86	6.32	5.63	1.01	6.13
Rwanda	5.98	6.12	8.61	10.06	3.5	6.65
South Sudan	-16.74	-5.49	-1.12	11.28	4.89	3.22
Tanzania	6.87	6.77	6.95	6.27	1.9	4.56
Uganda	2.32	5.03	6.33	4.92	0.3	4.25

Conversely, a second, slightly more pessimistic scenario is assumed where GDP growth trends dip further down in 2020. The second scenario models the effect of COVID-19 on economic productivity of households, firms, and government investment in infrastructure into the next year; to find out the resultant change in fiscal space, using the Markov Chain model. The discrete-Time Markov Chains stochastic economic model describes a sequence of all probable economic events⁶ arising from COVID-19, modelled on Kenya's economy (since it is considered the largest and most resilient in the region); and then applies this reduction in GDP to all countries, to assess its effect on domestic revenue generation. This scenario finds a weighted average dip by at least about 14.8% in major sectors of productivity and sources of government revenue, with most countries only recovering early 2022. This dip of 14.8% is corrected for Tanzania, which only closed internally for half the time as other countries in 2020; averaging GDP losses in the region downwards to 12%.

⁶ James R Norris and James Robert Norris. *Markov chains*. Number 2. Cambridge university press, 1998.



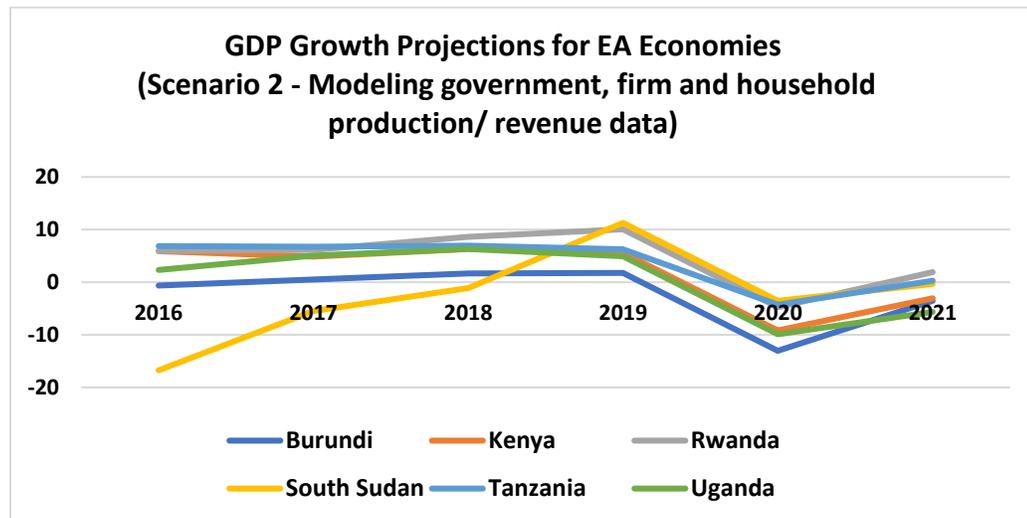
A number of other factors point to a pessimistic outlook for health and HIV funding. These include:

- The region’s foremost external HIV financing partner, that is the US Government’s PEPFAR, had in 2019 reduced annual HIV contributions by over \$200 Million overall⁷. The IMF estimates the US recession at -8% in 2020, followed by a level of recovery in 2021. While PEPFAR more than doubled its investments towards Adolescent Girls and Young Women in FY 2021, by \$400 Million⁸, continued PEPFAR support at current levels is not assured.
- Health sector budgets do not necessarily reflect the level of health sector expenditure. Traditionally, only between 70% to 80% of actual budgets are expended / spent due to revenue shortfalls, allocative and spending efficiencies, pilferage, and other factors.
- Revenues which depend on GDP growth and tax collection, alongside employer and individual contributions have been negatively affected. In fact, all sources for health sector and HIV financing, have been severely hit – with the exception of the Global Fund, assuming all donors remit their pledges on time.
- Much of the economy in East Africa is informal, unrecorded, and asymmetrical. Legislative, social, fiscal and monetary measures taken by EAC governments have been far reaching within the formal economy, but either postponed or failed to address a number of financial, legal, policy, disease program and population/ community level gaps, and may have failed to attain their trickle-down effect and increase households and firms’ production to a level that can stabilize household

⁷ UNAIDS, KFF (2020), Donor Government Funding for HIV in low and middle -income countries in 2019.

⁸ In July 2020, PEPFAR made this announcement at the 23rd International AIDS Conference (AIDS 2020) subject to congressional notification and approval procedures.

income and public revenue from indirect taxes. With the exception of Rwanda and Tanzania which have reliably linked community information systems at the village level to the health and development sectors, most of the statistics used by governments and development partners in East Africa do not accurately capture community and household data.



- A survey by the Kenya National Bureau of Statistics and community led monitoring mechanisms for HIV and other diseases shows that the health system faltered with reports of stockouts or missing medication by some sub populations. All economic sectors and most subsectors were adversely affected, communities still face potential long term health and economic effects of the pandemic, and most households had no financial coping mechanisms, hence 41.9% reduced spending while 36.7% did not take any measure to overcome financial distress caused by COVID-19.⁹
- A vaccine may not be available to the general public until end 2021 (according to US CDC) or early 2022 (according to Oxfam.)
- The pessimistic scenario is also necessary because of the high level of private spending on health in the region; the huge informal economy, high poverty rates, lack of public health insurance cover for a majority of the region’s population, and the view that government/IMF championed fiscal and monetary stimuli rarely attain a trickle-down effect at the scale required to avoid catastrophic spending on health by households. Data reported by international financial institutions do not tally with reality on the ground in some cases. For instance, South Sudan’s currency had depreciated by 40%, and suffered both an oil price shock and COVID-19 effects, and the Partner State has been unable to meet some of its financial obligations, ranging from payment of dues in East Africa to sustaining recurrent spending internally (some civil servants’ salaries had not been paid for between 6 and 19 months leading to Sept. 2020).

⁹ Kenya National Bureau of Statistics (2020) Survey on Socio Economic Impact of COVID-19 on Households Report. Wave 2, June 2020.

- Remittances, a major source of foreign exchange and key source of private funding, was expected to drop by 20% in 2020 according to the World Bank.¹⁰ However, in a few EA countries, they have actually increased by up to 9%.¹¹
- Much of the international data assumes that COVID-19 recovery will be attained in 2021, yet by September 2020, WHO had not officially announced the approval of any vaccine, and scientists estimate that it will only be available to the general public as far back as November 2021¹². Some IMF outlook by June 2020 assumed that the pandemic would be controlled by the end of 2020. For these reasons, the analysis provides two scenarios on the impact of COVID-19 on domestic health and HIV spending: an optimistic view based on analyses by the Bretton Woods institutions and a more pessimistic view based on independent modelling using data from East Africa.

Under this scenario, data on the effect of COVID-19 on government, sector, firm and household productivity from one country is inserted in the Markov Chain model, the output (a drop of 14.8% in GDP) extrapolated to the other economies and corrected for variances due to differences such as lockdown periods and preceding year trends in GDP. This is corrected to 12% on average to account for Tanzania's internal economy remaining open relatively longer than others.

**(Scenario 2 - GDP Growth Projections for EA Economies-
Modeling government, firm, and household production/ revenue
data)**

	2016	2017	2018	2019	2020	2021
Burundi	-0.63	0.54	1.65	1.77	-13.03	-3.53
Kenya	5.88	4.86	6.32	5.63	-9.17	-3.04
Rwanda	5.98	6.12	8.61	10.06	-4.74	1.91
South Sudan	-16.74	-5.49	-1.12	11.28	-3.52	-0.3
Tanzania ¹³	6.87	6.77	6.95	6.27	-4.265	0.295
Uganda	2.32	5.03	6.33	4.92	-9.88	-5.63

Under this scenario, only Rwanda and Tanzania attain positive growth by 2021, while the rest of EAC recovers in 2022.

The equation used to calculate the change in domestic health spending under this scenario is :

¹⁰ World Bank, KNOMAD Partnership, 2020.

¹¹ Central Bank of Kenya, January 2021

¹² Oxfam Expects at least 61% of the world's population will not have access to a vaccine before 2022 since 51% of potential vaccines have been secured by about 13% of countries (Statista, September 18 2020); while the US CDC Director, according to CNN, September 17, 2020, believes a vaccine will not be available to the general public until November 2021.

¹³ United Republic of Tanzania is assumed to have a smaller dip since productive economic sectors were locked down for slightly less than half the time in other partner states.

$$Z = x[(ak)+d),(c/100)]$$

where Z is the total change in disposable income for domestic health expenditure

x = GDP in 2019

k = tax to GDP ratio

a = Government health expenditure as a percentage of GDP

d = Other domestic health expenditure as a percentage of GDP

c = Gap between 2019 and 2020 projected GDP growth estimating domestic production using data from the local bureau of statistics modelled through the Markov-Chain

While the equation used to calculate the change in domestic HIV spending (Z^1) is

$$Z^1 = x[(a^1k)+d),(c/100)]$$

where Z^1 is the total change in disposable income for domestic HIV expenditure

x = GDP in 2019

k = tax to GDP ratio

a^1 = Government HIV expenditure as a percentage of GDP

d = Other domestic HIV expenditure as a percentage of GDP

c = Gap between 2019 and 2020 projected GDP growth estimating domestic production using data from the local bureau of statistics modelled through the Markov-Chain

iii. Findings

Under the optimistic scenario GDP will drop by 5.54% in Burundi, but grow by 1% in Kenya, 3.5% in Rwanda, 4.89 % in South Sudan, 1.9% in Tanzania and 0.3% in Uganda in 2020. These are markedly lower GDP growth rates than those forecasted towards the end of 2019. GDP growth in EAC is however expected to pick up to pre-pandemic levels in 2021.¹⁴

Under the pessimistic scenario, as much as 14.8%¹⁵ of GDP output will be lost by EAC Partner States. Correcting for Tanzania which had more relaxed social distancing actions and time periods as compared to other Partner States, the overall GDP in the region will be expected to drop by 12% under this. This will translate to a marked loss of fiscal space and is likely to lead to a drop in domestic health and HIV spending if not mitigated.

Under the optimistic scenario GDP will drop by 5.54% in Burundi; grow by 1% in Kenya, 6.7% in Rwanda, 3.2% in South Sudan, 4.56% in Tanzania and 4.25% in Uganda in 2020, and recover back to pre-COVID 19 levels in 2021.¹⁶ Weighted, these will amount to a reduction of 4.2% of health sector spending and HIV spending by domestic sources

¹⁴ African Development Bank, Economic Outlook, July 2020; IMF, World Economic Outlook, June 2020.

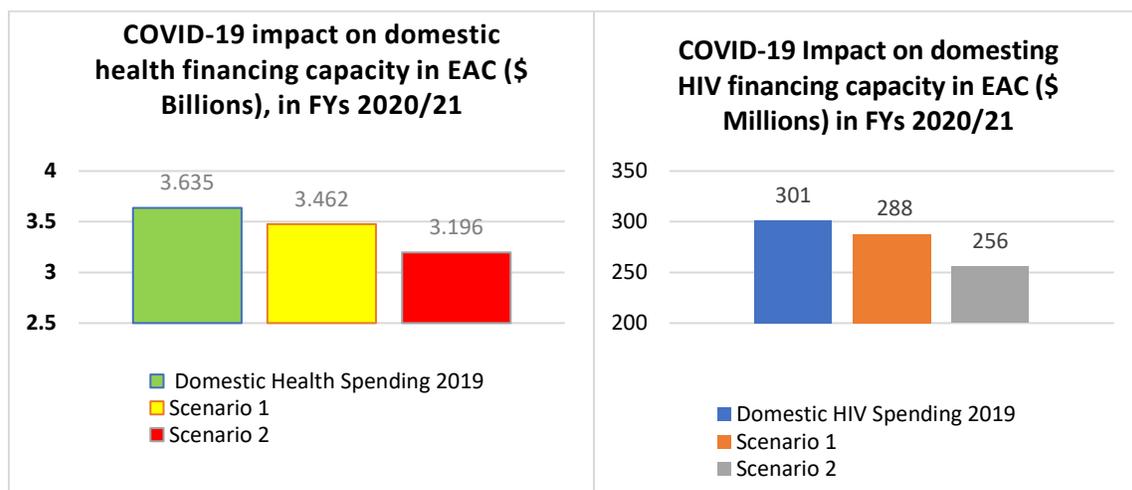
¹⁵ Applying the Markov Chain Model on key domestic factors of economic production, Odhiambo et al, University of Nairobi (April 2020); and updating for empirical effects of COVID-19 on the economy, and domestic health and HIV funding levels, Alando, C. September 2020.

¹⁶ African Development Bank, Economic Outlook, July 2020; IMF, World Economic Outlook, June 2020.

annually. Under this scenario EAC governments may face a total revenue shortfall amounting to \$162 Million, from current health expenditure levels of \$3.6 Billion annually while private sources including health insurance and households / out of pocket spenders will face a \$203 Million spending deficit. HIV spending by governments under this scenario may drop by \$12 Million in the next Fiscal Year, from \$301 Million to \$289 Million. In the case of individuals, this may result in avoidance or postponement of health-seeking even when services are required. At a time when the region was scheduled to create over Three Million jobs annually¹⁷ to keep abreast of new entrants to the labour market, the lockdown led to an estimated loss of over 5 million formal jobs across the region wiping off at least 10% of public health insurance contributions.

Under the pessimistic scenario, as much as 12%¹⁸ of GDP output will be lost by EAC Partner States. This will translate into a loss of fiscal space and is likely to lead to a drop in domestic health and HIV spending if not mitigated. Here, government spending capacity for the health sector will be reduced on health will fall by \$439 Million, while the private sector spends \$593 Million less. HIV spending by governments under this scenario may fall by up to 12%, by \$45 Million from \$301 Million to \$256 Million. This scenario may be accompanied by an increased disease burden (loss of life, increased morbidity/ sick days and reduced health seeking behavior, including among expectant mothers and infants who are critical determinants of health and HIV program impact, including delayed attainment of the third Sustainable Development Goal (SDG3) by between 1 and 2 years.

Implications are that unless health sector and HIV subsector budget requisitions and funds flow processes are prioritized by treasuries and line ministries, there is likely to be a fall in actual expenditure equivalent to these amounts, most visibly during the year 2021.



¹⁷ African Development Bank

¹⁸ Applying the Markov Chain Model on key domestic factors of economic production, Odhiambo et al, University of Nairobi (April 2020); Kenya National Bureau of Statistics (June 2020) and updating for empirical effects of COVID-19 on the economy, and domestic health and HIV funding levels, Alando, C. (September 2020)

The worst affected Partner States under each of the scenarios will be Burundi and South Sudan. Kenya and Rwanda have faced the largest percentage drops in GDP output but due to fiscal, monetary stimuli and, in the case of Rwanda - efficient community information systems, and high coverage of the mandatory public health insurance, will also be able to recover by 2021-2022. The highest single impact in monetary terms / spending will be seen in the drop in household capacity to spend on health, especially in Kenya, Tanzania and Uganda, and these populations would benefit most from increases in subsidized, mandatory health insurance coverage and compulsory government contributions. The least affected government budget will be Uganda's due to a relatively lower drop in GDP between 2019 and 2020, and a comprehensive set of measures taken to insulate and stimulate the economy. Tanzania will also face relatively lower impact on GDP since the reduced period and intensity of its social distancing measures did not completely shut down factors of production in the highest earning sectors.

However, households around East Africa will face the largest burden of health spending, due to the large informal size of the economy, and the inability of fiscal, monetary and balance of payment stimuli to trickle down to majority of the poor and low income earners.

It is likely that achievement of targets contained in section 5.1¹⁹ of the EAC UHHC Resource Mobilization Strategy may be delayed by one year to 2024/2025, given the impact of COVID-19, since fiscal space is likely to be constrained and the number of people on public and private health insurance is likely to fall due to job losses, company closures and lower remittance rates, while significant health sector resources including HIV and other disease community systems have been diverted to addressing COVID-19.

The following table provides an economic and financial summary of the impact of COVID-19 on both health and HIV financing capacity from domestic sources, for each of the EAC partner states. The columns in 'Yellow' and 'Green' represent the change or drop in disposable or available income from domestic sources that would otherwise be spent on health and HIV in each of the countries, if mitigating measures are not adopted..

Assuming an optimistic scenario, the disposable domestic revenue available from taxes will reduce by \$173 Million in 2020/2021 and on to the first quarter of 2022, compared to the 2019/2020 levels. (The East African Fiscal Year begins on July 1 and ends on June 30th). Of this amount, comparative drops by country will be \$4 Million in Burundi, \$90 Million (Kenya), \$14.8 Million (Rwanda); \$6 Million (South Sudan); \$43 Million (United Republic of Tanzania) and \$14.3 Million in Uganda. The private and other domestic sectors including insurance schemes and individuals will have \$220 Million less to spend on health in all Partner States. During the same period, the level of domestic resources available for spending on HIV will reduce by \$12 Million including by \$133,000 in Burundi, \$ 8 Million in Kenya, \$172,000 in Rwanda, \$.1.5 Million in South Sudan, \$2.5 Million in Tanzania and \$574000 in Uganda compared to 2019 spending. The interventions likely to suffer most from a fall in domestic government spending will be

¹⁹Section 5.1, page 46 of the EAC Universal Health and HIV Coverage Resource Mobilization Strategy 2018 – 2023 summarizes targets for domestic and external resource mobilization.

mitigation, especially among PLHIV, HIV sensitive social protection and the enablers. Significant losers will be out-of-pocket health purchasers and health insurance schemes.

Under the second scenario, if preventive actions such as prioritization of the health sector in budget spending are not taken, Partner States' health sectors stand to lose up to \$439 Million in disposable domestic resources from government budgets, and up to \$520 Million of the non-public domestic resources. The public sector will dispose of \$7.8 Million less to spend in Burundi, \$272 M less in Kenya, \$32 M in Rwanda, \$14 M in South Sudan, \$70 M in Tanzania and \$ 43 M less in Uganda. Disposable HIV/ AIDS expenditure will reduce by \$44 Million, including by \$270000 in Burundi, \$25 M in Kenya, \$ 387000 in Rwanda, \$ 3 Million in South Sudan, \$9 Million in Tanzania and \$6 Million in South Sudan. In percentage terms, the worst affected countries will be South Sudan and Burundi.

TABLE 1: EXPECTED CHANGE IN DOMESTIC EXPENDITURE ON HEALTH AND HIV – ‘OPTIMISTIC’ AND ‘PESSIMISTIC’ SCENARIOS

Country	GDP in \$ Billions (World Bank, 2020) ²⁰			Health Expenditure as % GDP all sources		Scenario inputs		% Reduction in fiscal space (disposable revenue) (US Dollars)				Reduction govt. HIV Exp. Sc.1 ²¹	Reduction govt. HIV Exp. Sc.2
	2017	2018	2019	Health Exp. as % GDP (WHO; current) ²²	Govt. health expenditure % GDP 2017 (WHO GHED)	GDP Growth Gap 2019-2020 - IMF/ WB - Scenario 1	GDP Loss - Markov Chain model (\$) Scenario 2 (applying tax to GDP ratio on model findings)	Scenario 1: reduction in government health expenditure (\$)	Scenario 1: reduction in private sector disposable health income/ expenditure (\$)	Scenario 2: reduction in government health expenditure/ income	Scenario 2: reduction in private sector disposable health income/ expenditure	Potential reduction in government HIV expenditure (scenario 1)	Potential reduction in government HIV expenditure (scenario 2)
Burundi	3	3	3	8	1.86	7.31	451,850,232	4,078,980	5,647,778.94	7,812,000	13,515,331	132,599	268463
Kenya	79	88	95	5	2.05	4.62	14,325,463,281	89,974,500	102,400,500.00	272,650,000	307,531,263	8,097,145	25938907
Rwanda	9	10	10	7	2.26	6.56	1,518,370,889	14,825,600	10,889,600.00	31,640,000	27,880,139	171,872	387760
South Sudan				10	0.82	6.39	1,799,670,114	6,287,760	17,994,240.00	13,776,000	54,611,464	1,469,700	3404000
Tanzania	53	58	63	6	1.58	4.26	4,738,280,113	43,498,980	60,568,200.00	69,678,000	109,428,989	2,455,353	8530334
Uganda	30	33	34	4	0.97	1.4	5,158,084,423	14,340,480	23,440,320.00	43,456,000	80,338,026	574000	6068000
TOTAL								173,006,300	220,940,638	439,012,000	593,305,212	12,900,669	44,597,464

²⁰ GDP Figures obtained from World Bank GDP Datasets

²¹ HIV expenditure data and estimates from UNAIDS AIDS Info database and NASA reports

²² Health Expenditure as % GDP and Government Health Expenditure obtained from WHO’s Global Health Expenditure Database

iv. Conclusions

While, fiscal stimuli and slight rebound of the retail sector have offset the potential economic losses considerably, economic effects of the COVID-19 pandemic roughly translate into proportionate drops of between \$173 M and \$439 M in disposable resources available for public spending in the calendar year, 2021 extending into 2022; including between \$13 M and \$45 M otherwise available from government sources for spending on HIV. Domestic private spending and health insurance schemes are likely to lose between \$220 M and \$593M from corporates and individuals under both scenarios. These scenarios are modelled using IMF, African Development Bank, and other agencies, as well as economic models using locally available bureau of statistics, UNAIDS and other data. Countries have been affected differently. In East Africa, Burundi and South Sudan appear to be the worst hit, and potentially incapable of meeting domestic health and HIV funding needs without additional fiscal stimuli including through borrowing from external sources. Other Partner States may require an extension of fiscal and monetary measures already in place.

Given the negative correlation between low public health spending and out of pocket expenditure on health, it will be important for the government and stakeholders to extend a raft of measures that ensure economies are not more adversely affected, individuals avoid catastrophic health spending, and that health gains are retained.

Given that most policies and fiscal stimuli may involve long term debt, UNAIDS and the Global Fund should consider lengthening the timeframes for the transition from development partner funding on a case-by-case basis for each country.

The United Nations should consider realigning the timelines for the achievement of Universal Health Coverage goals with the timeline that it would take to obtain a permanent solution to the pandemic, since Covid-19 has disrupted health systems to levels not fathomed previously. EAC countries should consider intensifying HIV/AIDS mitigation and social protection packages within public health insurance, accelerating public health insurance reforms and join Rwanda in making health insurance mandatory to protect citizens from catastrophic health spending. UNAIDS, WHO and partners should continue advocating for these and other recommendations to safeguard and prioritize HIV/ AIDS and health spending in domestic budgets.

v. Recommendations

A review of the EAC strategy and action plan (2018) for EAC UHHC Resource Mobilization against recommendations at the global level following the pandemic shows that most of the strategy's recommended actions²³ have not only remained relevant but also gained as sense of urgency. This section outlines actionable recommendations for the EAC Partner States to mitigate the effects of COVID-19 on domestic financing for UHHC.

²³ EAC UHHC Resource Mobilization Strategy and MS Excel Sheet Action Plan

UNAIDS should advocate for implementation of selected recommendations at country, partnership and global levels.

1. During the FY 2020/21 budget implementation, treasuries, and ministries in charge of planning should accelerate the funds flow processes for ministries responsible for health and HIV, by speeding up financing processes such as requisitions to the exchequer, authority to incur expenditure and other processes, with a view to maximizing amounts actually disbursed and expended for health and HIV in 2020 and 2021.

2. Partner States that have not yet adopted policies on mandatory public health insurance schemes and obligatory government spending on health, or intensified HIV/AIDS mitigation and social protection packages within public health insurance, should do so to avoid an increase in catastrophic health spending among citizens, which may further constrain disposable incomes and affect families and public revenues negatively.

3. UNAIDS and partners should advocate strongly for all states to include intensified HIV mitigation and HIV sensitive social protection packages within public health insurance schemes, and increase advocacy for adoption of select, relevant recommendations in this report.

4. All Partner States should adequately resource their health care systems and speed up implementation of the COVID-19 response mechanism activities funded by the Global Fund and other partners to improve readiness and limit future waves of the pandemic, across the region while strengthening diagnostic systems and customizing WHO's vaccine distribution plan.

5. Partner States should accelerate implementation of policies in the EAC UHHC Resource Mobilization Strategy (2018) that enhance domestic resource mobilization, including improved tax collection, administration and broadening the tax base to areas where labour is likely to shift, financial sector development, and financial innovation. These policies have now been supported by most global policymakers and multilateral partners including the IMF and World Bank (2020).

6. Partner States should accelerate reforms aimed at strengthening (Burundi, Kenya, Tanzania, Uganda) and creating (South Sudan) public health insurance schemes' ability to effectively play roles as social health insurers by increasing enrollment, with particular emphasis on enrolling informal sector workers; clearly defining and communicating the benefits package to members and providers; pooling resources across schemes covering different populations; improving payment mechanisms to better control both cost and quality; and making necessary institutional and legal reforms.

7. Partner States, with the assistance of UNAIDS, WHO, World Bank, USAIDS, P4H and others should continue to prioritize and implement measures in the EAC UHHC strategy aimed at improving efficiency in the allocation and use of health resources. These

include activities in the EAC UHHC Resource Mobilization plan, found under the following strategies:

Strategy 3.1: Strengthen and develop Flexible and Responsive Public Financial Management and Allocation Systems

Strategy 3.2: Improving efficiencies in the health system : Through optimizing the cost of inputs, for example pooled procuring commodities whose price has been collectively negotiated downwards by global platforms such as www.wambo.org ; improving health infrastructure availability and support by tapping into the Africa Infrastructure Fund; World Bank private sector initiatives and others to support construction and equipping of hospitals, research centers and supporting infrastructure); Improving the rational use of medicines; and optimizing the rational use of medicines.²⁴

8. The Global Fund should consider easing HIV cofinancing requirements in 2021 for countries classified as Challenging Operating Environments and extending them into the 2022-2023 period; and those whose domestic revenues will be hardest hit by the COVID-19 pandemic, including Burundi and South Sudan in the EAC.

9. Partner States that have not yet enrolled, should consider embracing debt service suspension and restructuring to safeguard fiscal space in the short and long term:

- Advocate collectively as EAC for bilateral and multilateral partners to proceed gradually in ending moratoria on debt service to prevent income losses and bankruptcies. Such moratoria should be gradually removed, and only when economies will have reverted back to pre-COVID-19 growth levels in GDP (currently expected at the end of 2021 for EAC countries, based on AfDB and IMF estimates 2020).
- Enrol for the IMF / World Bank G20 Debt Service Suspension Initiative²⁵
- Renegotiate funds and payment terms (longer grace periods) for loans owed to the Peoples' Republic of China by EAC Partner States.

10. EAC countries should widen the tax base and combat tax evasion collectively as contained in the UHHC Resource Mobilization strategy and operational plan (Strategy 1.4; activities 1.4.1 to 1.4.6)²⁶ .

²⁴ The EAC UHHC Resource Mobilization Operational Plan is available in MS Excel Format. It details activities that may be prioritized by countries to ensure results for the UHHC Resource Mob. strategies.

²⁵ Several Partner States have already begun negotiations. For example, on June 10 2020, the IMF Board approved a debt relief for Tanzania, of USD 14.3 million under the Catastrophe Containment Relief Trust (CCRT) and potentially up to USD 25.7 million, according to the Minister of Finance and Planning's Budget Speech to Parliament.

²⁶ An earlier version of the EAC UHHC Strategy is available at: <https://health.eac.int/publications/eac-universal-health-and-hiv-coverage-resource-mobilization-strategy-2018> ; the detailed operational plan in MS Excel may be obtained upon request.

11. EAC Partner States should adopt an insolvency framework to save *strategic* (those individual companies including SMEs, and sectors which are required to facilitate trade overall, and which have a multiplier effect on trade and employment. These include preventing viable firms from prematurely being pushed into insolvency through time-bound, extraordinary measures by:

- Increasing the barriers to creditor-initiated insolvency filings
- Suspend corporate directors' duty to put companies into insolvency and the associated liability for failure to file, except in cases of fraud. Directors often have a legal duty to act in the creditors' interests when a firm is on the edge of insolvency, to prevent businesses from growing debts they will not repay.
- Establish an informal out-of-court or hybrid workout framework, including mediation.
- Extend procedural deadlines for a limited time.
- Suspend requirements to proceed to liquidation, if the business activity of the debtor has stopped while undergoing reorganization.
- Ensure a mechanism for consumer bankruptcy, with appropriate safeguards: These critical tools for individuals and companies provide an orderly framework for paying creditors and give debtors key protections, such as discharge from their debt burden and shielding of certain assets from seizure by creditors. These have been shown to be critical tools for consumers and micro-entrepreneurs.

12. Strengthen governance and oversight for mobilized funds: EAC Partner States should consider forming a regional coordination mechanism for both domestic and external funds, complete with oversight mechanisms and interregional information exchange structures that link with the African Union hubs. These will partly address issues of conflict of interest currently plaguing individual countries that attempt to limit pilferage of funds by protected interests locally.

13. EAC Partner States should establish an emergency regional fund to respond to future COVID-19 and other outbreaks, build stockpiles of essential supplies, vaccines and protective equipment, accelerate pandemic response strategies especially in EAC Partner States scoring low on health system readiness on the Global Health Security Index (Burundi and South Sudan)²⁷, including modalities to deliver emergency health services to the most vulnerable.

14. EAC should Mobilize a regional pooled fund of at least \$1 Billion from multisectoral sources (governments, Africa Infrastructure Fund, OECD and G20 based asset managers and pension funds coupled with investment guarantee and investment promotion agencies (BUILD Act, World Bank MIGA, UK Trade, SINOSURE, etc.) and

²⁷ The Global Health Security Health System Preparedness Index showed by 2019 that South Sudan and Burundi's health systems were among the least prepared in Africa to address a health emergency such as the COVID-19; while those of Kenya and Uganda were best prepared in Africa, after South Africa, with Tanzania and Rwanda following closely: To download reports visit: <https://www.ghsindex.org/>

sovereign wealth funds facing surpluses, to accelerate implementation of the nine EAC Heads of States Health Sector Priorities, with emphasis on:

- Expansion of access to specialized health care and cross border health services
- Strengthening the network of medical reference laboratories and the regional rapid response mechanism for health security threats
- Expansion of capacity to produce skilled and professional work force for health in the region based on harmonized regional training and practice standards and guidelines
- Increase access to safe, efficacious and affordable medicines, vaccines, and other health technologies focusing on malaria, TB, HIV/AIDS, NCDs and other high burden conditions, and other priorities.

15. Accelerate regional trade and knowledge exchange consolidation initiatives:

- i. Accelerate implementation of the Africa Continental Free Trade Area (AfCFTA) frameworks through pooled procurement and supply by the regional block (EAC) to fill the health sector supply gap caused by PSM chain disruptions between Africa and other continents.²⁸
- ii. Accelerate the implementation of the African Union Regional Health Financing Hub for EAC to exchange knowledge with other countries.

16. Leverage ongoing multilateral cooperation to support health care systems [as supported by the Global Fund, World Bank, IMF, WHO, UNAIDS and other partners as well as the COVID-19 vaccine initiative (COVAX)] to enhance removal of trade restrictions on essential medical supplies; share information on the pandemic widely and transparently; provide financial assistance and expertise to Partner States with limited health care capacity; and to scale up vaccine production facilities regionally as trials advance to ensure adequate availability within the region. From the findings of this report, it is likely that the availability of effective vaccines and the efficiency of last mile and beyond the last mile²⁹ supply chain distribution systems will be the major determinant of whether countries manage to forestall any future reoccurrences of the COVID-19 pandemic and its attendant economic effects.

17. The Global Fund in preparation for the end of the Covid-19 Response Mechanism (C19RM) implementation period in June 2021, should consider reprogramming efficiency savings and Unfunded Quality Demand allocations towards supply chains for the COVID-19 vaccine.

18. Global Fund should encourage continuing Principal Recipients to direct savings from the 2017-2019 implementation grants that have gone into slippage/ closure at the end of 2020 to be reprogrammed into strengthening diagnostic capacity and vaccine storage as well as last mile and beyond the last mile, distribution and management capacity in

²⁸ Further information of AfCFTA may be found here: <https://au.int/en/cfta>

²⁹ “Beyond the last mile” here refers to how efficiently the health and community supply chain systems distribute the vaccine beyond health facilities and reach households, including those with reduced access and poor health-seeking behaviour.

countries. In the region, Burundi and South Sudan should be given the first priority, followed by Rwanda and Tanzania, Uganda and Kenya³⁰.

19. PEPFAR should strive to increase or hold its contributions constant for at least COP years 2021/22 and 2022/23 as most countries may not be able to absorb steep falls in grant amounts in FY 2021 and 2022.

20. To maximize domestic revenue collection as economies reopen, EAC Partner States should focus policy from protecting failing firms in non-strategic industries (air and port transport, communications, defense, health sector manufacturing, etc.) to providing incentives that support workers to shift into sectors that are picking up faster post-COVID-19, and providing stimuli, as well as policy and legislation support (removal of barriers to entry and relaxing of strict hiring rules) in these sectors such as ICT, financial technology (fintech), manufacturing, and retail; as well as facilitating capacity building of workers reallocate to these sectors. This is because businesses in some contact-intensive economic sectors may take much longer than others to recover, and intensive investment in these less protective sectors may tighten and constrain fiscal space, while retaining strict regulations may reduce productivity, thereby reduce taxes and promoting high debt levels.

21. National and local governments (counties, provinces, communes, and districts) should continue policies allowing temporary tax breaks for affected people and firms, wage subsidies for laid-off workers, cash transfers, and paid sick and family leave to mitigate income losses. These and other support should be removed gradually as opposed to suddenly, and any removal should consider the structure of employment—for the share of self-employed, distribution of firms across sectors experiencing different rates of recovery, and the size of the informal economy.

22. EAC should negotiate collectively with technology providers to speed up subsidized access to communication, workflow and other technologies in East Africa, as well as expanded bandwidth- all factors which will multiply the rate of economic growth in the region in the wake of the pandemic, and provide durable solutions. Other EAC Partner States may benefit from knowledge exchange with Rwanda, which is among the top three ranked African countries in WITSA's network readiness index.³¹

23. Governments and partners should heavily subsidize health insurance schemes in Kenya, Rwanda, Tanzania and Uganda if required; and accelerate the rollout of Burundi and South Sudan's public health insurance schemes; while speeding reforms to strengthen public health insurance agencies.³²

³⁰ Based on health systems readiness index on strength of the health systems relative to pandemics

<https://ghsindex.org>

³¹ World Information Technology and Services Alliance (2020) Network Readiness Index :

<https://networkreadinessindex.org/wp-content/uploads/2020/03/The-Network-Readiness-Index-2019-New-version-March-2020-2.pdf>

³² Among the options in the operational plan are: Separate health insurance scheme payers / funds/ entities (NHIF/NHIS/CBHI/CAM) from the users (MOH) and co-opt/ build capacity to examine various accreditation; service provision; refunds; capitation etc. promptly; Review laws and regulations to guide progressive pricing of insurance premiums to maximize uptake; professionally determine accreditation, capitation and timely reimbursements; - pass tougher laws to penalize entities defrauding health insurance funds; Review laws to provide more punitive and preventive

24. In addition, illicit financial flows from Africa could be as much as \$50 billion a year, more than double official development assistance. EAC Governments should collaborate internationally to embrace policies that limit and reverse illicit financial flows and curb capital flight; and use returned funds domestic health and HIV support among other developmental uses.

25. EAC Partner States should collectively develop investment vehicles, approach and provide concessions to large asset managers, pension funds and large financiers in the private sector, as well as sovereign wealth funds which gained surpluses in 2019 and any in 2020 to invest in the EAC health sectors, especially to build health sector infrastructure.

26. EAC Partner States should consider extending the term of the Resource Mobilization Strategy and its targets by one year to 2024/2025, given the impact of COVID-19, since fiscal space is likely to be constrained, the number of people on health insurance is likely to fall due to job losses, while significant health sector resources including HIV and other diseases community systems have been diverted to addressing COVID-19.

27. Several laws may require amendment in the wake of COVID-19. These include:

i. Labour laws: EAC Partner States should amend labour laws to provide a mechanism for carrying out temporary layoffs during national disasters subject to certain safeguards to protect employees; amend Occupational Health and Safety Acts to envisage the home as a workplace and amend labour law should also be amended to compel the employer, upon resumption of normal operations, to give priority to the laid off staff and to disregard the period of the disaster in the computation of the years of service. Countries should find ways to amend labor laws to help citizens deal with employment crisis.

ii. Ensuring gender sensitive policies: The COVID-19 pandemic has disproportionate negative effect on girls and women and affected their employment opportunities in a manner that will outlast the pandemic. There have been tens of thousands of teenage pregnancies across states; about a million left vulnerable to SGBV, and more adolescent women losing livelihoods and resorting to sex work. EAC partner states should join with the private sector to continue prioritizing women in the labour force; delivering customized emergency assistance to women and girls (e.g. food rations including sanitary hygiene materials) and equipping tribunals to prosecute the rise in domestic violence; offer zero-cost emergency hotlines and address other gender-specific vulnerabilities in a transformational manner. EAC Partner states should strengthen their gender mainstreaming

punishments for individuals and organizations who misuse or contravene health insurance usage and claim regulations, agreements and guidelines; Develop a system for delisting, successfully prosecuting, fee recovery and publishing names of individuals and service providers who contravene health insurance usage and claim regulations, agreements and guidelines,

stewardship to also reach women with their economic rescue and stimulus measures and ensure sustainability in transition. Gender-targeted fiscal stimulus packages are vital to ensure the survival of small and medium enterprises, many of which are owned by women and dependent on female workforce. And measures to increase financial inclusion are vital to reach women who are otherwise often excluded from state fiscal support. Yet, COVID-19 policies and regulations so far lack such gender-specific elements. The COVID-19 pandemic has exacerbated the vulnerability of women and girls, further increasing the wage gap and economic dependence.

iii. EAC should jointly advocate for increased access to health and IP rights, price reductions and amending laws (as Rwanda has done): As proposed in the UHHC Resource Mobilization strategy, there is need to revise copyright laws in each partner state for essential health products: Once a vaccine and other health products such as testing kits and other medical/protective devices for COVID-19 are developed and approved, these ought to be availed affordably to all, including the most vulnerable, at the same time, an accessible vaccine or treatments for COVID-19 may still end up being beyond the reach of those who need them most, states must utilize existing public health flexibilities. These include safeguarding a high standard of patentability as well as flexibilities provided for under the WTO TRIPS Agreement, such as transition provisions for Least Developed Countries, compulsory licenses and government use, and parallel imports. Some IP regimes are not comprehensive and do not take advantage of public health flexibilities and Partner States must be proactive in positioning themselves to use the measures available to them to protect public health and promote access to healthcare, which includes the utilization of TRIPS flexibilities.

iv. Modifying trade laws to remove export restrictions by manufacturing countries for essential health products: National emergency measures are necessary as first order steps. However, for sustainability, the region should advocate against export restrictions, by vaccine and reagent producing states which have had detrimental consequences on disaster relief, COVID-19 testing³³ and may affect vaccine availability in the long term. To forestall these negative consequences in future, the region should move with speed to build manufacturing capacity for essential medicines and diagnostic reagents in the region, beginning with the planned manufacturing facility in Zanzibar. The EAC region should in the meantime advocate with the WTO to reform export restriction laws.

v. Cybersecurity laws: Information technology has never been as crucial as it is now. For countries which do not have comprehensive data and cybersecurity laws, there is need to adapt laws to ensure proper handling of data; and safeguarding of wealth (The region's financial systems lose more than \$150 Million annually to cybertheft; this is an indirect leak on the tax system, which threatens to grow post COVID-19, as all sectors, financial system and the taxation system goes online.

vi. Redirecting illicit funds flows into public revenue: Supervisors, financial intelligence units and law enforcement agencies should continue to share information with

³³ In September 2020, reagents for use in COVID-19 diagnostic equipment supplied by Roche, as US-based entity, were unavailable due to export restrictions by the US government; this led to disruptions and reduced testing capacity in East Africa.

the private sector to prioritize and address key money laundering risks, particularly those related to fraud, and TF risks linked to COVID-19. Additionally, criminals and terrorists may seek to exploit gaps and weaknesses in national anti-money laundering/counter-financing of terrorism (AML/CFT) systems while they assume resources are focused elsewhere, making risk-based supervision and enforcement activity more critical than ever. Financial institutions and other businesses should remain vigilant to emerging ML and TF risks and ensure that they continue to effectively mitigate these risks and are able to detect and report suspicious activity. The FATF calls on countries to explore using digital identity, as appropriate, to aid financial transactions while managing ML/TF risks during this crisis, while providing reporting mechanisms.

vii. Relaxing financial and other laws to enable innovation: The increasing trends towards digitalization of financial services requires laws that address rising inequalities during and after the pandemic by enabling the use of sound financial laws and addressing several risks such as: insufficient consumer protection laws, lack of financial and digital literacy, as well as addressing money laundering and cyber risks through international agreements and information sharing; ensure digital payments can be made across borders, and facilitate the movement, release and clearance of goods across borders. Laws limiting the use of drones for distribution of health and other products should be removed to boost domestic trade and the retail sector in general. In addition, there is need for policies that ensure easy flow of credit to small-scale businesses and keep them afloat after the pandemic.

2. Background

The East African Community (EAC) is an intergovernmental organization of the Republic of Burundi, Republic of Kenya, Republic of Rwanda, Republic of South Sudan, United Republic of Tanzania and Republic of Uganda (www.eac.int). Article 118 of the treaty establishing the EAC calls for regional cooperation in health among the Partner States. In view of its high disease burden, where nearly 1.3 million³⁴ people die of AIDS and other preventable causes annually, dialogue among EAC Partner States has progressed towards ending AIDS and achieving Universal Health and HIV Coverage (UHC).

Building upon previous commitments such as the Framework of Action on Sustainable Financing of Universal Health and HIV Coverage (EFoA) and other regional instruments adopted during the High-Level Ministerial dialogue on Sustainable financing for universal health and HIV and AIDS coverage held on 23rd June 2016, the EAC developed and adopted a Resource Mobilization Strategy for Universal Health and HIV Coverage, covering the years 2018 to 2023. This strategy aimed to finance UHC to the tune of an additional \$23 Billion between the Fiscal Years 2018/19 and 2023/24, mainly through domestic sources. A rapid review during a meeting of the EAC Expert Working Group (EWG) on Health held in Dar es Salaam in November 2019 revealed that most of the health financing commitments made by partner states were on the course to being met.

However, the Coronavirus 2019 (Covid-19) pandemic triggered a global recession not seen since the second world war, and a contraction in sub Saharan Africa not witnessed since the 1970s, at a time when more than 70% of HIV funding in East Africa originates from external sources. By September 9, 2020, there were nearly 50,000 confirmed cases of COVID-19 and nearly 800 deaths reported across EAC.

Table: COVID-19 Disease Burden in EAC Partner States (September 9, 2020)

	Population, 2019 Est.	Confirmed Cases	Deaths
Burundi*	10864245	469	1
Kenya	52573973	35460	607
Rwanda	12626950	4460	21
South Sudan	11062113	2555	48
Tanzania*	58005463	509	21
Uganda	44269594	4101	46
Total Confirmed	189,402,338	47,554	744

Source: World Health Organization, figures reported as of 9 September 2020; Population size based on UN Statistics Data for 2019

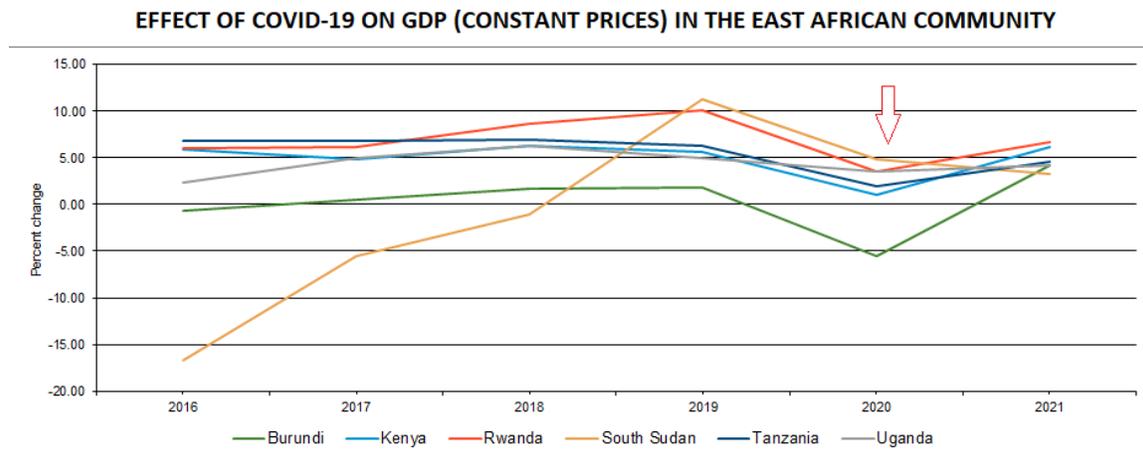
*Tanzania cases last reported in May 2020; Burundi numbers affected by delays in mass testing

Applying a positivity rate of between 4.1% (September 2020) and 7.2% (July 2020) based on Kenya's testing figures (from a sample size of 490,000 tests) and extrapolating for the

³⁴ WHO, World Bank (2016) Global Health Observatory Dataset- Mortality, All ages, by country, from selected common diseases (Respiratory/ Pulmonary, Malaria, TB, AIDS related, neonatal, maternal, NCDs, Stroke and others)

region (due to the high sample size), it could be estimated that EAC suffered between by 7.8 Million and 13.8 Million mostly unconfirmed COVID-19 cases, by mid-September 2020, with about 90% estimated to be asymptomatic, but prone to reoccurrences. This implies than demand for health services may rise in future, and more individuals would require insurance to avoid catastrophic out of pocket expenditure going forward.

Complicating the existing disease burden in Eastern Africa, the COVID-19 pandemic has had major impact not only on public health but also on economies businesses and communities. Oil prices have fallen steeply, affecting the economic outlook for South Sudan, Tanzania and to a smaller extent, Uganda.³⁵ All major internal and external revenue sources have been affected, with GDP growth projections revised downwards, and Burundi going into recession, as illustrated by the graph trending historic and projected GDP growth between 2016 and 2021 in the six Partner States.



According to the African Development Bank, in 2020, EAC economies are expected to grow at a fraction of 2019 rates: between 18% (Kenya) and 72% (Uganda) of 2019 GDP growth rates. Rwanda, South Sudan and Tanzania are expected to register GDP growth rates at 35%; 43% and 32% of their respective 2019 rates.³⁶ With only Rwanda and South Sudan being net exporters, this is an indication that internal sources of revenue, mainly indirect taxes at national level may drop considerably for most states, at least during the next three quarters, depending on the rate of recovery, reducing fiscal space, and fiscal, monetary stimuli or balance of payment adjustments. These will in turn affect the amount of domestic spending on health and HIV.

³⁵ Oil prices per barrel dropped by 43%, according to the World Bank, 2020. Some EAC economies have faced both price drops and Crude oil constitutes more than 95% of South Sudan’s exports; with China as its foremost export partner; Processed petroleum products constitute 5% of Tanzania’s exports; while Uganda has recently begun exporting oil.

³⁶ IMF World Economic Outlook database, April 2020. These were later revised further downwards in June 2020; but East Africa is estimated to be the least affected in the continent.

Table: Effect of COVID-19 on GDP Trends in EAC³⁷

Country	2016	2017	2018	2019	2020	2021
Burundi	-0.63	0.54	1.65	1.77	-5.54	4.21
Kenya	5.88	4.86	6.32	5.63	1.01	6.13
Rwanda	5.98	6.12	8.61	10.06	3.50	6.65
South Sudan	-16.74	-5.49	-1.12	11.28	4.89	3.22
Tanzania	6.87	6.77	6.95	6.27	2.01	4.56
Uganda	2.32	5.03	6.33	4.92	3.52	4.25

A second scenario based on Markov Chain modelling on leading sectors and populations from all income decile, which finds that the GDP of Kenya (the region's most resilient) may contract by between 12% and at least 14.9%, and this is extrapolated as a minimum threshold across East Africa.

3. Rationale

Of the additional \$23 Billion to be raised by Partner States of the East African community, in the UHHC resource mobilization strategy, at least \$5 Billion targeted national budgets through taxation; and a further \$8 Billion from social development and protection schemes including national health insurance schemes (National Hospital Insurance Funds, National Health Insurance Scheme, Mutuelles de Sante (Rwanda) and others in development within Burundi and South Sudan).

The pandemic has hit at a time when the HIV epidemic was facing a 27% financing gap. UNAIDS estimates that the resources available from all sources for HIV in-country activities totaled \$ 19.1 billion in 2016, a deficit of \$ 7.2 billion required by 2020, towards ending AIDS as a global public health threat by 2030. Domestic sources of funds (public and private) reached 57% of the total resources available in low-and middle-income countries in 2016, but some countries are still highly donor dependent for their HIV funding.

Between the fiscal years beginning July 2018/19 and 2019/20, all Partner States including Burundi, and South Sudan had increased their budgets raising contributions by nearly \$1.5 Billion with Kenya earmarking an additional \$450 Million of her domestic budget to UHHC while Kenya and Tanzania's NHIFs spent more than \$ 1 billion on UHC related spending with Tanzania's recording significant surpluses. Rwanda had gone further and launched payment for results schemes, and a cross-border health insurance scheme among many innovations, while a health impact bond had been planned for launch and taking to

³⁷ African Development Bank, 2020

market in the Nairobi Securities Exchange by end 2020, through the United Nations SDG partnership and a number of Public and Private Sector players. In brief, all States were on course to collectively meeting targets.

However, the onset of COVID-19 during the first quarter of the 2020 calendar year has affected all economic sectors and may impact implementation of all the strategies that EAC Partner States had adopted towards domestic resource mobilization. It is critical to estimate the effect of COVID-19 on domestic HIV and health sector financing in the EAC States, and make actionable short- and long-term recommendations to mitigate further long term effects and boost Domestic Resource Mobilization for UHHC during the remaining term of the Resource Mobilization Strategy.

While global economic growth is expected to be -4.9%, and advanced economies are set to shrink at -8%³⁸, East Africa's 2020 economic growth post COVID-19 is expected at 1.2% compared to the pre-Covid-19 projection of 5%³⁹ assuming that the virus is contained by end September 2020. Modelled, all these scenarios do not bode well for East Africa's health and HIV financing outlook. This is because the main source of HIV financing in the region are for the major part advanced economies contributing to the Global Fund to fight AIDS, tuberculosis, and malaria, and US Government's PEPFAR, which finance close to 80% of the region's HIV response, while the rest of the health system and disease programs, including primary universal health strategies are about 70% funded by the EAC governments through revenues which depend on GDP growth and tax collection, alongside employer and individual contributions to health schemes.

All these avenues, with the exception of the Global Fund, have been severely hit.

The harmonized regional response to the pandemic agreed on by EAC heads of state during the meeting on May 12th included: (i) adopting a harmonized system for certification and sharing of test results; (ii) establishing a regional mechanism for testing and certifying truck drivers and the adoption of an EAC digital surveillance and tracking system for drivers and crew; (iii) supporting agro-processing and value chains; and (iv) establishing special purpose financing schemes for SMEs.

While far reaching in their social distancing impact, the legislative measures passed by all countries failed to address a number of financial, legal, policy, disease program and population level gaps. For example, cross border populations with economic or medical activities in neighboring countries were closed off for about six months. The impact of COVID-19 as a co-infection or potential opportunistic infection to HIV and other diseases was recognized by health sectors but due to fiscal constraints the synchronized budget reading across the six partner states in June 2020 and amounts dedicated to HIV, TB, NCDs and other diseases did not reflect significant additional domestic funds allocated to the major diseases, at a time when the health sector was heavily strained by gaps in testing and emergency care equipment. Community led monitoring mechanisms for HIV and other

³⁸ IMF, World Economic Outlook, June 2020

³⁹ African Development Bank's East Africa Regional Economic Outlook, July 2020

diseases faltered, with reports of stockouts or missing medication by some sub populations. All economic sectors and most subsectors were adversely affected.

4. Methodology

The rapid assessment was conducted remotely, during the second half of 2020. A combination of primary and secondary sources and methods were used. Primary methods included data collected from EAC Expert Working Groups on health and communities,⁴⁰ while secondary sources included reports published by a range of actors, including government sources (ministries of health, finance and planning, others); bilateral, multilateral partners and other development agencies; private sector, including foundations, asset management corporations, sovereign wealth funds, individual researchers, among others. In addition, a number of teleconferences were held, while the researchers attended and interacted at several relevant online meetings hosted by the IMF, World Bank/ Africa Development bank, Global Fund and other partners.

Definitions used in this report

Fiscal space analysis: Simplified, Fiscal Space is the budgetary room that allows government to spend sustainably. It is calculated as the tax gap between the sustainable and the current tax-to-GDP ratio, where the sustainable tax rate is the constant tax rate that would achieve an unchanged debt-to-GDP ratio during a specific timeline, for a given projection set of public spending. This method is used where the interest rate to growth differential is positive. Higher tax revenues allow EAC Partner States to spend more on health, housing, education, infrastructure and other development objectives. Tax-to-GDP ratio is used to determine how efficiently government allocates resources, and longitudinally, to estimate the expected change in tax revenues due to the expected change in GDP.

For computational purposes, overall fiscal space is taken as the net internal financial flows, including internal interest rates; and calculated as: tax and non-tax revenue (excluding external grants), + external grants; - Total non-priority non-interest expenditure, + External debt disbursements - External debt service.

Domestic resources: These include government (public) resources from tax and non-tax revenue, local private sector spending, public health insurance schemes and individuals.

As an important source of external grants PEPFAR support to HIV is assumed constant at current rates since it is not known beyond FY 2020/2021, while the adoption of a predictability policy has meant that HIV allocations by the Global Fund to the six EAC Partner States is known over the next three years (\$1.1 Billion).⁴¹ An application of the

⁴⁰ Data collection continued until 30th October.

⁴¹ Global Fund (2019), 2020-2022 Allocations <https://www.theglobalfund.org/en/funding-model/before-applying/allocation/>

Markov Chain model on one country is used to analyze and extrapolate the expected change in GDP due to COVID-19 and historical tax to GDP ratios to compute the expected change in domestic revenue due to the change in annual productivity.

The assessment considers two scenarios: an optimistic one using World Bank IMF data and a more pessimistic outcome relying on local bureaus of statistics data to model the economic effect of fall in GDP on disposable income, using the Markov-Chain stochastic model.

The equation used to calculate the change in domestic resources for health under the optimistic scenario is :

$$Y = x[(ak)+d],(b/100)]$$

where y is the total change in disposable income for domestic health expenditure

x = GDP 2019

k= tax to GDP ratio

a = Government health expenditure as a percentage of GDP

d= Other domestic health expenditure as a percentage of GDP

b= Gap between the previous year's and 2020 projected GDP growth using World Bank/ IMF estimates

While the equation used to calculate the change in domestic HIV spending (Y^1) is

$$Y^1 = x [(a^1k)+d],(b/100)]$$

where y is the total change in disposable income for domestic HIV expenditure

x = GDP

k= tax to GDP ratio

a¹ = Government HIV expenditure as a percentage of GDP

d= Other domestic HIV expenditure as a percentage of GDP

b= Gap between the previous year's and 2020 projected GDP growth using World Bank/ IMF estimates

Under the pessimistic scenario, the following equation is applied:

$$Z = x[((ak)+d)],(c/100)]$$

where Z is the total change in disposable income for domestic health expenditure

x = GDP in 2019

k= tax to GDP ratio

a = Government health expenditure as a percentage of GDP

d= Other domestic health expenditure as a percentage of GDP

c= Gap between 2019 and 2020 projected GDP growth estimating domestic production using data from the local bureau of statistics modelled through the Markov-Chain

While the equation used to calculate the change in domestic HIV spending (Z^1) is

$$Z^1 = x[(a^1k)+d],(c/100)]$$

where Z^1 is the total change in disposable income for domestic HIV expenditure

x = GDP in 2019

k = tax to GDP ratio

a^1 = Government HIV expenditure as a percentage of GDP

d = Other domestic HIV expenditure as a percentage of GDP

c = Gap between 2019 and 2020 projected GDP growth estimating domestic production using data from the local bureau of statistics modelled through the Markov-Chain

A brief questionnaire was shared by social media to the EWGs in EAC, while one-on-one discussions were held with health, finance and planning ministries from the EAC region Partner States. Sampling was non-probabilistic, purposive, with the sampling frame consisting of the same group that reviewed and validated the UHHC Resource Mobilization strategy and its harmonized tracking measures. In addition, focus group discussions were conducted with other EWGs.

Besides primary respondents, data from a number of local and international health, financing and research agencies was collected, collated and analyzed in spreadsheets, and an equation devised to model the lower and upper bounds of the economic effect of COVID-19 on individual EAC partner states using the Markov model, with the variables analyzed above, and compared to other reports for variance⁴².

Recommendations were subjected to a review by EWGs for practicality, and a rapid legal assessment undertaken to assess the readiness of their implementation across each EAC Partner States.

Limitations:

For reasons of social distancing, and non-practicality of travel due mainly to the risk of quarantine during this period, face-to-face interviews were minimized. Most interaction with respondents were conducted online. To collect data and compare across countries, the author built a secure online community observatory tool (www.policyroom.org) and used it collect primary data remotely on the effects of the COVID-19 pandemic on communities, including pregnant women and those living with chronic diseases including HIV, TB, cancer, respiratory diseases as well as non-communicable diseases such as diabetes.

⁴² Odhiambo et al. (April 2020), Modeling Kenyan Economic Impact of Corona Virus in Kenya Using Discrete-Time Markov Chains. Journal of Finance and Economics, 2020, Vol. 8, No. 2, 80-85. Available online at <http://pubs.sciepub.com/jfe/8/2/5>. Published by Science and Education Publishing DOI:10.12691/jfe-8-2-5

In analyzing the economic effect of COVID-19 on key sources of revenue, the Markov model can only be applied to countries with similarly diversified economic structures. This means that the findings may not be accurately applied to South Sudan, which has fewer principal internal sources of revenue, and a slightly different economic structure. Similarly, different models have to be applied to this analysis since HIV funding in the region depends majorly on external sources while the majority of health sector funding is drawn from internal sources.

For some key data such as tax to GDP ratios, where data from the country, World Bank, AfDB or IMF was this analysis has relied on different sources such as UNICEF or USG fiscal space or expenditure analysis, and performed a longitudinal analysis to check for changes. especially for Burundi and South Sudan, where data does not exist.

The global nature of the COVID-19 pandemic has affected all countries in different ways, and the rate of recovery is not exactly known, since it will depend for the most part on the availability and effective deployment of a vaccine, and lack of a second wave. There has seldom been such a high number of variables to consider in analyzing the economic effect of a single event. Secondly, the effects have created both an economic shock, oil price shock, and in the region, some socio economic and political issues. Analyses between economists and agencies may differ based on the number of variables considered in each analysis; this study therefore confines itself to data from authoritative sources, and only those necessary to measure the effect of COVID-19 on the key domestic resource mobilization strategies in the EAC Universal Health and HIV coverage resource mobilization document.

Still, one school of analysts has taken an optimistic view about East Africa's economies post crisis (IMF/ World Bank)⁴³; while many local economists, based for instance on an analysis by the Markov Chain model, and empirical effects on the population, formal and informal private sector - have taken a slightly pessimistic view. The pessimistic scenario is necessary because of the high level of private spending on health in the region; the huge informal economy, high poverty rates, lack of public health insurance cover for a majority of the region's population, and the view that government/IMF championed fiscal and monetary stimuli rarely attain a trickle-down effect at the scale required to avoid catastrophic spending on health by households. Data reported by international financial institutions do not tally with reality on the ground in some cases. For instance, South Sudan's currency has depreciated by 40%, and suffered both an oil price shock and COVID-19 effects, and the Partner State has been unable to meet some of its financial obligations, ranging from payment of dues in East Africa to sustaining recurrent spending internally (some civil servants' salaries were not paid for 19 months leading to September 2020), yet on paper, international data reports it on a growth trajectory. Much of the international data assumes that COVID-19 recovery will be attained in 2021, yet by September 2020, WHO had not officially announced the approval of any vaccine, and

⁴³ An optimistic view may not be far-fetched. Mitigating factors in partner states such as Uganda and Rwanda mean that the economy may only slightly be affected but growth may still be witnessed. Uganda's currency has actually appreciated against the USD since 2019.

scientists estimate that it will only be available to the general public as far back as November 2021⁴⁴. Some IMF outlooks assume that the pandemic is controlled by September 2020. For these reasons, the analysis provides two scenarios on the impact of COVID-19 on domestic health and HIV spending: an optimistic view based on analyses by the Bretton Woods institutions and a more pessimistic view based on independent modelling using data from East Africa.

5. Findings

This section models the effects of COVID-19 on each of the domestic resource mobilization strategies currently being implemented by EAC Partner States; and their interventions as adopted in UHHC resource mobilization strategy. The strategy's six results-based programmes are implemented through a mutual accountability and reporting framework guided by domesticated implementation plans that take into account each Partner State's context.

The strategic results expected from the EAC Universal Health and HIV Resource Mobilization 2018-2023 plan include:

- I. Enhanced fiscal space for UHHC.**
- II. Sustainable UHHC financing mechanisms developed by each Partner State.**
- III. Improved spending and allocative efficiencies in the health and HIV sectors.**
- IV. Increased UHHC funding through public private partnerships (PPPs).**
- V. Strengthened structures at national and regional level to support and enable UHHC policy, governance, regulation, and resource mobilization; and
- VI. Enhanced cross-sectoral collaboration for UHHC resource mobilization.

These strategic results are premised upon EAC Partners continuing to meet priority commitments under the Enhanced Framework of Action (EFOA), developed consultatively with stakeholders in the EAC region, which include commitment to increase national health budgets to cover resource requirements for UHC; Commitment to implement a cost-effective UHHC reference package; exploration of innovative financing mechanisms to expand fiscal space for UHC and ending AIDS by 2030 and implementation of measures to improve efficiency in the allocation and use of health resources

This report analyzes the effect of COVID-19 on the UHHC resource mobilization strategic results which are most likely to affect domestic resource mobilization, namely fiscal space and sustainable financing mechanisms. Domestic private sector support is assumed to be

⁴⁴ Oxfam expects that at least 61% of the world's population will not have access to a vaccine before 2022 since 51% of potential vaccines have been secured by about 13% of countries (Statista, September 18 2020); while the US CDC Director, according to CNN, September 17, 2020, believes a vaccine will not be available to the general public until November 2021.

subsumed within fiscal space analysis, while spending and allocative efficiencies are held constant for now due to the disruption in the health system posed by COVID-19⁴⁵.

Report findings are divided into two scenarios. A summary of findings is presented in two scenarios, on the table below:

⁴⁵ Global Fund (2020) Mitigating the impact of COVID-19 in countries affected by AIDS, TB and malaria. For a rapid analysis of disruptions and reevaluated priorities in the health system due to COVID-19, please see : https://www.theglobalfund.org/media/9819/covid19_mitigatingimpact_report_en.pdf

TABLE 1 (October 2020 data) : EXPECTED CHANGE IN DOMESTIC EXPENDITURE ON HEALTH AND HIV – ‘OPTIMISTIC’ AND ‘PESSIMISTIC’ SCENARIOS
Updated World Bank IMF data October 2020

Country	GDP in \$ Billions (World Bank, 2020) ⁴⁶			Health Expenditure as % GDP all sources		Scenario inputs		% Reduction in fiscal space (disposable revenue) (US Dollars)				Reduction govt. HIV Exp. Sc.1 ⁴⁷	Reduction govt. HIV Exp. Sc.2
	2017	2018	2019	Health Exp. as % GDP (WHO; current) ⁴⁸	Govt. health expenditure % GDP 2017 (WHO GHED)	GDP Growth Gap 2019-2020 - IMF/ WB - Scenario 1	GDP Loss - Markov Chain model (\$) Scenario 2 (applying tax to GDP ratio on model findings)	Scenario 1: reduction in government health expenditure (\$)	Scenario 1: reduction in private sector disposable health income/ expenditure (\$)	Scenario 2: reduction in government health expenditure/ income	Scenario 2: reduction in private sector disposable health income/ expenditure	Potential reduction in government HIV expenditure (scenario 1)	Potential reduction in government HIV expenditure (scenario 2)
Burundi	3	3	3	8	1.86	7.31	451,850,232	4,078,980	5,647,778.94	7,812,000	13,515,331	132,599	268463
Kenya	79	88	95	5	2.05	4.62	14,325,463,281	89,974,500	102,400,500.00	272,650,000	307,531,263	8,097,145	25938907
Rwanda	9	10	10	7	2.26	6.56	1,518,370,889	14,825,600	10,889,600.00	31,640,000	27,880,139	171,872	387760
South Sudan				10	0.82	6.39	1,799,670,114	6,287,760	17,994,240.00	13,776,000	54,611,464	1,469,700	3404000
Tanzania	53	58	63	6	1.58	4.26	4,738,280,113	43,498,980	60,568,200.00	69,678,000	109,428,989	2,455,353	8530334
Uganda	30	33	34	4	0.97	1.4	5,158,084,423	14,340,480	23,440,320.00	43,456,000	80,338,026	574000	6068000
TOTAL								173,006,300.00	220,940,638.94	439,012,000	593,305,212	12,900,669	44,597,464

⁴⁶ GDP Figures obtained from World Bank GDP Datasets

⁴⁷ HIV expenditure data and estimates from UNAIDS AIDS Info database and NASA reports

⁴⁸ Health Expenditure as % GDP and Government Health Expenditure obtained from WHO's Global Health Expenditure Database

**JULY 2020 data: EXPECTED CHANGE IN DOMESTIC EXPENDITURE ON HEALTH AND HIV – ‘OPTIMISTIC’ AND ‘PESSIMISTIC’ SCENARIOS –
Using Earlier World Bank / IMF scenario 1 data of July 2020**

Country	GDP in \$ Billions (World Bank, 2020) ⁴⁹			Health Expenditure as % GDP all sources		Scenario inputs		% Reduction in fiscal space (disposable revenue) (US Dollars)				Reduction govt. HIV Exp. Sc.1	Reduction govt. HIV Exp. Sc.2
	2017	2018	2019	Health Exp. as % GDP (WHO; current) ⁵⁰	Govt. health expenditure % GDP 2017 (WHO GHED)	GDP Growth Gap 2019- 2020 - IMF/ WB - Scenario 1	GDP Loss - Markov Chain model (\$) Scenario 2 (applying tax to GDP ratio on model findings)	Scenario 1: reduction in government health expenditure (\$)	Scenario 1: reduction in private sector disposable health income/ expenditure (\$)	Scenario 2: reduction in government health expenditure/ income	Scenario 2: reduction in private sector disposable health income/ expenditure	Potential reduction in government HIV expenditure (scenario 1)	Potential reduction in government HIV expenditure (scenario 2)
Burundi	3	3	3	8	1.86	7.31	451,850,232	4,078,980	5,647,779	7,812,000	13,515,331	132,599	268463
Kenya	79	88	95	5	2.05	4.62	14,325,463,281	89,974,500	102,400,500	272,650,000	307,531,263	8,097,145	25938907
Rwanda	9	10	10	7	2.26	6.56	1,518,370,889	14,825,600	10,889,600	31,640,000	27,880,139	171,872	387760
South Sudan				10	0.82	6.39	1,799,670,114	6,287,760	17,994,240	13,776,000	54,611,464	1,469,700	3404000
Tanzania	53	58	63	6	1.58	4.26	4,738,280,113	42,404,040	59,043,600	69,678,000	109,428,989	2,455,353	8530334
Uganda	30	33	34	4	0.97	1.4	5,158,084,423	4,345,600	7,078,400	43,456,000	80,338,026	574000	6068000
TOTAL								161,916,480	203,054,119	439,012,000	593,305,212	12,900,669	44,597,464

⁴⁹ GDP Figures obtained from World Bank GDP Datasets

⁵⁰ Health Expenditure as % GDP and Government Health Expenditure obtained from WHO’s Global Health Expenditure Database

5.1 SCENARIO 1: Smaller reduction in fiscal space. (Estimating COVID-19 pandemic effect on domestic health and HIV spending using Government, IMF and World Bank data - Optimistic Scenario)

While the COVID-19 lockdown saved lives, the pandemic triggered a recession in Burundi, caused both an economic and oil price shock in South Sudan and contracted the regional economy. At a time when the region was scheduled to create over Three Million jobs annually⁵¹ to keep abreast of new entrants to the labour market, the lockdown led to an estimated loss of over 5 million formal jobs across the region wiping off at least 10% of public health insurance contributions. Still, a review of government budgets for fiscal year 2020/2021 across five of the six EAC Partner States⁵² show that governments are optimistic, with most increasing health sector spending, while IMF, World Bank figures show that the region will be the least affected by COVID-19 pandemic in all of Africa, with five of the six countries experiencing GDP growth, even as the world GDP recesses at -4.9%.⁵³ Still, leading global lending institutions expect a full recovery of the economy by 2021. This is an optimistic scenario, assuming that the pandemic will be contained by the end of the 2020 calendar year, and that a vaccine will be generally available in 2021; while fiscal, monetary and balance of payment stimuli will offset most of the economic losses suffered in 2020.

In brief, the economic effect of the lockdown in East Africa included:

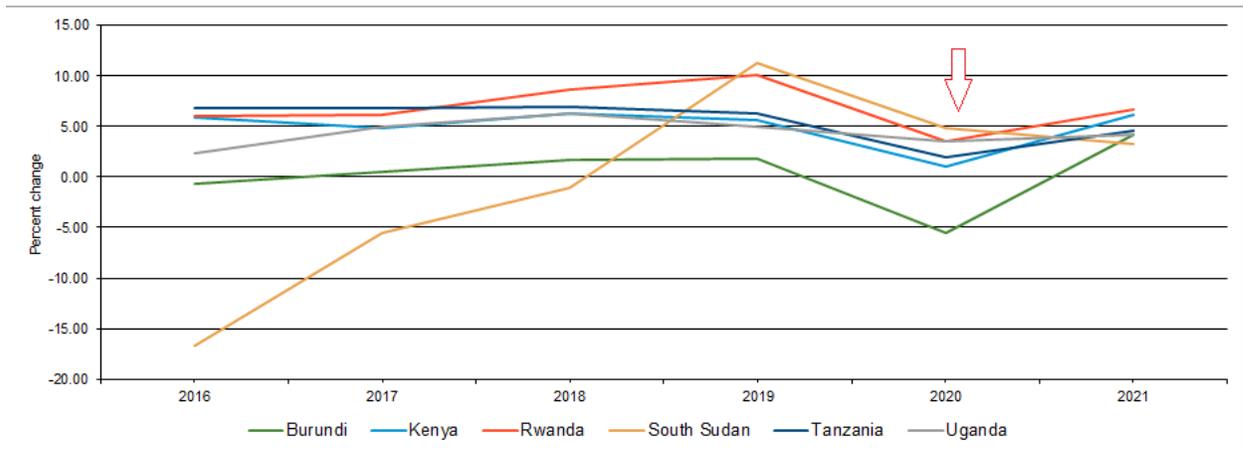
- Loss of public revenue
- Loss of household incomes
- Mass loss of jobs in the international merchandise trade, transport, tourism, travel and hospitality sector; mass under-employment in other sectors
- Close to \$1 Billion in revenue lost in the air travel industry for Kenya, Rwanda and Tanzania alone, with estimated losses in other sectors to reach \$15 Billion
- Loss of a significant percentage of GDP for countries heavily dependent on tourism as a percentage of GDP including Rwanda, Tanzania, Kenya and Uganda.

⁵¹ African Development Bank

⁵² By September 2020, South Sudan had not published a FY 2020/21 Budget.

⁵³ IMF, World Economic Outlook. June 2020 Update.

EFFECT OF COVID-19 ON GDP (CONSTANT PRICES) IN THE EAST AFRICAN COMMUNITY



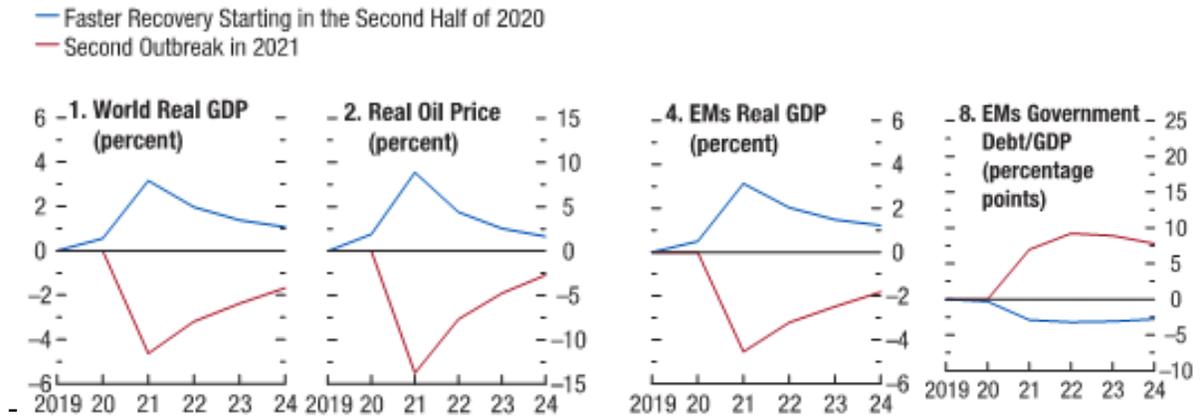
- Increased debt-stress even in the previously well performing states
- Increased poverty, inequality, and unemployment
- Outlook for net exporters such as Rwanda and South Sudan likely to be hit by slow international trade.
- Scarring (damage to supply potential) from the larger-than-anticipated hit to activity during the lockdown in the first and second quarters of 2020.
- Markedly lower imports from region's suppliers signaling a significant decrease in the value of trade, which will hit revenues in the next three quarters.
- Mass temporary and permanent closure of businesses, with consumer and business spending cut by half by as early as May 2020⁵⁴
- A reduction in productivity among surviving businesses as they adopt necessary workplace safety and hygiene practices.
- Cumulative global output loss of 12.5 trillion USD in the world; and at least \$6 Billion in East Africa
- Income convergence between developed and developing economies
- COVID-19 tested and exposed a fundamental weakness in pandemic preparedness across countries. According to the GHIS in 2019, Kenya, Uganda, Tanzania and Rwanda were among the most prepared while Burundi and South Sudan have the most gaps to fill in terms of epidemic preparedness, even while no country is fully prepared.
- Still, the effect in East Africa has been minimal, with only Burundi going into recession, and the rest of the region expecting GDP growth and full recovery by 2021, according to the IMF and World Bank.

⁵⁴ Deloitte (May, 2020) Economic impact of COVID-19 pandemic on the East African economies. Summary of government intervention measures and Deloitte insights.

Figure: Effect of COVID-19 on GDP and Oil Prices

Scenarios

(Deviation from baseline)



Source : International Monetary Fund (June 2020)

Globally, tourism dependent and oil exporting economies have contracted the most due to the Coronavirus related lockdowns. With four of the six countries depending on tourism for at least 10% of their GDP, tourism revenues are expected to drop massively during the fiscal year, while South Sudan, whose oil exports to China comprise over 95% of all its exports.

Table: Historical Average Domestic Spending on Health in EAC

Proportionate spending by govt and private sector as % of GDP				
	Domestic	Health % of GDP	Govt Spending %	Private sector %
Burundi	59%	8	1.86	2.6
Kenya	81%	5	2.05	2.0
Rwanda	56%	7	2.26	1.7
South Sudan	38%	10	0.82	3.0
Tanzania	63%	6	1.58	2.2
Uganda	60%	4	0.97	1.4

Source: World Health Organization and UNAIDS

Tax to GDP ratio is assumed constant at 2018 rates across all East Africa Countries, and is used to measure the level of revenue that will be available for government to deploy domestically.

Table: Tax-GDP ratio⁵⁵

Country	2015	2016	2017	2018
Burundi				
Kenya	16	16	16	15
Rwanda	13	14	13	14
South Sudan				
Tanzania	10	11	12	11
Uganda	11	11	12	12

Of the \$12.5 Trillion estimated by IMF to have been lost globally due to the pandemic, the East African Community may have lost between \$6 and \$10 Billion, based on its share of global economic output (0.23%). However, its informal sector, which employs a majority of East Africans suffered comparatively more than most regions, with at least five Million jobs lost (1.7 Million in Kenya by June 2020, pushing unemployment levels to 22% in Kenya alone and causing a dent on the informal economies of neighboring countries)⁵⁶. On the positive side, the region’s economy is set to rebound to 3.7 percent growth in 2021 providing the necessary fiscal space to continue UHHC implementation at pre-covid levels through 2022 and 2023

Mitigating Factors

Despite significant economic losses in the wake of the pandemic, several positives bode well for the EAC Partner States. The following factors are estimated to have contributed majorly towards avoiding recessions in five of the six EAC Partner States.

- i. *Positive trends in GDP growth:* First, the region was already on a high economic growth trajectory in 2019, with four economies – Tanzania, Rwanda, Kenya and Uganda featuring among the top ten fastest growing in Africa within the three preceding years with growth rates of between 5% and 7%⁵⁷, and South Sudan emerging from civil strife with signs of stellar economic growth.
- ii. *Economic diversification:* With all Partner States except South Sudan having extensively diversified revenue sources over time, job losses were measured across sectors with the exception of the contact intensive and travel related sectors. This means that most of the countries are assured of a recovery by end 2021, if the virus is contained by end 2020 and a vaccine produced by mid-2021.

⁵⁵ World Bank, 2019

⁵⁶ Kenya Association of Manufacturers - Quarterly labour force survey, September 2020.

⁵⁷ World Economic Forum and IMF data on GDP growth between 2016 and 2019.

iii. *Predictability of Global Fund HIV support:* In December 2019, EAC Partner States received Global Fund allocations totaling \$1.1 Billion for the years 2020-2022, providing a level of predictability in financing. The Global Fund supports between 25% and 70% of HIV financing in the region. Countries had already submitted successful funding requests by September 2020 and benefited from tens of millions of US Dollars from the fund’s Covid-19 response mechanism, safeguarding existing grants. The Fund had earlier held a successful replenishment conference, raising slightly over \$14 Billion with majority of the funding destined to fight HIV in low- and middle-income countries.

Table: Global Fund HIV allocations to EAC Partner States 2020-2022

Country	Global Fund HIV Allocation FY 2020-2022
Burundi	38,883,452
Kenya	271,649,197
Rwanda	121,349,916
South Sudan	58,196,898
Tanzania	364,840,423
Uganda	289,203,023
TOTAL	1,144,122,909

Source: The Global Fund to fight AIDS, tuberculosis, and malaria

PEPFAR: In 2019, pre-COVID, ⁵⁸ PEPFAR contribution reduced by over \$200 Million overall, and was on a reducing trend. The IMF estimates the US recession at -8% in 2020, followed by a level of recovery in 2021. While there is no clarity on policy actions regarding PEPFAR support, the tightened financial outlook means that the US government may adopt measures that would reduce some PEPFAR budget lines (reductions at operational or intervention level); or at worst reduce overall budget allocations to PEPFAR.

iv. *Fiscal and monetary stimuli including debt restructuring:*⁵⁹ Having learned from the 2008 global financial crisis, governments deployed significant fiscal stimuli, debt suspension and insolvency frameworks, with the broad support of the IMF, World Bank, G20 and other agencies. It is estimated that by June 2020, fiscal stimuli worth over \$10 trillion globally had offset about 83% of the estimated loss of \$12 trillion in global output during the pandemic, saving the world from a debilitating recession.

Among EAC Partner States, the following were the most impactful in stopping economic recessions:

⁵⁸ UNAIDS, KFF (2020), Donor Government Funding for HIV in low and middle -income countries in 2019.

⁵⁹ IMF (2020) Fiscal Policy Responses to COVID-19, updated September 2020.

<https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#R>

Burundi: The pandemic hit Burundi in the middle of an election campaign period. The government's response plan entailed strengthening the health care system, social safety nets and facilitating access to the sick through a better road network, as well as social behaviour change communication to prevent disease and build medical stocks. The country received US\$5 million from the World Bank, and an IMF debt suspension agreement of \$7.6 Million in July 2020⁶⁰, but by September, still had a financing gap of at least \$110 Million. Fiscal measures included reprioritizing the existing budget, to divert about \$12 million (0.4 percent of GDP) towards fighting the effects of the pandemic; foregoing taxes for hotels and industries unable to pay and subsidizing salaries in the hotel and travel industries to avoid massive layoffs. Monetary and macro-financial support included an extension of bank loan maturities to borrowers in hard-hit sectors. The currency remained significantly depreciated against the dollar.

Kenya: The government earmarked Ksh 40 B (\$400 M) of the FY2019/20 (0.4 percent of GDP) for Covid-related expenditure, including laboratory surveillance and equipment, surveillance units; and social protection (cash transfers and food relief); and expedited tax refunds for businesses. This increased to Ksh56.6 Billion (\$566 M, or 0.5 percent of GDP) in the 2020/21 budget, for an economic stimulus package, including a new youth employment scheme, credit guarantees, fast-tracking VAT refunds and other government obligations, more cash transfers, and other initiatives. Tax measures adopted included full income tax relief for persons earning below \$225 per month, reduction of PAYE and Corporate Income Tax rates from 30 to 25 percent, reduction of the turnover tax rate on small businesses from 3 to 1 percent, and a reduction of the standard VAT rate from 16 to 14 percent. Among monetary policies, the central bank lowered its policy rate by 100 basis points to 7.25 percent; lowered banks' cash reserve ratio by 100 bps to 4.25 percent; increased the maximum tenor of repurchase agreements from 28 to 91 days; and allowed flexibility for banks to reclassify loans and provide for restructuring of non-performing loans during the pandemic. In addition, the central bank encouraged a reduction of mobile money transactions costs to disincentivize the use of cash. On April 15, it suspended the listing of negative credit information for borrowers whose loans became non-performing after April 1 for six months. A new minimum threshold of \$10 was set for negative credit information submitted to credit reference bureaus. On April 29, the central bank lowered its policy rate by 25 bps to 7.0 percent. There were no measures to stabilize the exchange rate or balance of payments. The Kenyan shilling has depreciated by close to 10% against the US dollar since the onset of the pandemic.

Rwanda: The pandemic is expected to cause a revenue shortfall of 4 percent of GDP. The government's Economic Recovery Plan in response to the pandemic was estimated at about 3.3 percent of GDP. Cash transfers to casual workers, subsidized access to agricultural

⁶⁰ The IMF Executive Board approved debt relief under the Catastrophe Containment and Relief Trust to provide US\$ 7.63 million over the next 3 months, and potentially up to US\$ 24.97 million over the next 21 months.

inputs, and door to door food distribution every three days, and other measures to ensure continued access to basic health and education for households were among some of the subsidies offered. The government launched a fund to subsidized affected businesses with loans from commercial banks and MFIs, and credit guarantees. Tax deferral and relief measures includes (i) suspension of down payments on outstanding tax for amicable settlement, (ii) softening of enforcement for tax arrears collection, (iii) extension of the deadline for filing and paying CIT, (iv) fast-tracking of VAT refunds to SMEs, (v) CIT and PIT payments based on current year transactions, (vi) PIT exemption for private school teachers and tourism and hotel employees earning less than RWF 150,000/month, and (vi) VAT exemption for locally produced masks. The 30-day maturity period for the public health insurance scheme premium was removed to expedite access to medical services and the salaries of top civil servants for the month of April was redirected to welfare programs. Among its monetary policies, the central bank announced liquidity support measures: (i) an extended lending facility worth RWF 50 billion (0.5 percent of GDP) available to liquidity-constrained banks for the next six months, allowing banks to borrow at policy rate for longer maturity periods; (ii) Treasury bond purchases through the rediscount window for the next six months; and (iii) lowering of the reserve requirement ratio by 100 basis points, from 5 to 4 percent from April 1. Loan repayment conditions were eased for impacted borrowers, and charges on electronic money transactions waived for the next three months. The central bank is working with the Minister of Economy and Planning to support microfinance institutions. On April 30, the central bank cut the policy rate by 50 basis points to 4.5 percent. Charges on electronic money transactions were reinstated on June 22. There were no exchange rate or balance of payment measures by September 2020.

South Sudan: The government allocated \$ 8 Million to a COVID-19 fund, including \$ 5 Million to MOH to fight the pandemic. It redirected a \$ 7.6 million grant from the World Bank to UNICEF and International Committee of the Red Cross (ICRC), to purchase items for COVID-19 prevention and treatment. On April 24, 2020, the Bank of South Sudan (BSS) cut the Central Bank Rate by 2 percentage points, from 15 percent to 13 percent, and reduced the Reserve Requirement Ratio from 20 percent to 18 percent. On July 7, 2020, it further cut the Central Bank Rate and reduced the Reserve Requirement Ratio to 10 percent and suspended the recent regulation of higher minimum paid-up capital for commercial banks. BSS reaffirmed the South Sudanese Pound (SSP) as the only legal tender of domestic debt payments and encouraged banks to restructure loans where required. (Circular No. SDR/S/4/2020). There were no exchange rate or Balance of Payment measures. By August 26, 2020 the SSP had depreciated by 40% from the pre Covid-19 rate of 300 SSP/ USD to 420 SSP/ USD.

Tanzania: The government spent \$8.4 million to address the COVID-19 pandemic and received \$3.2 Million as grants to use as a contingency reserve to fund additional health spending to mitigate the pandemic's risks. The government expedited the payment of verified expenditure arrears to SMEs, refunding US\$376 million in March 2020, and expanded social security schemes by US\$32.1 million to meet the increase in withdrawals benefits for new unemployed due to COVID-19. It granted VAT and customs duties

exemptions for medical equipment and medical supplies importers. As part of monetary policies, the Bank of Tanzania (BoT) reduced the discount rate from 7 percent to 5 percent and reduced collateral haircuts requirements on government securities on May 12. By June 8, the BoT Statutory Minimum Reserves requirement was reduced from 7 percent to 6 percent. In addition, the BoT began providing regulatory flexibility to banks and other financial institutions carrying out loan restructuring operations on a case-by-case basis. The daily transactions limit for mobile money operators was raised from about US\$1,300 to US\$2,170 and the daily balance limit raised from US\$2,170 to US\$4,340.

Uganda: The government used part of its Contingency Fund in the FY2019/20 budget to finance the Ministry of Health Preparedness and Response Plan from January with approximately \$1.3 million to June 2020. Two supplementary budgets increased the spending envelope for critical sectors and vulnerable groups by about US\$370 million. The government accelerated import substitution and export promotion by increasing funds to the Uganda Development Bank (UDB), recapitalizing the Uganda Development Cooperation (UDC) and accelerating the development of industrial parks; increased agricultural productivity by funding inputs and sector support entities; increased households' incomes by providing additional funding to SMEs; delayed payment of corporate income tax and deferred Pay As You Earn (PAYE) from tourism, floriculture and other extensively affected sectors; waived interest on tax arrears; expedited payment of outstanding VAT refunds, and reduced domestic arrears. The government boosted health sector financing and provided food to the vulnerable in the urban areas, social insurance (by continuing the Social Assistance Grants for Empowerment (SAGE) Scheme; introduced a tax exemption on items destined to medical use; and labor-intensive public works programs in the Roads and Water and Environment sectors. The World Bank approved a further \$300 M budget support under the Uganda COVID-19 Economic Crisis and Recovery Development Policy Financing supporting reforms to provide immediate relief to individuals and businesses most affected by the pandemic.

As part of monetary and macro-financial policies, the Bank of Uganda (BoU) maintained its policy rate at 7 percent in August 2020, following two consecutive 100 basis points reductions in April and June, and extended liquidity support to supervised financial institutions to minimize the likelihood of insolvency due to lack of credit. The BoU waived limitations on restructuring of credit facilities at financial institutions at risk of distress and encouraged mobile money providers and commercial banks to reduce transaction charges. All Supervised Financial Institutions (SFIs) were directed to defer dividend payments and bonuses for at least 90 days effective March 2020 to ensure capital adequacy. BoU also purchased Treasury Bonds held by microfinance deposit taking institutions and credit institutions to ease liquidity pressures and provided exceptional permission to SFIs to restructure loans as needed on a case by case basis.

To address exchange rate depreciation and improve the balance of payments, BoU intervened to smooth out excess exchange rate volatility in late March when it overshot temporarily. IMF provided US\$491.5 million in emergency financing on May 6, 2020 under its Rapid Credit Facility, including 70% to boost international reserves and thus preserving macroeconomic stability, while 30% would be spent on the health sector and

vulnerable population. As a result, only the Uganda shilling has appreciated against the dollar since the last budget reading in 2019, among EAC economies.

5.2 SCENARIO 2: Higher reduction in fiscal space. (Modelling the effect of COVID-19 on economic productivity and change in fiscal space modeling government, firm, and household data into the Markov Chain model - Pessimistic scenario)

A case study of COVID-19 effects on Kenya’s economy

Modelling major sources of Kenya’s GDP (both individuals in different wealth deciles and sectors that contribute the most to GDP) into the Markov model, can help analyze the net economic effect of COVID-19 following the fiscal stimulus package, hence provide a measure of certainty on the amount of revenue that the governments and individuals will dispose of.

Using the discrete-Time Markov Chains stochastic economic model (simply explained, a model that allows the input of many random variables such as those affecting the economy post-COVID 19; while holding the non-variables such as individual wealth deciles and economic sectors in a stable state) to describe a sequence of all probable economic events⁶¹ arising from COVID-19.

Using Markov Chains to model individual Kenya’s’ economic deciles as follows (assuming that people can move between economic deciles):

Individual income levels	Global and Model Definitions	Proportion ⁶²
Poor	Earning less than \$1.25 a day (s_1)	42.1%
Lower Class	Earning from \$1.25 to \$20 a day (s_2)	40.25%
Middle Class	Earning from \$20 to \$50 a day (s_3)	11.65%
Upper Class	Earning between \$50 and \$150 a day (s_4)	5%
Wealthy	Making more than \$150 a day (s_5)	1%

And using economic data on Kenya compiled from various sources⁶³ to weight each of the top five sectors’ economic contributions to the GDP of Kenya and produce a probability vector⁶⁴, the contribution of each sector to economic growth is summarized as below:

⁶¹ James R Norris and James Robert Norris. *Markov chains*. Number 2. Cambridge university press, 1998.

⁶² Source: Kenya National Bureau of Statistics

⁶³ Data from the Kenya National Bureau of Statistics, African Development Bank, IMF and others as presented on statista.com

⁶⁴ Giorgio Alfredo Spedicato. Discrete time markov chains with r. *The R Journal*, 9(2):84-104, 2017

Economic Sector	Weight Index
Agriculture Sector = X_1	$\frac{X_1}{\sum_{i=1}^5 X_i} = \frac{24.15}{66.11} = 0.36$
Tourism Sector = X_2	$\frac{X_2}{\sum_{i=1}^5 X_i} = \frac{9.85}{66.11} = 0.15$
Building & Construction = X_3	$\frac{X_3}{\sum_{i=1}^5 X_i} = \frac{10.25}{66.11} = 0.16$
Infrastructure development = X_4	$\frac{X_4}{\sum_{i=1}^5 X_i} = \frac{12.56}{66.11} = 0.19$
Manufacturing = X_5	$\frac{X_5}{\sum_{i=1}^5 X_i} = \frac{9.3}{66.11} = 0.14$

The vector of the economy can therefore be written
 $\Pi = (\pi_1, \pi_2, \pi_3, \pi_4, \pi_5)$
as: $(0.36, 0.15, 0.16, 0.19, 0.14)$

Simplifying the vector matrix of proportion as Π and developing a probability transition

matrix: $P_{X,t}^{ij}$: Where:

$$P_{X,t}^{ij} = \begin{matrix} & s_1 & s_2 & s_3 & s_4 & s_5 \\ \begin{matrix} s_1 \\ s_2 \\ s_3 \\ s_4 \\ s_5 \end{matrix} & \begin{bmatrix} p_{11} & p_{12} & p_{13} & p_{14} & p_{15} \\ p_{21} & p_{22} & p_{23} & p_{24} & p_{25} \\ p_{31} & p_{32} & p_{33} & p_{34} & p_{35} \\ p_{41} & p_{42} & p_{43} & p_{44} & p_{45} \\ p_{51} & p_{52} & p_{53} & p_{54} & p_{55} \end{bmatrix} \end{matrix}$$

And where Poor is s_1 , Lower Class is s_2 , Middle Class is s_3 , Upper class is s_4 , and Wealthy is s_5 as defined earlier.

Applying the Discrete-time Markov Chain analysis to this date, the probability transition matrix is filled as.

$$P_{X,j}^{ij} = \begin{matrix} & s_1 & s_2 & s_3 & s_4 & s_5 \\ \begin{matrix} s_1 \\ s_2 \\ s_3 \\ s_4 \\ s_5 \end{matrix} & \begin{bmatrix} 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \end{bmatrix} \end{matrix}$$

Determining what happens at steady state by analyzing the long run:

$(\pi_1, \pi_2, \pi_3, \pi_4, \pi_5)$

$$= (\pi_1, \pi_2, \pi_3, \pi_4, \pi_5) \begin{array}{|c|c|c|c|c|} \hline 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ \hline 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ \hline 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ \hline 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ \hline 0.42 & 0.40 & 0.12 & 0.05 & 0.01 \\ \hline \end{array}$$

$$\pi_1 = 0.42\pi_1 + 0.42\pi_2 + 0.42\pi_3 + 0.42\pi_4 + 0.42\pi_5$$

$$\pi_2 = 0.40\pi_1 + 0.40\pi_2 + 0.40\pi_3 + 0.40\pi_4 + 0.40\pi_5$$

$$\pi_3 = 0.12\pi_1 + 0.12\pi_2 + 0.12\pi_3 + 0.12\pi_4 + 0.12\pi_5$$

$$\pi_4 = 0.05\pi_1 + 0.05\pi_2 + 0.05\pi_3 + 0.05\pi_4 + 0.05\pi_5$$

$$\pi_5 = 0.01\pi_1 + 0.01\pi_2 + 0.01\pi_3 + 0.01\pi_4 + 0.01\pi_5$$

$$\pi_1 + \pi_2 + \pi_3 + \pi_4 + \pi_5 = 1.$$

The above equations are rearranged to make them easier to solve:

$$-0.58\pi_1 + 0.42\pi_2 + 0.42\pi_3 + 0.42\pi_4 + 0.42\pi_5 = 0$$

$$0.40\pi_1 - 0.60\pi_2 + 0.40\pi_3 + 0.40\pi_4 + 0.40\pi_5 = 0$$

$$0.12\pi_1 + 0.12\pi_2 - 0.88\pi_3 + 0.12\pi_4 + 0.12\pi_5 = 0$$

$$0.05\pi_1 + 0.05\pi_2 + 0.05\pi_3 - 0.95\pi_4 + 0.05\pi_5 = 0$$

$$0.01\pi_1 + 0.01\pi_2 + 0.01\pi_3 + 0.01\pi_4 - 0.99\pi_5 = 0$$

$$\pi_1 + \pi_2 + \pi_3 + \pi_4 + \pi_5 = 1$$

Solving the six simultaneous equations using Boolean algebra / a mathematical software⁶⁵ to obtain the definitive values of $\Pi = (\pi_1, \pi_2, \pi_3, \pi_4, \pi_5)$.

This gives the value of Π are as follows

$$\Pi = \left(\begin{array}{l} \pi_1 = 0.28, \pi_2 = 0.13, \\ \pi_3 = 0.14, \pi_4 = 0.16, \pi_5 = 0.13 \end{array} \right)$$

This shows that:

- the proportion of $\pi_1 = 0.28$ has reduced from the previous percentage of 0.36.
- the proportion of $\pi_2 = 0.13$ has reduced from the previous percentage of 0.15.
- the proportion of $\pi_3 = 0.14$ has reduced from the previous percentage of 0.16.
- the proportion of $\pi_4 = 0.16$ has reduced from the previous percentage of 0.19.

⁶⁵ Pramode Ranjan Bhattacharjee. A novel method for solving simultaneous equations in boolean/switching algebra. *IETE Journal of Education*, 59(1): 18-25, 2018.

- the proportion of $\pi_5 = 0.13$ has reduced remarkably from the previous percentage of 0.14.

This implies that Covid-19 has had a negative impact on all economic sectors of the country with agriculture being the hardest to hit, followed by tourism, building and construction, infrastructure development, and manufacturing. This is aligned to empirical evidence since the manufacturing sector did not fully close at any point during the onset of the pandemic.

Therefore, the weighted contribution by each sector to GDP before and after COVID-19 may be summarized as below:

Sector	Pre-Covid-19	Post Covid-19	Reduction
Agriculture	24.15%	18.50%	23.4%
Tourism	9.85%	8.50%	13.7%
Building and Construction	10.25%	9.15%	10.7%
Infrastructure development	12.65%	10.50%	17.0%
Manufacturing	9.30%	8.45%	9.1%

Implications:

Covid-19 negatively affected Kenya's GDP by an average of 14.8%. Considering that Kenya adapted strong fiscal responses to the pandemic and had more available external donors, this proportionate loss is likely to be one of the least impactful in the region. Annualized, this would translate to a loss of about \$15 Billion spending at national and county levels and a further \$70 Million in HIV spending, if HIV spending is not ring-fenced.

Output from the agriculture sector, which employs majority of Kenyans and to an extent, East Africans, reduced from 24.15% to 18.5%. Tourism output, after fiscal stimuli reduced from 9.85 percent to 8.50 percent, while the building and construction sector will reduce its contribution to GDP from 10.25% to 9.15% due to individuals' reduced disposable incomes. Following the government's temporary halting of infrastructural development, the sector's GDP contribution reduced from 12.56% to 10.5%. The contribution of manufacturing reduced from 9.3% to 8.45 %.

Extrapolating a 14.8% loss in GDP to other countries in EAC (lowered to 12% since Tanzania's economy did not face a severe shutdown), this would translate as shown on the table:

Table: Effect of Post COVID-19 on Government Disposable Income for Health and HIV

Country	2017	2018	2019	Health Exp. as % GDP (WHO; current)[2]	Govt. health expenditure % GDP 2017 (WHO GHED)	GDP Growth Gap 2019-2020 - IMF/ WB - Scenario 1	GDP Loss - Markov Chain model (\$) Scenario 2 (applying tax to GDP ratio on model findings)	Scenario 2: reduction in government health expenditure/ income	Scenario 2: reduction in private sector disposable health income/ expenditure	Potential reduction in government HIV expenditure (scenario 2)
Burundi	3	3	3	8	1.86	7.31	451,850,232	7,812,000	13,515,331	268463
Kenya	79	88	95	5	2.05	4.62	14,325,463,281	272,650,000	307,531,263	25938907
Rwanda	9	10	10	7	2.26	6.56	1,518,370,889	31,640,000	27,880,139	387760
South Sudan				10	0.82	6.39	1,799,670,114	13,776,000	54,611,464	3404000
Tanzania	53	58	63	6	1.58	4.26	4,738,280,113	69,678,000	109,428,989	8530334
Uganda	30	33	34	4	0.97	1.4	5,158,084,423	43,456,000	80,338,026	6068000
TOTAL								439,012,000	593,305,212	44,597,464

Capacity to meet tax collections targets for fiscal year 2020/2021 will depend on a number of variables, including efficiency in tax collection, the rate of economic rebound and avoidance of a second wave, hence remains doubtful. Prior to the COVID-19 pandemic, the region's economic growth was projected at more than 5 percent, well above continent's average of 3.3 percent and global average of 2.9%. However, in the second scenario, up to 12% drop in 2019 GDP figures is expected.

Differences between the individual Partner States depend on trends in the pandemic, effectiveness of containment strategies; variation in economic structure (for example, dependence on severely affected sectors, such as tourism and oil); and level of reliance on external financial flows, including remittances; and pre-crisis growth trends. In this respect while all EAC Partner States have faced a debilitating economic contraction, Burundi due to high level of external funding of the health sector, South Sudan and Uganda due to oil price shocks and Kenya due to its reliance on the hospitality, remittances, air transport and tourism sectors, followed by Rwanda and Tanzania. Rwanda's containment strategies appeared to be most successful in limiting COVID-19 spread, while Tanzania did not adopt most of the WHO-recommended social distancing strategies after May 2020, hence the local economy remained somewhat functional.

Effect of Covid-19 on Fiscal Space:

Simplified, Fiscal Space is the budgetary room that allows government to spend sustainably. It is calculated as the tax gap between the sustainable and the current tax-to-GDP ratio, where the sustainable tax rate is the constant tax rate that would achieve an unchanged debt-to-GDP ratio during a specific timeline, for a given projection set of public spending. This method is used where the interest rate to growth differential is positive.

Higher tax revenues would mean that East African Countries would be in a position to spend more on health, housing, education, infrastructure and other development objectives. Tax-to-GDP ratio is used to determine how efficiently government allocates resources. Unfortunately, even as EAC countries have varied their revenue bases over the last two decades, COVID-19 has hit EAC Partner States' revenue bases from external and internal fronts.

Effect of shrinking fiscal space on domestic resource mobilization: Domestic resource mobilization has progressively improved in Africa, pre-Covid 19. Countries with tax revenues below 15 percent of GDP usually find it difficult to fund basic state functions. From 1998 to 2008, tax-to GDP ratios in the EAC ranged from 12 percent to 22 percent, compared with 36 percent in advanced economies and 25.4% in South Africa. Tax revenue in South Sudan has generally been below fragile states' levels of 15 percent of GDP. The low domestic saving and high necessary investment are leading to persistent fiscal deficits and growing indebtedness.

Testing the model across sources of revenue: Illustration of impact on actual revenue

An analysis of a few important revenue sources (remittances, tourism, travel and hospitality; and commodity prices) for EAC countries follows.

Remittances: Inward remittances, a major source of South Sudan, Uganda and Kenya's external revenues and a key source of revenue for other EAC countries, are estimated to fall by about 20% (about \$1.2 Billion) in 2020, back to 2015 levels, but are expected to rise by more than 5.6% in 2021.⁶⁶

⁶⁶ World Bank, April 2020, Historical data from The Global Knowledge Partnership on Migration and Development (KNOMAD) Knomad.org, a partnership supported by GIZ, Sweden, Swiss Confederation, EU, and the World Bank.

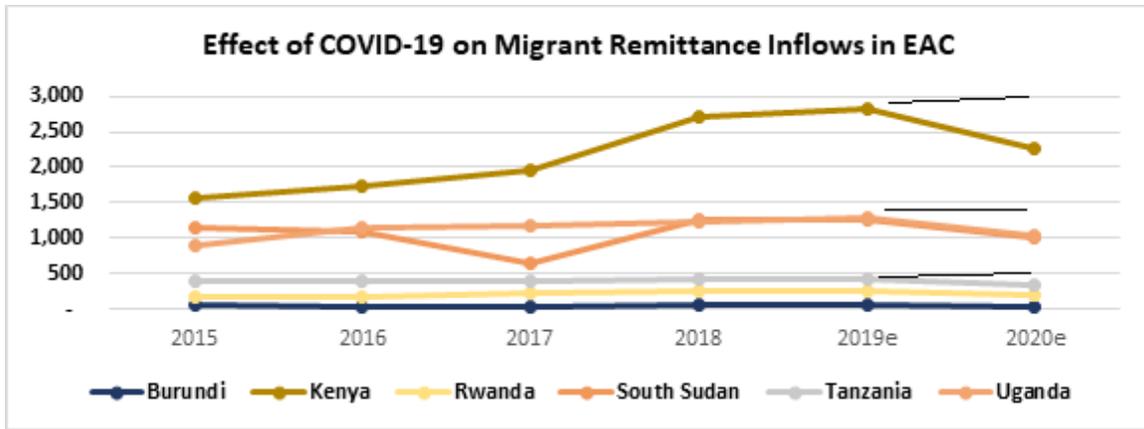


Figure: Trends in migrant remittance inflows across EAC Partner States. (Remittances have since increased [Black line] tampering the impact of job losses.)

With inward remittances accounting for about 34% of South Sudan’s GDP and 4.2% of Uganda’s by 2019, the outlook is gloomy for these Partner States, with South Sudan the worst hit. Migrant remittances are important since besides being key sources of foreign exchange, most of East Africa’s low and middle income families rely on them for household budget support, a significant proportion of which is spent on health.

Table: Migrant remittance inflows in EAC (US\$ million)

	2015	2016	2017	2018	2019e	2020e	Remittances as a share of GDP in 2019 (%)	Loss
Burundi	51	31	34	48	48	39	1.4	10
Kenya	1,569	1,745	1,962	2,719	2,819	2,255	2.9	564
Rwanda	159	173	215	261	261	208	2.6	52
South Sudan	1,139	1,083	634	1,267	1,267	1,014	34.4	253
Tanzania	388	403	403	413	435	348	0.7	87
Uganda	902	1,146	1,166	1,230	1,293	1,035	4.2	259
Total	4,208	4,580	4,413	5,938	6,123	4,899		1,225

Source: World Bank Staff Calculations; 2020 figures Author’s calculation- based on KNOMAD partnership statistics

Tourism, Travel and Hospitality: Tanzania is dependent on tourism for about 17% of her GDP. Kenya, Uganda and Rwanda obtain above 10% of revenues from tourism, with Burundi closely following.⁶⁷ A contact intensive sector, perhaps no other sector suffered as much as the tourism, travel and hospitality industry.

Commodity prices: Due to mitigation efforts that have limited most travel, oil demand was estimated to fall by close to 90% this year, from an estimated 100 Million barrels per

⁶⁷ United Nations Economic Commission for Africa, 2020.

day to 9.3 million barrels per day with prices falling from \$61 per barrel to \$35 (World Bank, 2020). Key crude and processed oil exporters such as South Sudan, Uganda and Tanzania are expected to face some decline. Oil comprised 5.8% of Tanzania's \$2.9 Billion exports. However, for Tanzania, the effect of this decline in oil prices could be hedged by a rise of about 30% in gold prices this year. Gold is Tanzania leading export.

In brief, COVID-19 did not spare any major economic sector or source of revenue in East Africa.

Overall effect of COVID-19 on GDP, Government Debts; and Tax Revenue Collected

All EAC States, due to the narrow fiscal space, have found it a major challenge to earmark additional funding from tax revenues, and move towards compulsory sources. Indirect taxes within general tax revenues are a better, less visible source for public financing of UHC, since they complement available revenue for health within the general budget but can be targeted at the rich and urban dwellers, or the top economic deciles. This leads us directly to importance of dialogue with MOF on the level of funding, the budget process, etc.

Effect of COVID-19 on Progress in Implementing the EAC Universal Health and HIV Domestic Resource Mobilization Strategies:

The overall effect of COVID-19 on domestic resource mobilization strategies will be a slight delay in mobilizing all resources by between 4% and 12% under optimistic and pessimistic scenarios. Progress in passing legislation that would accelerate implementation of strategies in the operational plans has been slow, however, and was only slowed further in 2020.

Between the fiscal years beginning July 2018/19 and 2019/20, all Partner States including Burundi, and South Sudan had increased their budgets raising contributions by nearly \$1.5 Billion with Kenya earmarking an additional \$450 Million of her domestic budget to UHHC while Kenya and Tanzania's NHIFs spent more than \$ 1 billion on UHC related spending with Tanzania's recording significant surpluses. Notably in the 2020-2021 budgets, majority of partner states increased health sector budgets by at least 10% by July 2020. Rwanda had gone further and launched payment for results schemes, and a cross-border health insurance scheme among many innovations, while a health impact bond had been planned for launch and taking to market in the Nairobi Securities Exchange by March 2020, through the United Nations SDG partnership and a number of Public and Private Sector players. In brief, all States were on course to collectively meeting targets.

However, the onset of COVID-19 during the first quarter of the 2020 calendar year has affected all economic sectors and may impact implementation of all the strategies that EAC Partner States had adopted towards domestic resource mobilization. It is critical to estimate the effect of COVID-19 on domestic health sector financing in the EAC States and make actionable short and long term recommendations to mitigate further long terms effects and

boost Domestic Resource Mobilization for UHHC during the remaining term of the Resource Mobilization Strategy.

Progress in implementing innovative domestic health and HIV/AIDS sustainable financing interventions: Countries were on course to implementing innovative domestic health and HIV/ AIDS sustainable financing interventions / initiatives in the partner states prior to the onset of the full effects of the COVID-19 pandemic in March 2020. After this date, Kenya sought to implement a social (health) impact bond, while Rwanda, Tanzania and Uganda launched a joint Security Exchange, paving the way for such innovative financing activities in the next few years.

Progress in commitments towards resource mobilization pre-COVID 19: Partner States committed to increasing national health budgets for UHHC and have followed up on these commitments by increasing health sector budgets even in the middle of the COVID-19 pandemic. While meeting the aspirational Abuja Declaration to allocate at least 15% of their annual budget to improve the health sector has remained a challenge, government spending on health has progressively increased. EAC Partner States committed to increasing their domestic health budgets by at least 10% annually since 2019, and this action is being taken in all countries.

Commitment to progressively increase domestic HIV budgets followed upon in 2020 budgets:

All EAC Partner States progressively increased their health sector budgets in 2020.

Burundi: Burundian Ministry of Public Health increased by 7% between 2016 and 2018: from 82 billion Burundian Francs (BIF) or US\$ 44 million to BIF84 billion BIF (US\$45 million). In 2018, the health sector budget further increased to BIF88 billion BIF (US\$48 million). Corrections for increasing inflation and population pressures may have cancelled some of the real value of this increase. Burundi's Carte d'Assistance Médicale (CAM) medical assistance scheme, on which the country relies as a sustainable UHHC financing strategy is 80% government funded, while 20% of its costs are contributed by individuals. Support by the Burundi diaspora has advanced use of this scheme, especially by schools. A social protection fund (FAP) has been established and is awaiting necessary laws, financing and strategies to support its implementation. Burundi increased the health budget in the July 2020 budget.

Kenya: The health sector budget increased from Ksh 58.9 billion (US\$590 million) in 2016/17 to Kenyan Shillings (Ksh) 60.1 billion (US\$600 million) in the 2017/18 financial year. This represented an increase of 2% between the 2016/17 and 2017/18 financial year budgets. Despite missing the 2017/18 revenue collection targets by US\$840 million, treasury allocated an additional US\$91 million for 2018/19. Government spending on health in 2016/17 decreased to 7.6% from 7.7% of the preceding year's budget, below the pre-devolution level of 7.8%, and is still far from the aspirational 15% Abuja Declaration target. Health services are delivered under both national and 47 county governments. The latter finance the primary level, where most UHHC services are delivered. County

governments maintained a gradual increase in health budgets, from 13.5% to 25.2% between 2013 and 2017. From 2015/16 to 2016/17, at least 33 of the 47 county governments increased allocations to health, bringing the total to Ksh92 billion (US\$920 million), up from the previous year's Ksh85 billion (US\$850 million). In 2020, Kenya's health budget increased to \$2.2 Billion

Rwanda: Along with other EAC Partner States, Rwanda committed to increasing her national health budget for UHHC. Indeed, between 2013 and 2018, the nominal health budget increased by 23%, from Rwandan Franc (FRW) 157.5 billion (US\$177 million) in 2013/14 to FRW193.6 billion (US\$218 million) in 2017/18. However, fiscal space has expanded, leading to an increase in the overall budget at a pace generally surpassing the increase in health sector investments. Key sectors benefitting from increased investments include infrastructure, finance, technology, tourism and general private enterprise. As a result, the health sector budget as a proportion of the national budget shows a declining trend, from 10.8% in 2014/15 to 9.2% in 2017/18 – below the 15% Abuja Declaration target adopted by the third Health Sector Strategic Plan (HSSP). In 2020, Rwanda increased her health sector budget by about 10%.

South Sudan is committed to increasing her national health budget for UHHC. The nominal budget for health has increased from £1 billion (US\$100 million) in 2017/18 to £1.5 billion (US\$150 million) in 2018/19.¹³ A significant proportion of external funding remains unspent. Nominal government budget for health is still short of the 15% Abuja Declaration target, with domestic sources accounting for 2% of the health budget. The first National Health Accounts (NHA) was conducted in 2018 to determine the proportion of external funding to the health sector. Through health pooled funding, some partners have collectively funded essential health services in eight of the state's main regions to the tune of US\$240 million and now updated to about US\$133 million annually for the third phase, while the World Bank has supported the two remaining regions, using government, civil society and humanitarian agency health facilities, and mostly staff on government payroll. South Sudan's 2020 budget is not available.

Tanzania (mainland) Tanzania (Zanzibar) Tanzania mainland is committed to increasing her national health budget for UHHC. The health sector was allocated 2.22 trillion Tanzania Shillings (Tsh) or US\$958 million in the 2017/18 fiscal year. This represented a 34% nominal increase on 2016/17, or 28% increase when adjusted for inflation. The sector's proportional allocation of the total budget averaged for three years is estimated at around 10%. However, only about 57% of the budget for 2018 had actually been disbursed to the sector by the third quarter of the fiscal year¹⁴, while a significant proportion of external funding remains unspent. HIV funding is heavily donor-dependent (77.4%) and could benefit from sustainability and transition planning. Funding is externally sourced, while the government supports about 10% of HIV programme needs. The Revolutionary Government of Zanzibar, consisting of the islands of Unguja and Pemba in Tanzania, increased the nominal budget for health by 27% from Tsh85 billion in 2016/17 (US\$37 million) to Tsh108 billion (US\$47 million) in 2018/19. A significant proportion of external funding remains unspent. Tanzania increased its health sector budget in 2020 by about 10%.

Uganda: The HIV programme is still heavily funded by external partners and Zanzibar could also benefit from sustainable and transition preparedness planning towards 2030. Uganda has committed to increasing her national health budget towards UHHC. The Government of Uganda increased her health budget from 1.8 trillion Uganda Shillings (UGX) or US\$463 million to UGX2.3 trillion US\$591 million) between 2017/18 and 2019/20, effectively increasing allocation to health from 6.3% to 7.3% of the budget. However, government spending on health has increased slowly and is still far from the aspirational 15%. Less than a fifth of total HIV spending is from government. Still, Uganda increased its health sector budget in 2020 by about than 10%.

EFFECT OF LEGISLATIONS RESTRICTING MOVEMENT WITHIN INDIVIDUAL EAC STATES

The following legislations with significant short, medium, and long term economic impact were passed in EAC Partner States during the lockdown

Several measures are in place to mitigate Coronavirus transmission across Partner States and from international sources through the region's porous borders. Schools were closed, all commercial flights suspended, and the country remains closed to international passenger travel. To contain pressure on hospitals, authorities identified additional space for patient management and recruited additional staff/ volunteers to assist with the management of the pandemic. Funding for scaling up testing was mobilized from the Global Fund and other sources.

Burundi

The first confirmed COVID-19 case was reported on April 1st, 2020. While suspension of passenger flights in and out of Burundi began on 22nd March 2020; measures taken to minimize the risk of the pandemic breaking out in Burundi were limited until after the elections in May 2020, and all borders were closed except for cargo. Cross-border travel between Burundi and Rwanda was discouraged. Following the passing of the outgoing Head of State and former EAC Chair, the Late Pierre Nkurunziza and part of his family, the new president General Évariste Ndayishimiye instituted a large-scale testing and prevention campaign on July 6, 2020, and the population was instructed to follow basic social distancing rules and frequent handwashing, with sanitizers and water installed in public places. Travelers from high-risk countries underwent quarantine, while commercial flights were banned (cargo flights still operate). Borders remained closed, except for merchandise. Burundi's health care system, already challenged, was further weakened by COVID-19. The government planned to strengthen the system, provide social safety nets and build road networks to facilitate access to sick people. Preventive education was provided, and drugs stocked. In the beginning, Burundi downplayed effects of the virus and expelled a WHO team supporting the country's response. Mandatory quarantine was imposed for those suspected of infection, while limited access to hotel premises was imposed for at least two months. Border closures led to scarring and slowdown in trade and a disruption of cross-border markets, affecting employment opportunities for casual labour and reducing incomes.

Vulnerable households in the Congo Ridge Millet, Eastern Lowlands, East Arid Plateaus and Buragane livelihood zones, strongly reliant on casual labour and trade with neighboring Democratic Republic of the Congo and United Republic of Tanzania, were most severely affected by border closures. There were no lockdowns and restriction of movement within the country.

Kenya

The first confirmed COVID-19 case was reported on March 14, 2020. The government in Kenya, which is the region's largest economy, adopted several containment measures, including months-long lockdowns of Nairobi, Mombasa and other cities contributing about 70% of the country's GDP. These included social distancing and heightened restrictions in most non-essential social spaces and gatherings; encouraged teleworking where possible; established isolation facilities; and limited public transportation passenger capacity. Domestic flights ceased on March 25th 2020, and commenced on July 15th, 2020, while international flights commenced from August 1st, 2020. Quarantine measures remain for all international arrivals. Places of worship had by September 2020 opened with a maximum of 100 people for one hour and aged between 13 and 57 years. Sale of alcohol has been banned in bars and restaurants. Curfew is still in place and ban on inter-county travel lifted. The land borders with Somalia and Tanzania were closed on 17 May, except for cargo, following increasing number of cases in border areas. COVID-19 test is, since then, mandatory for all drivers of transborder cargo vehicles and those who have the virus will not be allowed to entry Kenya. The Minister for Education announced on 7th July the cancellation of the 2020 academic year. All schools, colleges and universities in the country will remain closed until January 2021.

Legislations passed in Kenya included:

The public health (prevention, control and suppression of COVID-19) regulations, 2020
The Public Order (State Curfew) Order, 2020 – putting in place a nationwide 7p.m. to 5 a.m. curfew, which was later varied to 9pm -5am. but cut out about all night-time economic activity. This order restricted public gatherings, processions, and movement with only groups of essential service providers allowed to move within the country.

At the subnational level, several of the 47 counties, which are constitutionally responsible for primary healthcare and prevention instituted county level measures and provided preventive products.

The Ministry of labour and social protection developed guidelines for older people, further restricting their movement.

Guidelines developed by the Ministry of Health included:

- Public Mental Health Education during COVID – 19 Pandemic ,
- Interim guidelines for management of COVID ,
- Guidelines on the Management of Pediatric patients during COVID – 19 Pandemic .
- Public notice issued by the Ethics and Anti-corruption commission suspended all local, international and other trainings; Parliament suspended all travel and workshops, while the judiciary shifted filings and proceedings online.

The Government of Kenya's Independent Policing Oversight Authority recorded at least 35 cases of police brutality related to enforcement of the COVID-19 curfew, 12 of which resulted in death. The number of online child exposure to inappropriate content, sexual exploitation, teenage pregnancies, and domestic violence cases peaked, with UNFPA estimating that a total of 247,334 women of reproductive age are at risk of sexual violence and are in need of services.

The government unveiled an economic stimulus package and measures to buffer some Kenyans against financial hardships arising from movement restrictions associated with the coronavirus crisis, including:

- 100% tax relief to Kenyans earning Ksh 24,000 (US\$228) and below.
- Pay as you earn (PAYE) reduction from a maximum of 30% to 25%.
- Reduction of turnover tax rate from 3% to 1% for all micro, small and medium enterprises.
- Reduction of resident income tax to 25%.
- Making available Ksh 10 billion (US\$95 million) to vulnerable groups including the elderly and orphans, among others.
- Temporary suspension of the listing of loan defaulters for of any person, micro, small and medium enterprise and corporate entities whose loan account is in arrears effective 1 April 2020.
- Reduction of VAT from 16% to 14% effective 1 April 2020.
- Cabinet approval of comprehensive insurance cover for all medics fighting Covid-19 in September 2020.

South Sudan

Perhaps the worst hit country by COVID-19 in the region, South Sudan's health, economic and humanitarian sectors suffered significantly with significant risk of increased maternal and child deaths.

The Republic of South Sudan reported its first case of COVID-19 on April 4, 2020. The government announced various precautionary measures, including (i) international flight suspension (with few exceptions for planes bringing in health-related cargo, such as medicine and medical equipment, and essential/critical food items; (ii) land border restrictions; (iii) passenger bus prohibitions; (iv) evening curfews; (v) social distancing; and (vi) a mandatory 14-day quarantine period for any traveler arriving from a virus-affected country. The government also encouraged businesses to allow their employees to telework and warned the business community against increasing prices and hoarding essential goods and commodities. However, lockdown measures were partially lifted on May 7.

One of the region's only two next exporters (alongside Rwanda), South Sudan was grossly affected by the sharp decline in international oil prices, in the midst of a humanitarian crisis. According to the Food and Agriculture Organization of the United Nations, the impact of the above measures include:

- Closure of borders caused a disruption in fresh food supplies
- Restrictions in movement reduced access to animal health and vaccination facilities which occasioned increased tensions and risk of conflict. The livestock sector is another driver South Sudan's economy.
- The high number of refugees and internally displaced people were exposed to rights abuses.

Tanzania

The first confirmed case was reported on March 17, 2020. Since May, after 508 were confirmed, the United Republic of Tanzania stopped reporting cases to the WHO. Authorities banned large gatherings (except for worship), suspended attendance to schools and educational institutions, cancelled international flights, and mandated the wearing of face masks in Dar Es Salaam. On May 18, 2020, the authorities lifted the suspension of international flights into and out of Tanzania, with no mandatory quarantine for incoming travelers. Effective June 1, 2020, the authorities allowed the opening of upper-secondary and tertiary schools and the resumption of sports activities and events. On 8th June the president announced that Tanzania was COVID-19 free, amidst opposition from alternative political parties, civil society and some diplomatic agencies. The Government has not made public any official update since May 8 2020. On June 29, 2020 all other educational institutions reopened. As a result, most of the restrictions due to Covid-19 had been lifted by July 2020. The President encouraged people to pray and attend church, and ordered the Ministry of Natural Resources and Tourism and other relevant authorities to allow in. Authorities enhanced COVID-19 screening at the borders. By end June 2020, all economic activities were ongoing as normal.

Health guidelines from the Ministry of Health, Community Development, Gender, Elderly and Children provided during the epidemic in Tanzania included:

- Guidelines for Testing people travelling out of Tanzania to countries that make it a requirement.
- Guidance on provision of NCD and mental health services in the context of COVID-19 outbreak in Tanzania
- Guidelines for people with life-threatening diseases and old people.
- Guidelines for people leaving the country, due to restrictions from neighboring states.
- Travel advisory for COVID 19 screening.

Uganda

Coronavirus positivity rates in Uganda were comparatively lower than in neighboring countries. Uganda gradually relaxed one of the most stringent lockdowns in the region that started in late May by: (i) allowing the movement of private cars, albeit with a limit in place on number of passengers; (ii) reopening sequentially merchandise shops; (iii) relaunching public transport with strict regulation on passenger capacity and obligation to wear masks; and (iv) shortening the curfew to 9.00 PM–5.30 AM.

Changes decreed to regulate the lockdown included:

- The Public Health (Control of COVID-19) Rules, 2020
- Public Health (Prohibition of Entry into Uganda) Order, 2020
- Public Health (Prevention of COVID - 19) (Requirements and Conditions of Entry into Uganda) Order, 2020
- Public Health (Notification of COVID – 19) Order, 2020
- Judiciary Circulars: Uganda Chief Justice Circular: Administrative and Contingency Measures to Prevent and Mitigate the Spread of Corona Virus (COVID-19) by the Judiciary, 19 March 2020
- Ministry of Public Service: Circular Letter No 3. of 2020: Guidelines on Preventive Measures Against Corona Virus (COVID-19)

The restrictions had a disproportionate effect on the poor. Besides media reports of some pregnant women dying because of walking long distances to hospital due to the ban on public transport and a myriad other challenges, there were reports of altercations between civilians and police / military enforcing COVID-19 measures in Uganda both by the local defense units and the army leading to a rise in police brutality and lack to access of justice. Prior to the onset of the pandemic 800 women in Africa were dying daily due to pregnancy related causes; this is believed to have increased post COVID (WHO).

Government of Uganda on 25th March 2020 suspended receiving new refugees and asylum seekers with immediate effect, for a period of 30 days. According to Government, this is one of the refugee focused prevention and control measures to curb spread of COVID-19 to refugees and host communities. Uganda hosts the largest refugee population in Africa, with 1,411,098 refugees and asylum seekers as of 29th Feb 2020. Uganda's Refugee Act of 2006 also guarantees refugees their full enjoyment of fundamental rights such as freedom of movement and to participate in economic activities such as access to work. Children are also part of refugees and this poses risks to child mental health and well-being. Lockdowns come with heightened risk of children witnessing or suffering violence and abuse. Children who already struggle extensively to access health services may be further excluded from attention and access to the severely stretched health systems.

Other social, political and business impact

All physical meetings within EAC were suspended, including those planned at the East African Legislative Assembly and EAC Headquarters.

Trade in the region, closely tied to China, Europe, and the Middle East was disrupted significantly, with Kenyan imports from China alone (which accounts for USD 3.6 Billion in imports) falling by Kshs. 58 Billion (about \$580 Million) between March and May 2020, a further loss following a 37% drop in January and February.⁶⁸

The conference tourism economy all but died and was slowly recovering online by September 2020. Other adverse business effects reported included uncertainty of investors;

⁶⁸ <https://eabc-online.com/news/257-eabc-brief-on-impact-of-the-coronavirus-covid-19-outbreak-to-eac-businesses>

partial or complete collapse of the hotel industry; disruptions in the entire supply chain, a contraction of the financial sector, with most banks reporting above 50% quarterly declines in profits. Arrangers in the financial sector reported reduced capital flows.

- Most export dependent investments will suffer severe setbacks since most raw materials are sourced from Asia.
- International trade delays and slowdown in infrastructure projects has elevated credit risk associated with lending.
- Reduced transactions by foreigners has resulted in reduced non-funded income
- Key sectors of the economy especially manufacturing, transport, tourism, and trade as well as SME revenues declined
- Foreign exchange became more expensive, with most EAC Partner State currencies losing about 10% of their value to the US Dollar.
- Besides investing further in the purchase of protective products, the health sector had to budget slightly higher for the recruitment additional health workers.
- The manufacturing sub sector suffered majorly since about 82% of manufacturers seek their inputs from, or export to China. 67% faced supply chain disruptions.⁶⁹

6. Conclusions

Under the optimistic scenario GDP will drop by 5.54% in Burundi, but grow by 1% in Kenya, 3.5% in Rwanda, 4.89 % in South Sudan, 1.9% in Tanzania and 0.3% in Uganda in 2020. These are markedly lower GDP growth rates than those forecasted towards the end of 2019. GDP growth in EAC is however expected to pick up to pre-pandemic levels in 2021.⁷⁰

Under the pessimistic scenario, as much as 14.8%⁷¹ of GDP output will be lost by EAC Partner States. Correcting for Tanzania which had more relaxed social distancing actions and time periods as compared to other Partner States, the overall GDP in the region will be expected to drop by 12% under this. This will translate to a marked loss of fiscal space and is likely to lead to a drop in domestic health and HIV spending if not mitigated.

While, fiscal stimuli and a slight rebound of the retail sector upon opening of the economies between August and September 2020 have offset potential economic losses considerably, this roughly translates to a proportionate drop in government revenues from both individuals and corporates during the 2020/2021 fiscal year. This is true for most of the global estimates by agencies such as the IMF, African Development Bank, and other agencies and researchers. Extending that to the level of taxation, this roughly means that

⁶⁹Kenya Association of Manufacturers, 2020

⁷⁰ African Development Bank, Economic Outlook, July 2020; IMF, World Economic Outlook, June 2020.

⁷¹ Applying the Markov Chain Model on key domestic factors of economic production, Odhiambo et al, University of Nairobi (April 2020); and updating for empirical effects of COVID-19 on the economy, and domestic health and HIV funding levels, Alando, C. September 2020.

there will be proportionately less disposable income from direct and indirect taxes that the governments could allocate to health. Given the negative correlation between low public health spending and Out of Pocket (OOP) expenditure on health, it will be important for the government to and stakeholders to extend a raft of measures to ensure that the economy is not more adversely affected, individuals avoid catastrophic health spending, and that health gains are retained. Given that most policies and fiscal stimuli may involve long term debt, UNAIDS and the Global Fund should consider lengthening the timeframes for the transition from development partner funding on a case-by-case basis for each country, while the United Nations should consider realigning the timelines for the achievement of Universal Health Coverage goals with the timeline that it would take to obtain a permanent solution to the pandemic, since Covid-19 has disrupted health systems to levels not fathomed previously. EAC countries should consider accelerating public health insurance reforms, intensifying HIV/AIDS mitigation and social protection packages within public health insurance and join Rwanda in making health insurance mandatory to protect citizens from catastrophic health spending.

7. Recommendations

A review of the EAC strategy and action plan (2018) for EAC UHHC Resource Mobilization against recommendations at the global level following the pandemic shows that most of the strategy's recommended actions⁷² have not only remained relevant but also gained as sense of urgency. This section outlines actionable recommendations for the EAC Partner States to mitigate the effects of COVID-19 on domestic financing for UHHC. UNAIDS should advocate for implementation of selected recommendations at country, partnership, and global levels.

1. All Partner States should adequately resource their health care systems and speed up implementation of the COVID-19 response mechanism activities funded by the Global Fund and other partners to improve readiness and limit future waves of the pandemic, across the region while strengthening diagnostic systems and customizing WHO's vaccine distribution plan.
2. During the FY 2020/21 budget implementation, treasuries, and ministries in charge of planning should accelerate the funds flow processes for ministries responsible for health and HIV, by speeding up financing processes such as requisitions to the exchequer, authority to incur expenditure and other processes, with a view to maximizing amounts actually disbursed and expended for health and HIV in 2020 and 2021.
3. Partner States that have not yet adopted policies on mandatory public health insurance schemes and obligatory government spending on health, or intensified HIV/AIDS mitigation and social protection packages within public health insurance, should do so to avoid an increase in catastrophic health spending among citizens, which may further constrain disposable incomes and affect families and public revenues negatively.

⁷² EAC UHHC Resource Mobilization Strategy and MS Excel Sheet Action Plan

4. UNAIDS and partners should advocate strongly for all states to include intensified HIV mitigation and HIV sensitive social protection packages within public health insurance schemes.

5. EAC Partner States should establish an emergency regional fund to respond to future COVID-19 and other outbreaks, build stockpiles of essential supplies, vaccines and protective equipment, accelerate pandemic response strategies especially in EAC Partner States scoring low on health system readiness on the Global Health Security Index (Burundi and South Sudan)⁷³, including modalities to deliver emergency health services to the most vulnerable.

6. EAC should Mobilize a regional pooled fund of at least \$1 Billion from multisectoral sources (governments, Africa Infrastructure Fund, OECD and G20 based asset managers and pension funds coupled with investment guarantee and investment promotion agencies (BUILD Act, World Bank MIGA, UK Trade, SINOSURE, etc.) and sovereign wealth funds facing surpluses, to accelerate implementation of the nine EAC Heads of States Health Sector Priorities, with emphasis on:
 - Expansion of access to specialized health care and cross border health services
 - Strengthening the network of medical reference laboratories and the regional rapid response mechanism for health security threats
 - Expansion of capacity to produce skilled and professional work force for health in the region based on harmonized regional training and practice standards and guidelines
 - Increase access to safe, efficacious and affordable medicines, vaccines, and other health technologies focusing on malaria, TB, HIV/AIDS, NCDs and other high burden conditions, and other priorities.

7. Accelerate regional trade and knowledge exchange consolidation initiatives:
 - iii. Accelerate implementation of the Africa Continental Free Trade Area (AfCFTA) frameworks through pooled procurement and supply by the regional block (EAC) to fill the health sector supply gap caused by PSM chain disruptions between Africa and other continents.⁷⁴
 - iv. Accelerate the implementation of the African Union Regional Health Financing Hub for EAC to exchange knowledge with other countries.

8. Partner States should accelerate implementation of policies in the EAC UHHC Resource Mobilization Strategy (2018) that enhance domestic resource mobilization, including improved tax collection, administration and broadening the tax base to areas where labour is likely to shift, financial sector development, and financial innovation.

⁷³ The Global Health Security Health System Preparedness Index showed by 2019 that South Sudan and Burundi's health systems were among the least prepared in Africa to address a health emergency such as the COVID-19; while those of Kenya and Uganda were best prepared in Africa, after South Africa, with Tanzania and Rwanda following closely: To download reports visit: <https://www.ghsindex.org/>

⁷⁴ Further information of AfCFTA may be found here: <https://au.int/en/cfta>

These policies have now been supported by most global policymakers and multilateral partners including the IMF and World Bank (2020).

9. Partner States should accelerate reforms aimed at strengthening (Burundi, Kenya, Tanzania, Uganda) and creating (South Sudan) public health insurance schemes' ability to effectively play roles as social health insurers by increasing enrollment, with particular emphasis on enrolling informal sector workers; clearly defining and communicating the benefits package to members and providers; pooling resources across schemes covering different populations; improving payment mechanisms to better control both cost and quality; and making necessary institutional and legal reforms.

10. Partner States should continue to prioritize and implement measures in the EAC UHHC strategy aimed at improving efficiency in the allocation and use of health resources. These include activities in the EAC UHHC Resource Mobilization plan, found under the following strategies:

Strategy 3.1: Strengthen and develop Flexible and Responsive Public Financial Management and Allocation Systems

Strategy 3.2: Improving efficiencies in the health system : Through optimizing the cost of inputs, for example pooled procuring commodities whose price has been collectively negotiated downwards by global platforms such as www.wambo.org ; improving health infrastructure availability and support by tapping into the Africa Infrastructure Fund; World Bank private sector initiatives and others to support construction and equipping of hospitals, research centers and supporting infrastructure); Improving the rational use of medicines; and optimizing the rational use of medicines.⁷⁵

11. Leverage ongoing multilateral cooperation to support health care systems [as supported by the Global Fund, World Bank, IMF, WHO, UNAIDS and other partners as well as the COVID-19 vaccine initiative (COVAX)] to enhance removal of trade restrictions on essential medical supplies; share information on the pandemic widely and transparently; provide financial assistance and expertise to Partner States with limited health care capacity; and to scale up vaccine production facilities regionally as trials advance to ensure adequate availability within the region. From the findings of this report, it is likely that the availability of effective vaccines and the efficiency of last mile and beyond the last mile⁷⁶ supply chain distribution systems will be the major determinant of whether countries manage to forestall any future reoccurrences of the COVID-19 pandemic and its attendant economic effects.

12. The Global Fund in preparation for the end of the Covid-19 Response Mechanism (C19RM) implementation period in June 2021, should consider reprogramming efficiency

⁷⁵ The EAC UHHC Resource Mobilization Operational Plan is available in MS Excel Format. It details activities that may be prioritized by countries to ensure results for the UHHC Resource Mob. strategies.

⁷⁶ "Beyond the last mile" here refers to how efficiently the health and community supply chain systems distribute the vaccine beyond health facilities and reach households, including those with reduced access and poor health-seeking behavior.

savings and Unfunded Quality Demand allocations towards supply chains for the COVID-19 vaccine.

13. Global Fund should encourage continuing Principal Recipients to direct savings, efficiency savings from the 2017-2019 implementation grants that have gone into slippage/ closure at the end of 2020 to be reprogrammed into strengthening diagnostic capacity and vaccine storage as well as last mile and beyond the last mile, distribution and management capacity in countries. In the region, Burundi and South Sudan should be given the first priority, followed by Rwanda and Tanzania, Uganda and Kenya⁷⁷.

14. The Global Fund should consider easing HIV cofinancing requirements in 2021 for countries classified as Challenging Operating Environments and extending them into the 2022-2023 period; and those whose domestic revenues will be hardest hit by the COVID-19 pandemic, including Burundi and South Sudan in the EAC.

15. PEPFAR should strive to increase or hold its contributions constant for at least COP years 2021/22 and 2022/23 as most countries may not be able to absorb steep falls in grant amounts in FY 2021 and 2022.

16. To maximize domestic revenue collection as economies reopen, EAC Partner States should focus policy from protecting failing firms in non-strategic industries (air and port transport, communications, defense, health sector manufacturing, etc.) to providing incentives that support workers to shift into sectors that are picking up faster post-COVID-19, and providing stimuli, as well as policy and legislation support (removal of barriers to entry and relaxing of strict hiring rules) in these sectors such as ICT, financial technology (fintech), manufacturing, and retail; as well as facilitating capacity building of workers reallocate to these sectors. This is because businesses in some contact-intensive economic sectors may take much longer than others to recover, and intensive investment in these less protective sectors may tighten and constrain fiscal space, while retaining strict regulations may reduce productivity, thereby reduce taxes and promoting high debt levels.

17. National and local governments (counties, provinces, communes, and districts) should continue policies of temporary tax breaks for affected people and firms, wage subsidies for laid-off workers, cash transfers, and paid sick and family leave to mitigate income losses. These and other support should be removed gradually as opposed to suddenly, and any removal should consider the structure of employment—for the share of self-employed, distribution of firms across sectors experiencing different rates of recovery, and the size of the informal economy.

18. Embrace debt service suspension and restructuring:

- Advocate collectively as EAC for bilateral and multilateral partners to proceed gradually in ending moratoria on debt service to prevent income losses and

⁷⁷ Based on health systems readiness index on strength of the health systems relative to pandemics <https://ghsindex.org>

bankruptcies. Such moratoria should be gradually removed, and only when economies will have reverted back to pre-COVID-19 growth levels in GDP (currently expected at the end of 2021 for EAC countries, based on AfDB and IMF estimates 2020).

- Enrol for the IMF / World Bank G20 Debt Service Suspension Initiative⁷⁸
- Renegotiate funds and payment terms (longer grace periods) for loans owed to the Peoples' Republic of China by EAC Partner States.

19. EAC should negotiate collectively with technology providers to speed up subsidized access to communication, workflow and other technologies in East Africa, as well as expanded bandwidth- all factors which will multiply the rate of economic growth in the region in the wake of the pandemic, and provide durable solutions. Other EAC Partner States may benefit from knowledge exchange with Rwanda, which is among the top three ranked African countries in WITSA's network readiness index.⁷⁹

20. EAC countries should widen the tax base and combat tax evasion collectively as contained in the UHHC Resource Mobilization strategy and operational plan (Strategy 1.4; activities 1.4.1 to 1.4.6)⁸⁰.

1.4.1. Encourage adoption of progressive tax systems by EAC Partner States (Obtain technical support to review tax policy and adopt progressive tax systems that widen tax base and encourage tax payment by more entities, including the informal sector)

1.4.2. Encourage improved tax policy and more efficient tax collection.

- The EAC partner states should increase the amount of taxes collected by increasing the tax base, improving tax collection systems, number of taxpayers, creating more jobs and promoting efficient use of taxes.

- Curtail revenues losses due to trade mis invoicing through the following activities

- *Draft and implement legislative and regulatory measures that assert huge penalties and other disincentives for importers and exporters who avoid tax*
- *Detect mis invoicing as transactions are occurring and take corrective steps in real time.*
- *Conduct forensic audits to get back lost revenues after mis invoicing is found through subsequent audits and reviews*
- Expand tax collection from informal sector through the single ID system and fairly priced rates

⁷⁸ Several Partner States have already begun negotiations. For example, on June 10 2020, the IMF Board approved a debt relief for Tanzania, of USD 14.3 million under the Catastrophe Containment Relief Trust (CCRT) and potentially up to USD 25.7 million, according to the Minister of Finance and Planning's Budget Speech to Parliament.

⁷⁹ World Information Technology and Services Alliance (2020) Network Readiness Index : <https://networkreadinessindex.org/wp-content/uploads/2020/03/The-Network-Readiness-Index-2019-New-version-March-2020-2.pdf>

⁸⁰ An earlier version of the EAC UHHC Strategy is available at: <https://health.eac.int/publications/eac-universal-health-and-hiv-coverage-resource-mobilization-strategy-2018> ; the detailed operational plan in MS Excel may be obtained upon request.

- Implement progressive tax systems that encourage informal sector tax payment
- Progressively charge higher and increase sin taxes on betting, gambling, alcoholic beverages, tobacco products and similar categories of sin but high profit ventures.
- Reduce tax exemptions once the COVID-19 vaccine is availed to the general public, or after June 2021)

1.4.3. EAC to continue to assist Partner States to scale up international tax cooperation and inclusive cooperation and dialogue among national tax authorities on international tax matters. (Work with the Committee of Experts on International Cooperation in Tax Matters, including its subcommittees and the Economic and Social Council through the Special Meeting on International Cooperation on Tax Matters; Enhance intergovernmental consideration of tax issues through EAC, AU and other international organs).

1.4.4. Strengthen countries' capacity for contract negotiations for fair and transparent concession, revenue and royalty agreements and M&E of contract implementation (Seek support to retain technical support through open partnerships/ agreements to avail fiduciary transaction advisors for fair and transparent concession, revenue and royalty agreements and M&E of contract implementation; Engage with international trade facilitation agencies to support EAC Partner States to manage liability and risk in trade issues and obtain guarantees on behalf of investors)

1.4.5. Expand online and mobile revenue collection, administration and follow up. (Continuously adopt innovative tax collection and payment systems through SMS, smartphones, internet and physical mobile vehicle tax collection and enrollment sites; Obtain and / or pool free/ affordable SMS bulk to educate the general public on ways and deadlines for remitting taxes and enrolling for health insurance or social health protection

1.4.6. Expand tax base : Institute indirect taxes (PAYE, Income Tax, etc.) for employees of national and non-diplomatic international non-state actors (private sector, civil society) where these do not exist

- Strengthen systems for real time collection and automated remittance of capital gains taxes to national revenue collection authorities.
- Strengthen systems for real time collection and automated remittance of property taxes to national revenue collection authorities.
- Deploy systems for real time collection and reimbursement of property taxes.
- Work with informal sector lenders and financial credit agencies to enroll taxpayers and remit taxes automatically.
- Work with national health insurance schemes to promote cross enrollment into health insurance and revenue authorities.
- Promote health services quality and uptake; Enhance efficient use of taxes by introducing value for money measures and using data for next annual allocation

21. Governments and partners should heavily subsidize health insurance schemes in Kenya, Rwanda, Tanzania and Uganda if required; and accelerate the rollout of Burundi and South Sudan's public health insurance schemes; while speeding reforms to strengthen public health insurance agencies.⁸¹

22. In addition, illicit financial flows from Africa could be as much as \$50 billion a year, more than double official development assistance. Governments should embrace policies that limit and reverse illicit financial flows and curb capital flight; and use returned funds domestic health and HIV support among other developmental uses.

23. EAC Partner States should collectively develop investment vehicles, approach and provide concessions to large asset managers, pension funds and large financiers in the private sector, as well as sovereign wealth funds which gained surpluses in 2019 and any in 2020 to invest in the EAC health sectors, especially to build health sector infrastructure.

24. EAC Partner States should adopt an insolvency framework to save *strategic* (those individual companies including SMEs, and sectors which are required to facilitate trade overall, and which have a multiplier effect on trade and employment. These include preventing viable firms from prematurely being pushed into insolvency through time-bound, extraordinary measures by:

- Increasing the barriers to creditor-initiated insolvency filings
- Suspend corporate directors' duty to put companies into insolvency and the associated liability for failure to file, except in cases of fraud. Directors often have a legal duty to act in the creditors' interests when a firm is on the edge of insolvency, to prevent businesses from growing debts they will not repay.
- Establish an informal out-of-court or hybrid workout framework, including mediation.
- Extend procedural deadlines for a limited time.
- Suspend requirements to proceed to liquidation, if the business activity of the debtor has stopped while undergoing reorganization.
- Ensure a mechanism for consumer bankruptcy, with appropriate safeguards: These critical tools for individuals and companies provide an orderly framework for paying creditors and give debtors key protections, such as discharge from their debt burden

⁸¹ Among the options in the operational plan are: Separate health insurance scheme payers / funds/ entities (NHIF/NHIS/CBHI/CAM) from the users (MOH) and co-opt/ build capacity to examine various accreditation; service provision; refunds; capitation etc. promptly; Review laws and regulations to guide progressive pricing of insurance premiums to maximize uptake; professionally determine accreditation, capitation and timely reimbursements; - pass tougher laws to penalize entities defrauding health insurance funds; Review laws to provide more punitive and preventive punishments for individuals and organizations who misuse or contravene health insurance usage and claim regulations, agreements and guidelines; Develop a system for delisting, successfully prosecuting, fee recovery and publishing names of individuals and service providers who contravene health insurance usage and claim regulations, agreements and guidelines,

and shielding of certain assets from seizure by creditors. These have been shown to be critical tools for consumers and micro-entrepreneurs.

25. Strengthen governance and oversight for mobilized funds: EAC Partner States should consider forming a regional coordination mechanism for both domestic and external funds, complete with oversight mechanisms and interregional information exchange structures that link with the African Union hubs. These will partly address issues of conflict of interest currently plaguing individual countries that attempt to limit pilferage of funds by protected interests locally.

26. EAC Partner States should consider extending the term of the Resource Mobilization Strategy and its targets by one year to 2024/2025, given the impact of COVID-19, since fiscal space is likely to be constrained, the number of people on health insurance is likely to fall due to job losses, while significant health sector resources including HIV and other diseases community systems have been diverted to addressing COVID-19.

27. **Several laws may require amendment in the wake of COVID-19. These include:**

i. Labour laws: EAC Partner States should amend labour laws to provide a mechanism for carrying out temporary layoffs during national disasters subject to certain safeguards to protect employees; amend Occupational Health and Safety Acts to envisage the home as a workplace and amend labour law should also be amended to compel the employer, upon resumption of normal operations, to give priority to the laid off staff and to disregard the period of the disaster in the computation of the years of service. Countries should find ways to amend labor laws to help citizens deal with employment crisis.

ii. Modifying trade laws to remove export restrictions by manufacturing countries for essential health products: National emergency measures are necessary as first order steps. However, for sustainability, the region should advocate against export restrictions, by vaccine and reagent producing states which have had detrimental consequences on disaster relief, COVID-19 testing⁸² and may affect vaccine availability in the long term. To forestall these negative consequences in future, the region should move with speed to build manufacturing capacity for essential medicines and diagnostic reagents in the region, beginning with the planned manufacturing facility in Zanzibar. The EAC region should in the meantime advocate with the WTO to reform export restriction laws.

iii. Cybersecurity laws: Information technology has never been as crucial as it is now. For countries which do not have comprehensive data and cybersecurity laws, there is need to adapt laws to ensure proper handling of data; and safeguarding of wealth (The region's financial systems lose more than \$150 Million annually to cybertheft; this is an indirect

⁸² In September 2020, reagents for use in COVID-19 diagnostic equipment supplied by Roche, as US-based entity, were unavailable due to export restrictions by the US government; this led to disruptions and reduced testing capacity in East Africa.

leak on the tax system, which threatens to grow post COVID-19, as all sectors, financial system and the taxation system goes online.

iv. Relaxing financial and other laws to enable innovation: The increasing trends towards digitalization of financial services requires laws that address rising inequalities during and after the pandemic by enabling the use of sound financial laws and addressing several risks such as: insufficient consumer protection laws, lack of financial and digital literacy, as well as addressing money laundering and cyber risks through international agreements and information sharing; ensure digital payments can be made across borders, and facilitate the movement, release and clearance of goods across borders. Laws limiting the use of drones for distribution of health and other products should be removed to boost domestic trade and the retail sector in general. In addition, there is need for policies that ensure easy flow of credit to small-scale businesses and keep them afloat after the pandemic.

v. EAC should jointly advocate for increased access to health and IP rights, price reductions and amending laws (as Rwanda has done): As proposed in the UHHC Resource Mobilization strategy, there is need to revise copyright laws in each partner state for essential health products: Once a vaccine and other health products such as testing kits and other medical/protective devices for COVID-19 are developed and approved, these ought to be availed affordably to all, including the most vulnerable, at the same time, an accessible vaccine or treatments for COVID-19 may still end up being beyond the reach of those who need them most, states must utilize existing public health flexibilities. These include safeguarding a high standard of patentability as well as flexibilities provided for under the WTO TRIPS Agreement, such as transition provisions for Least Developed Countries, compulsory licenses and government use, and parallel imports. Some IP regimes are not comprehensive and do not take advantage of public health flexibilities and Partner States must be proactive in positioning themselves to use the measures available to them to protect public health and promote access to healthcare, which includes the utilization of TRIPS flexibilities.

vi. Redirecting illicit funds flows into public revenue: Supervisors, financial intelligence units and law enforcement agencies should continue to share information with the private sector to prioritize and address key money laundering risks, particularly those related to fraud, and TF risks linked to COVID-19. Additionally, criminals and terrorists may seek to exploit gaps and weaknesses in national anti-money laundering/counter-financing of terrorism (AML/CFT) systems while they assume resources are focused elsewhere, making risk-based supervision and enforcement activity more critical than ever. Financial institutions and other businesses should remain vigilant to emerging ML and TF risks and ensure that they continue to effectively mitigate these risks and are able to detect and report suspicious activity. The FATF calls on countries to explore using digital identity, as appropriate, to aid financial transactions while managing ML/TF risks during this crisis, while providing reporting mechanisms.

Ensuring gender sensitive policies: The COVID-19 pandemic has disproportionate negative effect on girls and women and affected their employment opportunities in a manner that will outlast the pandemic. There have been tens of thousands of teenage pregnancies across states; about a million left vulnerable to SGBV, and more adolescent women losing

livelihoods and resorting to sex work. EAC partner states should join with the private sector to continue prioritizing women in the labour force; delivering customized emergency assistance to women and girls (e.g. food rations including sanitary hygiene materials) and equipping tribunals to prosecute the rise in domestic violence; offer zero-cost emergency hotlines and address other gender-specific vulnerabilities in a transformational manner. EAC Partner states should strengthen their gender mainstreaming stewardship to also reach women with their economic rescue and stimulus measures and ensure sustainability in transition. Gender-targeted fiscal stimulus packages are vital to ensure the survival of small and medium enterprises, many of which are owned by women and dependent on female workforce. And measures to increase financial inclusion are vital to reach women who are otherwise often excluded from state fiscal support. Yet, COVID-19 policies and regulations so far lack such gender-specific elements. The COVID-19 pandemic has exacerbated the vulnerability of women and girls, further increasing the wage gap and economic dependency

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Please send comments and queries to chris@globesolute.com or WhatsApp +41796837050 or +254775200200

