

# East Africa Economic Outlook 2020

Coping with  
the COVID-19  
Pandemic



AFRICAN DEVELOPMENT BANK GROUP



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African Development Bank Group

Avenue Joseph Anoma

01 BP 1387 Abidjan 01

Côte d'Ivoire

[www.afdb.org](http://www.afdb.org)

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<b>AEO</b>	African Economic Outlook
<b>AfCFTA</b>	African Continental Free Trade Area
<b>AfDB</b>	African Development Bank
<b>ASME</b>	American Society of Mechanical Engineers
<b>CBR</b>	Central Bank Rate
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>COVID-19</b>	Coronavirus Disease 2019
<b>CPI</b>	Consumer Price Indices
<b>EAC</b>	East African Community
<b>ECCAS</b>	Economic Community of Central African States
<b>ECI</b>	Economic Complexity Index
<b>EFA</b>	Education for All
<b>ETB</b>	Ethiopian Birr
<b>FDI</b>	Foreign Direct Investment
<b>FOW</b>	Future of Work
<b>GDP</b>	Gross Domestic Product
<b>GTP</b>	Growth and Transformation Plan
<b>HCI</b>	Human Capital Index
<b>HERQA</b>	Higher Education and Relevance Quality Agency
<b>IADC</b>	International Association of Drilling Contractors
<b>ICT</b>	Information and Communications Technology
<b>IFPRI</b>	International Food Policy Research Institute
<b>IGAD</b>	Intergovernmental Authority on Development
<b>ILO</b>	International Labor Organization
<b>ILOSTAT</b>	International Labor Organization Statistics Database
<b>IMF</b>	International Monetary Fund

<b>LAPSSET</b>	Lamu Port-South Sudan-Ethiopia-Transport
<b>MDGs</b>	Millennium Development Goals
<b>NAYS</b>	National Adolescents and Youth Survey
<b>NCIP</b>	Northern Corridor Integration Project
<b>OECD</b>	Organization for Economic Co-operation and Development
<b>OSH</b>	Occupational Safety and Health
<b>PCI</b>	Product Complexity Index
<b>SADC</b>	Southern African Development Community
<b>SDGs</b>	Sustainable Development Goals
<b>SSA</b>	Sub-Saharan Africa
<b>TVET</b>	Technical and Vocational Education and Training
<b>UIS</b>	UNESCO Institute for Statistics
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNICEF</b>	United Nations Children's Fund
<b>US</b>	United States
<b>USD</b>	United States Dollars
<b>WEF</b>	World Economic Forum

## EXECUTIVE SUMMARY

East Africa's economies are slowly transitioning from agriculture to services. The contribution of agriculture to the region's GDP went down from an average of 33.4 percent at the turn of the millennium to 28.3 percent in 2018. This was against an increase in the contribution of services to GDP from 44.6 percent in the early 2000s to 53.8 percent in 2018. This movement is more prominent in Seychelles, Eritrea, Kenya and Rwanda where services contribute 80, 67, 60 and 47 percent of GDP, respectively. However, services are not the higher value-added activities in the region to trigger the desired structural transformation. In line with this shift, the ILO had estimated that the number of employment opportunities in the region's service sector would have more than doubled to 40.8 million while those in agriculture would have increased at a slower pace from 56.7 million to 97.6 million in 2020. These estimates are no longer tenable given the ongoing supply and demand shocks related to COVID-19-business disruptions have lowered production while the loss of income, fear of contagion and heightened uncertainty has made people to spend less, thus lowering aggregate demand with the service sector being hit the hardest.

At the global level, economic growth projection has taken a hit in the face of COVID-19 pandemic. The global economy grew by an estimated 2.9 percent in 2019 and was projected to grow by 3.4 percent in 2020. However, the COVID-19 pandemic is expected to have negative impacts on the global economic growth. New projections indicate that the global economy in 2020 will contract by 3 percent<sup>1</sup>, far lower than the 2.9 percent growth rate estimated in 2019. Similarly, Africa's economic growth projection for 2020 has also been revised downwards from 3.9 percent to -1.7 percent in a baseline scenario (COVID-19 is contained by the third quarter of 2020) and -3.4 percent in a worst-case scenario (COVID-19 crisis persists to the end of 2020). Sub-Saharan Africa's economic growth is projected to fall sharply from 2.4 percent in 2019 to between -2.1 percent and -5.1 percent in 2020, the first recession in the region over the past 25 years.<sup>2</sup>

East Africa's GDP growth was projected to be 5.1 percent in 2020 (pre COVID-19)- midway between the 5 percent base in 2019 and 5.2 percent peak in 2018, and remaining the fastest growing region in Africa. All East African countries were projected to positively contribute to the growth, except for Sudan whose economy was projected to slow by 1.6 percent in 2020 due to conflict. The region's growth is largely driven by strong public spending in infrastructure, rising domestic demand, the benefit of improved stability, new investment opportunities and incentives for industrial development. However, with the COVID-19 related disruptions of fiscal expenditure plans, revenue mobilization, supply chains and international market demands, the region's growth will be dampened significantly. Consequently, the region's 2020 growth is projected at 1.2 percent in the baseline scenario and 0.2 percent in the worst-case scenario. A recovery of

<sup>1</sup> IMF's WEO (April 2020).

<sup>2</sup> World Bank's Africa's Pulse (April 2020).

3.7 percent in the baseline scenario and 2.8 percent in the worst-case scenario is however projected in 2021 under the assumption that COVID-19 would be contained in the short-to-medium term.

East Africa's inflation was projected to remain the highest in the continent in 2020 at 14.2 percent, slightly above the 13.5 percent experienced in 2019. With COVID-19, 2020's inflation rate is projected to rise further to 17.3 percent in the baseline scenario and 18.0 percent in the worst-case scenario. The region's fiscal deficit was expected to remain relatively stable, from a deficit of 4.9 percent of GDP in 2019 to 4.7 percent in 2020, but with the outbreak of COVID-19, this is no longer the case. Fiscal deficit in 2020 will be -6.1 percent of GDP in the baseline scenario and -6.8 percent in the worst-case scenario. Public debt remains high at 59.2 percent of the region's nominal GDP, way above the IMF's recommended threshold of 40 percent for developing countries, and is expected to worsen as countries seek additional resources to enhance the capacity of their health systems and to tackle the socio-economic effects of COVID-19. The risk of debt distress has increased in Ethiopia, Eritrea, Kenya, South Sudan and Sudan. The region's current account deficit was projected to slightly deteriorate to 6 percent of GDP in 2020 from 5.9 percent in 2019, this has also been revised in the wake of COVID-19 to 7.0 percent of GDP. Overall, the impact of the region's economic growth on poverty, inequality and unemployment is expected to remain minimal, with inequality, poverty and unemployment expected to persist in 2020.

East Africa's growth in labor productivity was expected to average 1.2 percent per annum over the period 2018-2020, slightly above Africa's 0.9 percent. Djibouti was poised to record the highest level of labor productivity of all East African countries, marginally improving from 4.5 percent in 2018 to 4.6 percent in 2019 but with a slight decline to 3.8 percent in 2020. Rwanda's labor productivity was expected to remain constant at 3.9 percent in 2019 and 2020 while Ethiopia's was expected to decline from 3.7 percent in 2019 to 3 percent in 2020, and Tanzania's to fall from 3.5 percent in 2019 to 3.4 percent in 2020. South Sudan was considered as the only country in East Africa that recorded negative growth in labor productivity during 2018-2020. However, due to the impact of COVID-19 crisis, all East African countries are expected to experience low growth in labor productivity in the year 2020.

To harness East Africa's growth prospects and mitigate the underlying external and domestic risks, a multiple of political and socio-economic policy interventions are necessary. These include consolidating peace and stability, accelerating structural transformation, strengthening macroeconomic policy coordination and diversifying the development financing sources. Other interventions may include deepening regional integration and developing skills for the workforce of the future. In the face of COVID-19, the private sector and development partners must come in to help restore the growth trajectory, create employment and accelerate poverty reduction. Equally, East African governments must come up with targeted fiscal, monetary and social insurance policies to moderate the social and economic impact of COVID-19. While countries could initially undertake country-specific interventions, joint and collaborative efforts would be desirable given the integrative nature of the region. In the short term, there is need for donor emergency response package to channel funding in critical areas such as strengthening the capacity of the health systems and supporting poor households already in safety net programs and others. In the medium-to-long term, there is need to stimulate domestic demand to counter the effect of weak global demand while deepening structural reforms to support the transition from public sector to private sector led growth in the region. To diversify development financing sources, East African countries should reduce over-reliance on government borrowing to finance public investments, which has contributed to a rise in the risk of debt distress, and instead explore other financing avenues such as the use of public private partnerships and securitization of infrastructure assets, and undertake complementary measures to boost domestic savings mobilization.

Though East Africa is expected remain among the fastest growing in the world, only a few of the region's workers will have high quality jobs. This is partly due to low skill levels of the labor force, largely to the region's low quality of education and skills development. East African countries adopt varied education systems ranging from three-cycle to two-cycle with years of schooling ranging between 11 and 16 years. The region's education systems equipped the population with an average of five years of schooling, implying low educational outcomes. Only five of the 13 countries in the region have mean years of schooling which is above the region's average of five years. These are Seychelles (9.5 years), Kenya (6.5 years), Uganda (6.1 years) and Tanzania (5.8 years). Ethiopia has the lowest mean years of schooling at 2.7 years. Close to 5 million adolescents and 8 million children in East Africa are out of school with Sudan accounting for about 2.6 million out of school children, slightly above Ethiopia (2.3 million) and South Sudan (2.2 million). The large number of children who are out of school compared to adolescents indicates limited access to education, particularly at pre-primary school level. East African countries are also confronted by high school dropout rates, especially at primary school level. This increased from 35 percent in 2010-2014 to 49.7 percent in 2015-2018. Sudan had the highest primary school dropout rate at 65 percent, followed by Uganda, Burundi and Rwanda. Educational outcomes are, however, going to be dampened by the COVID-19 crises that has made all the countries in East Africa other than Burundi close schools and universities to mitigate the spread of the virus. The closure of schools and universities has affected close to 90 million learners of whom 49 per cent are girls. While school closures seem to present a logical solution to enforcing social distancing within communities, it could create longer-term human capital issues for East African economies, widen learning inequalities, and hurt vulnerable children and youth disproportionately particularly girls who may never return to school even after schools reopen. It is estimated that East African countries are likely to experience a COVID-19 effect of at most 10 percent of a standard deviation on educational outcomes.

Transformation towards services and regional integration in East Africa are expected to boost the region's demand for educated and skilled labor. The Northern Corridor Integration Project (NCIP) and Central Corridor Initiative has created a workforce demand of 4,500-15,500 for maritime transport and shipping logistics in ten years, while Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) is to generate 200,000 jobs through the port and related activities. The NCIP's regional demand for Information and Communications Technology (ICT) skills is expected to increase to 8,300-30,600 skilled ICT workforce while a regional strategy for scaling up access to modern energy services will demand 12,044 professional and technical staff in the geothermal industry. The region may, however, not reap the full employment benefits of transformation and integration due to the large gap between demand and supply of education and skills, and low levels of education and training which impedes productivity of the labor force. Firms in East Africa generally cite an inadequately skilled workforce as a major constraint on their businesses. The region is also deficient in specialized Technical and Vocational Education and Training (TVET) skills, particularly in transport, energy, manufacturing including agro-processing and ICT, which could dampen the region's industrialization and integration agenda. There is a weak sync between the skills possessed by the labor force and those required by industry, implying that the region's inadequacies in education and skills development could result in a less productive workforce.

Policymakers in East Africa should, therefore, focus on improving access and the quality of learning taking place in the education and training institutions; linking universities and other tertiary institutions such as TVETs and the education system in general with industry; and integrating higher learning skills in the curricula by remodeling the curricula to create critical and creative thinkers who are emotionally intelligent to fit in an automated and ICT intensive society. Closure of schools and universities due to COVID-19 calls for change in the way East African countries think about provision of education. It calls for measures to ensure adoption of inclusive methods of digital and distance learning that considers the gender digital divide.



## PART 1

RECENT MACROECONOMIC TRENDS  
AND DEVELOPMENTS

## 1.1 INTRODUCTION

**Growth in East Africa was buoyed by strong growth in Rwanda, South Sudan, Ethiopia, Tanzania, Uganda, Kenya and Djibouti.** East Africa was the fastest growing region in Africa, although the region's real GDP growth slipped marginally from 5.2 percent in 2018 to 5 percent in 2019. Pre-COVID-19 projections showed the region's real GDP growth recovering slightly to 5.1 and 5.4 percent in 2020 and 2021, respectively. The region's growth was driven by strong public spending in infrastructure, rising domestic demand, the benefits of improved stability, new investment opportunities and incentives for industrial development across countries. With the outbreak and continuing spread of COVID-19, the projected growth rates in 2020 and 2021 are significantly dampened (Figure 1).

**Though East Africa's economies have observed a prolonged period of robust growth, income distribution remain inequitable.** United Nations (2019) estimates that East Africa's GDP per capita expands at about half the growth rate of its GDP. In 2000, it is estimated that the bottom 20 percent of earners received 6.5 percent of the total income,

while the top 20 percent of earners received 48 percent of the total income. In 2015, there was no statistically significant change in the income distribution with the shares being almost constant at 6.3 and 48 percent, respectively.

## 1.2 GLOBAL MACROECONOMIC TRENDS AND DEVELOPMENTS

**The global economy grew by an estimated 2.9 percent in 2019 and was projected to grow by 3.4 percent in 2020.** However, the COVID-19 pandemic is expected to have both direct and indirect negative impacts on the global economic growth. New projections indicate that as a result of COVID-19, the 2020 global growth that had in 2019 been projected at 2.9 percent will fall to -3.0 percent but would rebound to 5.8 percent in 2021 if the COVID-19 pandemic fades quickly.<sup>3</sup> Other factors constraining the global growth include: (i) rising trade barriers; (ii) elevated uncertainty surrounding trade and populations; (iii) idiosyncratic factors causing macroeconomic strain in several emerging market economies; (iv) structural factors, such as low productivity growth and aging demographics in advanced economies; and (v) a significant rise in risk premia and the reversal in

<sup>3</sup> IMF's WEO (April 2020).

capital inflows due to tightening global financial conditions. The COVID-19 pandemic is a key downside risk to the global economic outlook and is expected to negatively affect global supply and demand. Supply will be affected by mitigation measures to combat COVID-19 that restrict travel, slowdown supply chains and reduce credit availability. Demand will be impacted by the increased uncertainty around the duration and severity of COVID-19 and the consequent cautious consumer spending behavior. Tightened financial conditions will also reduce consumer spending.

Owing to rising trade barriers and tensions with partners, growth in the US was projected to slow to 1.9 percent in 2020 from 2.6 percent in 2019, but the spread of COVID-19 is likely to accelerate the projected slowdown to -6.1 percent (IMF, April 2020). In the Euro area, growth was projected to remain stable at 1.6 percent in 2020 but with the outbreak of COVID-19 and Europe being one of the most hit regions, the growth is expected at -7.5 percent. Escalating tariff wars with the US and weakening external demand are expected to reduce China's growth to 6 percent in 2020 from estimated growth of 6.2 percent in 2019.<sup>4</sup> With the pandemic of COVID-19, China's growth rate is expected to decline further to 1.2 percent in 2020.

**COVID-19 crisis has far-reaching adverse impact on global economy.** All economic sectors and activities are affected as a result of several administrative measures taken by countries to protect their citizens against COVID-19 pandemic (travel bans/restrictions, shutdown of restaurants/bars, border closures, curfews, quarantine). An UNCTAD analysis dated 26 March 2020 reveals that the downward pressure of the COVID-19 impact on foreign direct investment (FDI) flows could range from -30 percent to -40 percent during 2020-2021. The same analysis shows the adverse impact of COVID-19 on the sales of the largest multinational enterprises, and the generating problems beyond supply chain

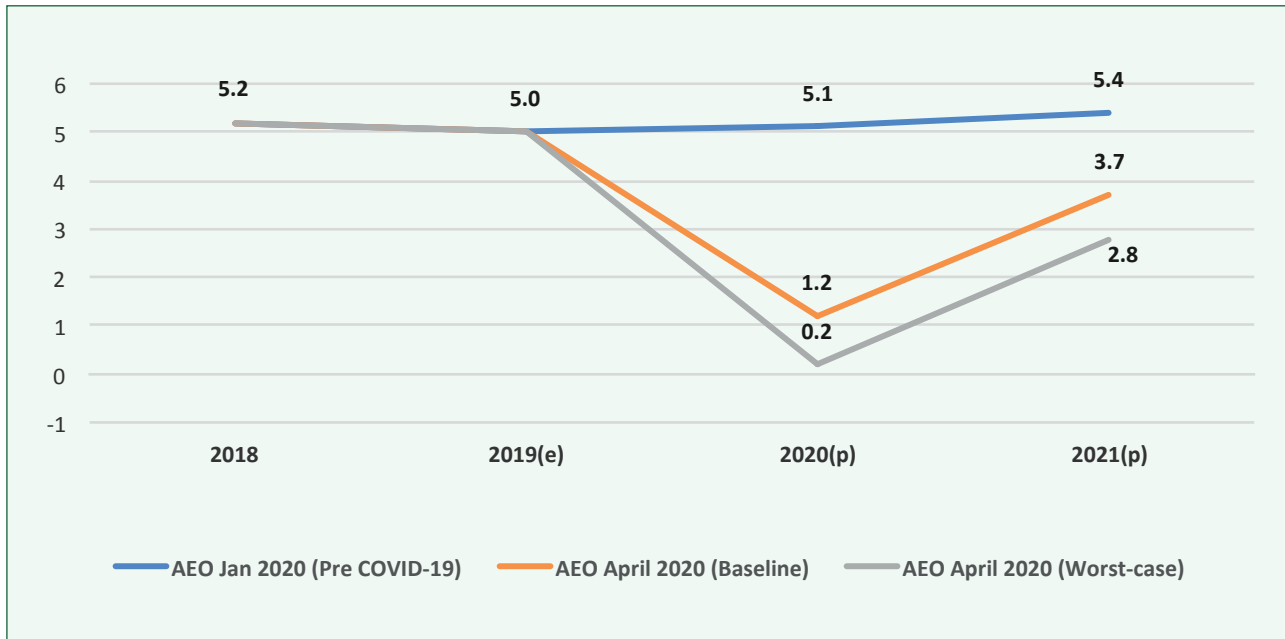
disruptions after a production slowdown in parts of China. The most affected economic sectors are the energy and basic materials industries (-208 percent for energy, with the additional shock caused by the recent drop in oil prices), airlines (-116 percent) and the automotive industry (-47 percent) (UNCTAD, March 2020). COVID-19 equally affects the world of work as indicated in a recent study of ILO (2020). Many workers cannot move to their places of work or carry out their jobs, which has knock-on effects on incomes, particularly for informal and casually employed workers. The ILO's study reveals a significant rise in unemployment and underemployment due to COVID-19. Preliminary ILO estimates indicate a rise in global unemployment of between 5.3 million ("low" scenario where GDP growth drops by around 2 percent) and 24.7 million ("high" scenario where GDP growth declines by around 8 percent) from a base level of 188 million in 2019.

**At the continental level, the adverse impact of the COVID-19 pandemic suppresses the projected growth trends in Africa.** Africa's economic growth projection for 2020 has been revised downwards from 3.9 percent to -1.7 percent in the baseline scenario and -3.4 percent in the worst-case scenario. In 2021, the continental growth is projected to recover to about 3.0 percent in the baseline scenario and 2.4 percent in the worst-case scenario. A sharp fall is projected in Sub-Saharan Africa's economic growth from 3 percent in 2019 to -2.1 percent in baseline scenario and -4 percent in worst-case scenario in 2020, the first recession in the region over the past 25 years. Figure 1 shows that for 2020, East Africa's economic growth projections have also been revised downwards from 5.1 percent to 1.2 percent in the baseline scenario and 0.2 percent in the worst-case scenario. A slight recovery is however projected in 2021 under the assumption that COVID-19 would be contained in the short-to-medium term.

<sup>4</sup> <https://www.imf.org/en/Publications/WEO/Issues/2019/07/18/WEOupdateJuly2019>.



Figure 1: Impact of COVID-19: Projected East African GDP Growth



Source: African Development Bank, April 2020.

In general, the global economic slump is less supportive of East Africa's growth expectations due to a reduction in export demand and capital flows as well as disruptions in global supply chains. East African economies are sensitive to global risks. To cope with the adverse effects, East African monetary authorities have opted for monetary easing by reducing interest rates and cash reserve ratios in order to boost private investment and foster economic growth in the region.

## 1.3 RECENT MACROECONOMIC DEVELOPMENTS

### 1.3.1 East African Economic structure is transforming with services sector becoming more dominant

East African economies are in transition, albeit at a slow pace, from agriculture to services, while the industrial sector remains relatively underdeveloped. In the last two decades, agriculture was the mainstay of these economies, but this is no longer the case. Considering that 11 of the 13

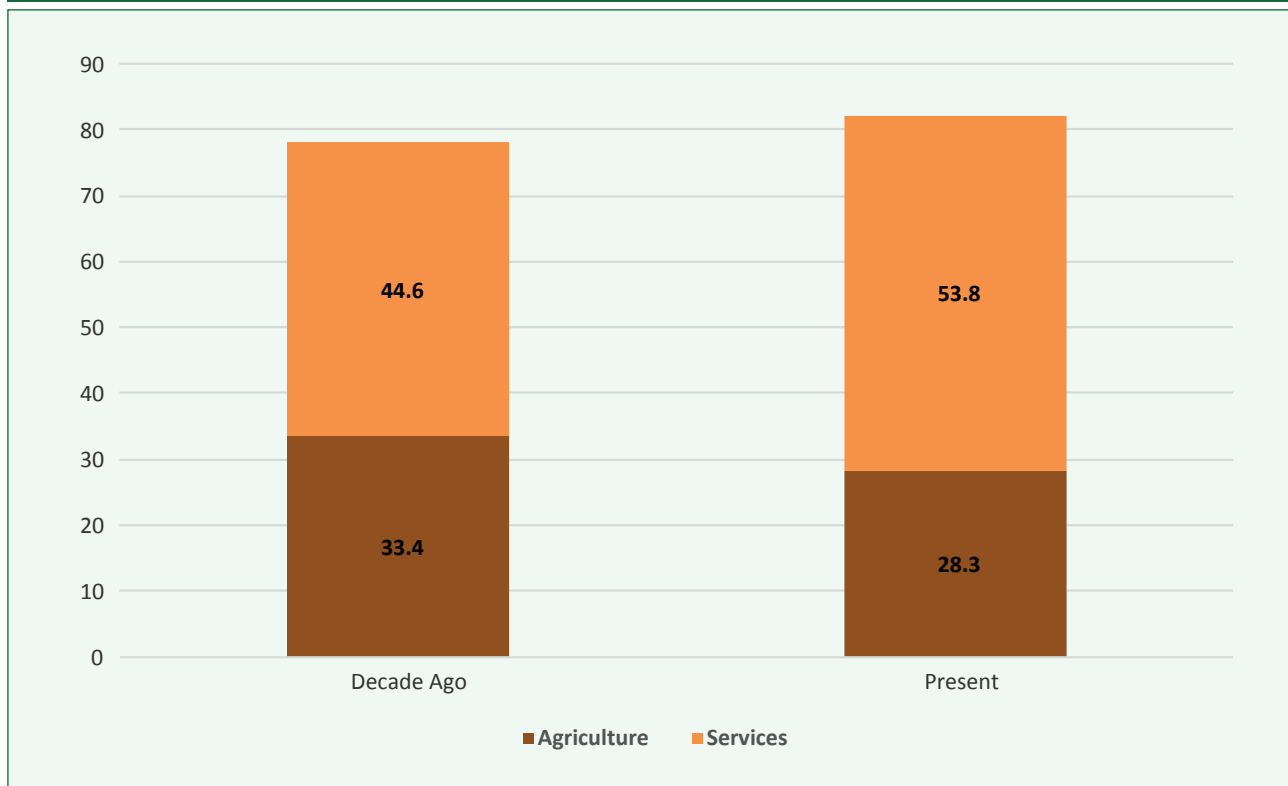
countries in the region are non-resource rich, the average contribution of agriculture to GDP has declined from an average of 33.4 percent in early 2000s to 28.3 percent in 2018. This contrasts with an increase in the average contribution of services to GDP from 44.6 percent in the early 2000s to 53.8 percent in 2018 (Figure 2).

**The declining contribution of agriculture is contrasted with the rising prominence of services in GDP.** In Ethiopia, the service sector's contribution to GDP increased by 4 percentage points between 2000 and 2018 to 41.2 percent. In Rwanda and Kenya, the service sector has contributed an average of 47 and 60 percent of the GDP, respectively, over the last decade. The expansion of the service sector (contributing to 67 percent of GDP) in Eritrea has been gradual and steady, largely benefiting from growth of transport and logistics sub-sectors, wholesale and trade, and tourism. Similarly, the service sector (mainly tourism) dominates Seychelles' economy contributing more than 80 percent of GDP and employment, while industry contributes only about

15 percent and agriculture 3 percent. The scenario is no different for Burundi, Comoros and Somalia. The only

exception is South Sudan, whose growth in GDP is largely driven by oil exports.

**Figure 2: Sectoral contribution to GDP for non-resource countries in East Africa**



Source of Data: 2020 Country economic outlooks.

**The gradual shift from agriculture to services results to some extent in the creation of employment opportunities in the region.** The International Labor Organization (ILO) estimates that between 2000 and 2020, the number of opportunities in the region's service sector will more than double to 40.8 million, while those in agriculture will increase by less than double from 56.7 million to 97.6 million (Table 1). Though opportunities in services are projected to grow more rapidly than those in agriculture, the bulk of employment opportunities will remain in agriculture. Specifically, employment levels in agriculture will remain more than double those in services. This implies that though workers are

expected to transition from agriculture to services, the rate of transition is not as prompt as expected. A huge proportion of workers are still left stuck in agriculture even as the economies shift to services. This means that the workers in East Africa may be lacking the requisite skills required to work in the service sector. In Ethiopia, agriculture still employs over 70 percent of the workforce and accounted for over 70 percent of merchandise exports during 2015/16–2017/18. This scenario is also observed in Burundi where over 80 percent of the labor force is still employed in the agricultural sector despite the significant rise in the contribution of services to GDP.

Table 1: Employment by sector in East Africa by country, (thousands, annual)

	2000		2020		Growth (percent)	
	Agriculture	Services	Agriculture	Services	Agriculture	Services
Burundi	2,447.9	151	4,699.4	299.9	92.0	98.6
Comoros	67.1	36.2	127.7	66.4	90.3	83.4
Djibouti	129	84.5	192.7	169	49.4	100.0
Eritrea	880.6	402	1,513.9	709.7	71.9	76.5
Ethiopia	21,098.2	4,642.2	35,090.8	12,165.8	66.3	162.1
Kenya	5,387.7	4,342.2	11,078.5	6,971.1	105.6	60.5
Rwanda	3,354.9	349.2	4,342	1,663.7	29.4	376.4
Sudan	3,155.7	2,315.3	4,593.8	4,522.4	45.6	95.3
Somalia	1,430.1	383.3	2,514.8	738.2	75.8	92.6
South Sudan	-	-	2,634.7	1,762.1	-	-
Tanzania	13,040.2	2,303.5	18,557.6	7,786.1	42.3	238.0
Uganda	5,760.9	1,859	12,284.3	3,921	113.2	110.9
<b>East Africa</b>	<b>56,752.3</b>	<b>16,868.4</b>	<b>97,630.2</b>	<b>40,775.4</b>	<b>72.0</b>	<b>141.7</b>

Source of Data: ILO Modelled Estimates November 2018.

Note: Data for Seychelles is missing.

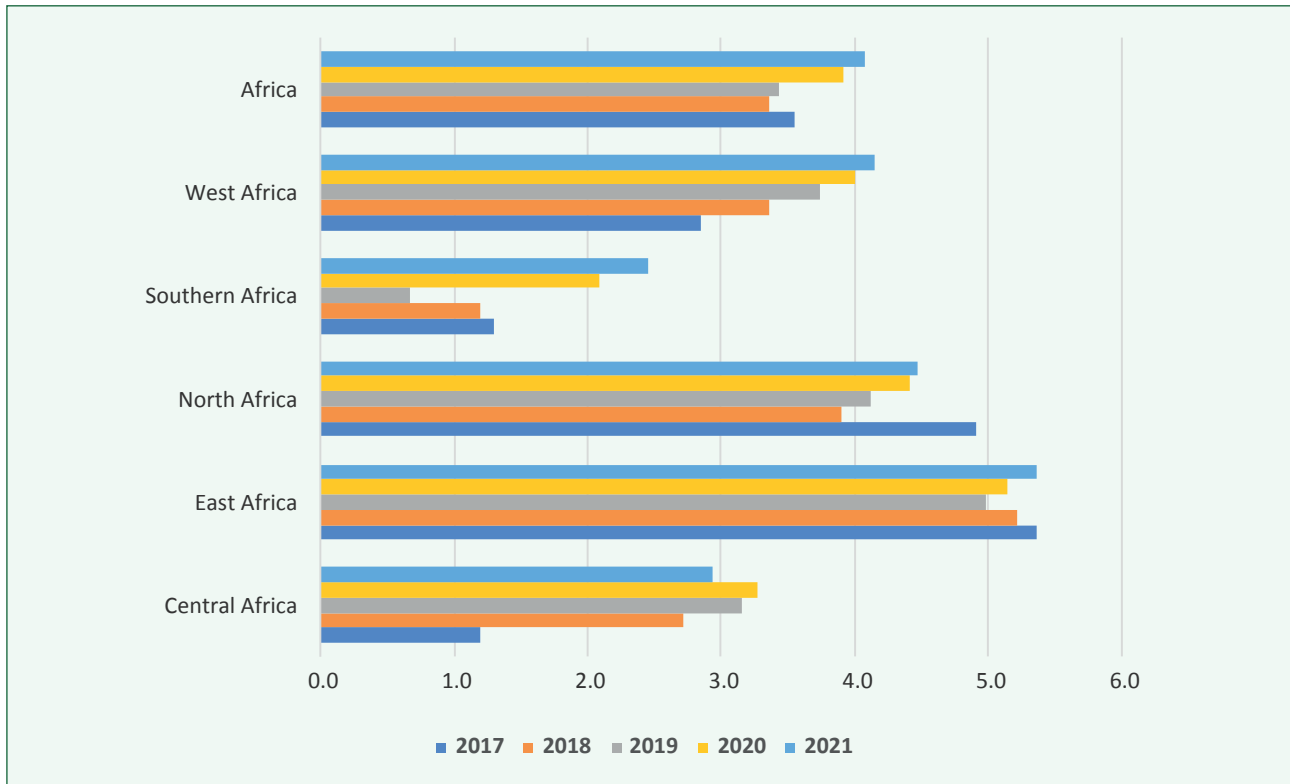
### 1.3.2 The Robust Growth Momentum is dampened by the COVID-19 pandemic

**The Region's economic growth remained robust amid emerging challenges until the pandemic of COVID-19.**

Three of the six African countries in the top-10 fastest-growing economies in the world are in East Africa (Ethiopia, Rwanda and Tanzania). The region's real GDP growth was

5.2 percent in 2018, before slowing down to 5.0 percent in 2019. The estimated slowdown in 2019 was mainly as a result of adverse weather conditions and fiscal consolidation that constrains the growth in public sector infrastructure projects. East Africa's pre-COVID-19 economic growth was projected to recover to 5.1 percent in 2020 and 5.4 percent in 2021 and remaining the fastest growing region in Africa (Figure 3).

Figure 3: GDP Growth in Africa by Region, 2017-2021 (Pre-COVID-19)

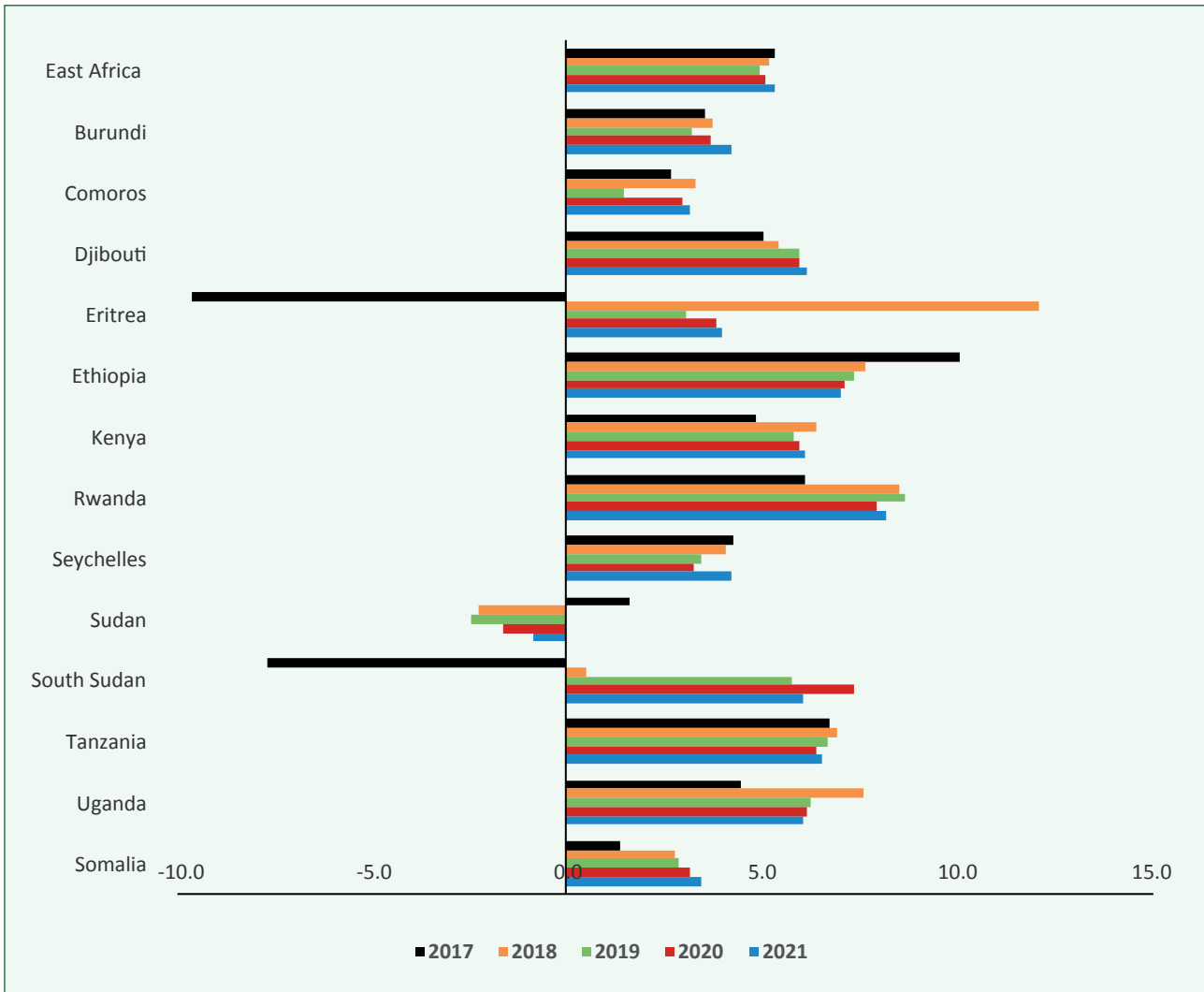


Source of Data: African Development Bank Statistics.

**The service sector plays a major role in the region's economic growth on the supply side, while on the demand side growth is driven by private consumption and investment.** The high growth economies (6 percent and above in 2018) were Eritrea, Ethiopia, Rwanda, Tanzania, Kenya and Uganda. Djibouti and South Sudan were projected to join the high growth countries in 2020 (pre-COVID-19). However, with the COVID-19 pandemic, only Rwanda and Tanzania are projected to record growth rates above 4 percent in 2020 (Table 2). Except for South Sudan whose growth is largely driven by oil exports, these economies are largely driven by the service and industry sectors on the supply side. The economies of East Africa have witnessed mega public

projects in energy and infrastructure. For instance, Djibouti in collaboration with Ethiopia has invested in a standard gauge railway line and oil pipeline. Ethiopia has invested in energy projects. Rwanda is investing in an international airport as well as energy projects. Tanzania is investing in a standard gauge railway. Kenya is investing in a standard gauge railway line, energy and road infrastructure. The development of these key infrastructure projects has complemented the contribution of the service sector in countries such as Djibouti where the service sector is dominated by export of transportation and logistical services. With further utilization of the unused capacity of these projects, growth in GDP is expected to increase.

Figure 4: GDP Growth in East Africa, by Country, 2017-2021 (Pre-COVID-19)



Source of Data: African Development Bank Statistics.

On the demand side, growth in East Africa’s economies is driven mainly by private household consumption and investment. Private household consumption contributes over 65 percent of GDP in the region. In Kenya, private consumption accounted for over 74 percent of the GDP growth in 2018, followed by investment at 24 percent. In

Seychelles, household consumption accounted for 56 percent in 2019, and investment accounted for about 30 percent of GDP. The negative growth estimated in Sudan in 2019 is also attributed to the decline in private consumption and investment driven by fuel and local currency shortages coupled with an unfavorable investment climate.

Table 2: Impact of COVID-19: Projected GDP Growth in East Africa, by Country

	Pre-COVID-19		With COVID-19			
			Baseline Scenario		Worst-case Scenario	
	2020	2021	2020	2021	2020	2021
East Africa	5.1	5.4	1.2	3.7	0.2	2.8
Burundi	3.0	4.0	-5.2	3.9	-5.8	2.6
Comoros	3.0	3.2	-1.2	3.5	-1.8	2.8
Djibouti	6.0	6.2	1.0	5.5	-0.5	5.2
Eritrea	3.9	4.0	0.3	5.9	-1.1	4.3
Ethiopia	7.2	7.1	3.1	4.0	2.6	3.1
Kenya	6.0	6.2	1.4	6.1	0.6	5.7
Rwanda	8.0	8.2	4.2	6.4	2.9	4.7
Seychelles	3.3	4.2	-10.5	7.7	-11.6	7.1
Sudan	-1.6	-0.8	-7.2	-3.2	-8.9	-4.5
Somalia	3.2	3.5	-3.3	1.1	-5.4	0.3
South Sudan	7.4	6.1	-0.4	0.1	-3.6	-1.5
Tanzania	6.4	6.6	5.2	6.3	4.0	4.4
Uganda	6.2	6.1	2.5	3.5	1.6	4.2

Source: African Development Bank, April 2020.

### 1.3.3 COVID-19 reverses the otherwise easing inflationary pressures

**Inflationary pressures were expected to ease.** East Africa's inflation remains the highest on the continent but was projected to ease slightly in 2020 and 2021 prior to the COVID-19 pandemic (Table 3). High annual inflation is a result of the effects of currency devaluation on domestic prices in Sudan, monetization of fiscal deficits and reduced agricultural productivity due to poor rainfall. The COVID-19 pandemic will raise the inflation rate in the region in 2020 further from a projection of 14.2 percent to 17.3 percent in the baseline scenario and 18.0 percent in the worst-case scenario, while

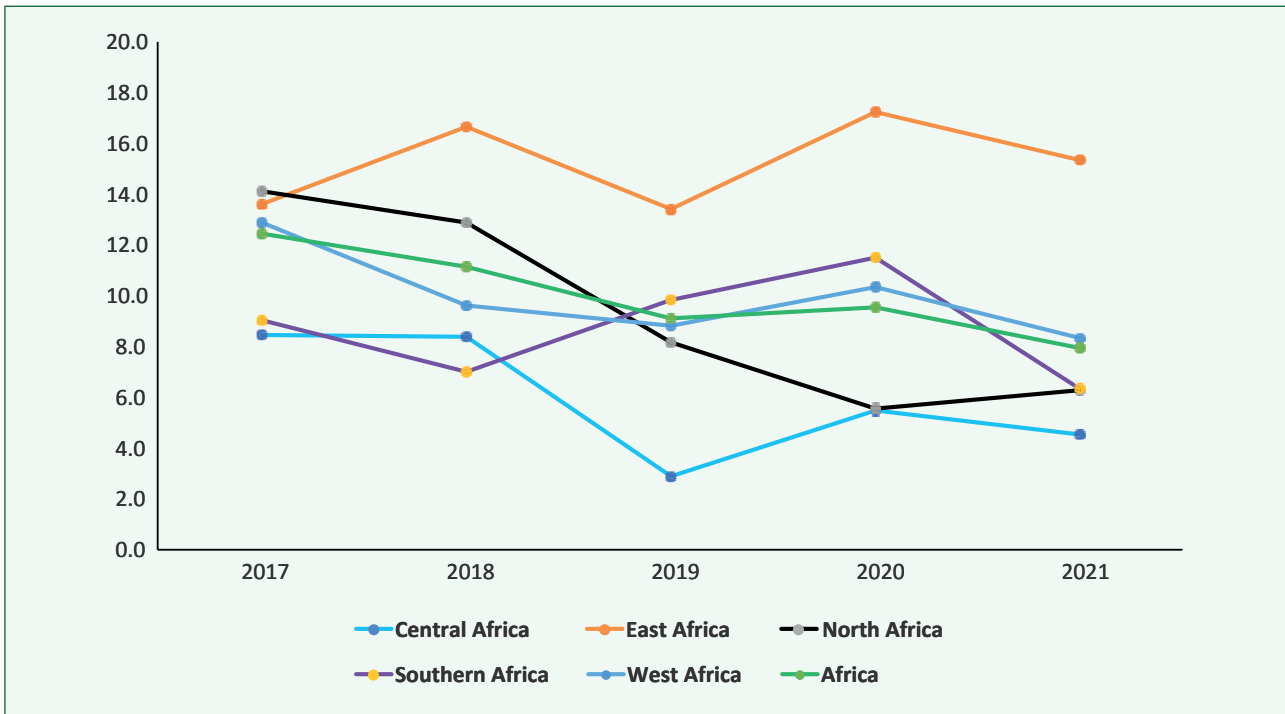
the region's inflation remains the highest in Africa (Figure 5). Analysis by country shows that an improved inflation outlook was projected for most economies (Table 3).

**The region's inflationary pressures arise from diverse sources, calling for diverse policy responses.** For Ethiopia, inflation has been in the double digits due to disrupted food production and use of central bank advances to finance the fiscal deficit. In South Sudan, inflation has been galloping due to the monetization of deficits by the central bank and the fragile peace in the country. In Sudan, the near hyperinflation is explained by the sharp devaluation of the Sudanese pound and monetization of fiscal deficit. Therefore, cautious mone-

tary policy should be expected in Ethiopia, South Sudan and Sudan to contain inflation. In Eritrea, the persistent deflation

is explained by the low prices of imported goods supported by contraband.

Figure 5: Africa's Inflation Rates, by Region, 2017-2021 (baseline scenario)



Source of Data: African Development Bank Statistics.

**Inflation rates remained stable in some of the East African countries.** In Kenya, the inflation rate has been stable and within the central bank's target range of  $5 \pm 2.5$  percent for a couple of years, supported by the loose monetary stance. Central bank rate (CBR) was maintained at 9.0 percent since July 2018 having declined progressively from 10.5 percent in the wake of the interest rate capping law introduced in

September 2016. However, with the removal of the interest rate cap in January 2020, inflation is expected to rise as economic activity picks up and demand pressures rise. The low inflation in Tanzania (estimated below 5 percent), is supported by a slow-down in the non-food component. With COVID-19, country level inflationary pressures are also expected to build up further (Table 3).

Table 3: Inflation by Country in East Africa, 2017-2021

	Table 3: Inflation by Country in East Africa, 2017-2021								
	Pre-COVID-19					Under COVID-19			
	2017	2018	2019(e)	2020(p)	2021(p)	Baseline		Worst-case	
	2017	2018	2019(e)	2020(p)	2021(p)	2020(p)	2021(p)	2020(p)	2021(p)
East Africa	13.7	16.7	13.5	14.2	13.5	17.3	15.4	18.0	16.0
Burundi	16.1	-2.6	-3.1	0.4	0.8	6.2	4.9	6.3	5.4
Comoros	1.0	2.0	2.0	1.9	2.1	2.8	2.2	3.0	2.6
Djibouti	0.6	0.1	2.2	2.0	1.8	2.7	1.0	3.5	1.4
Eritrea	-13.3	-14.4	-27.6	0.0	2.0	4.6	2.2	5.0	3.7
Ethiopia	7.2	14.0	13.9	12.1	9.1	15.3	8.6	15.5	9.0
Kenya	8.0	4.7	5.2	5.1	5.2	5.6	4.9	5.7	4.6
Rwanda	4.8	1.4	1.6	5.1	5.0	7.1	5.2	7.4	6.1
Seychelles	2.9	3.7	2.6	3.0	3.1	4.5	3.2	5.0	3.4
Somalia	2.9	5.1	4.4	3.0	3.0	5.8	4.5	6.3	4.9
South Sudan	-	83.5	24.5	16.9	9.7	27.9	19.1	32.6	23.3
Sudan	32.4	63.3	50.6	61.5	65.7	78.5	88.1	82.5	92.5
Tanzania	5.3	3.6	3.3	3.3	3.4	3.5	3.4	3.9	3.7
Uganda	5.6	2.6	2.8	3.8	4.5	4.6	4.8	5.3	5.0

Source of Data: African Development Bank Statistics.

### 1.3.4 Prudent foreign exchange management will minimize COVID-19 related payment risks

**Exchange rate policies in the region are diverse** Burundi, Kenya, Rwanda, Seychelles, South Sudan and Tanzania have floating exchange rate regimes, while Ethiopia, Eritrea and Sudan have fixed exchange rate regimes. Except for South Sudan, economies practicing a floating exchange rate system have experienced relative exchange rate stability. The exchange rate stability in Rwanda, Kenya, Tanzania and Seychelles can be attributed to the modest pressure from the external sector despite the high import bill from infrastructural projects. Economies with fixed

exchange rate regimes have not achieved the desired outcomes, which is to promote external competitiveness to boost exports. For instance, in Ethiopia despite the 15 percent devaluation of the Ethiopian Birr (ETB) in 2017, unfavorable terms of trade have weakened export performance amid high import demand. In addition, rising inflationary pressures have contributed to overvaluation of the ETB and eroded the anticipated competitiveness gains. In Sudan, the persistent shortage of central bank reserves has increased downward pressures on the local currency. Consequently, the spread between the official and parallel exchange rates has widened to over 30 and 70 percent in Ethiopia and Sudan respectively.



**The new entrants in the floating regime (South Sudan and Burundi) have had challenges with their exchange rates.**

Burundi and South Sudan has experienced depreciation of the pound due to the decline in oil production and the uncertainty over the formation of a Transitional Government of National Unity. Burundi is experiencing a currency crisis due to the structurally large external current account deficit that is financed in large part by an increase in domestic debt. With the COVID-19 pandemic, volatilities in the financial markets and the global disruptions of demand and supply in international market will likely weigh on the local currencies in the region. The expected loss in export revenue, increase in portfolio investment outflow and decline in FDI would strain foreign exchange reserves in the region and compromise stability of the exchange rates. For instance, as a result of COVID-19 pandemic, UNCTAD projects that most countries' FDI would decline by between 30 and 40 percent in 2020 and 2021.

**1.3.5 Huge infrastructure expenditure and high import bills drive the twin deficit in the region**

**The region's fiscal deficit is driven mainly by huge infrastructural expenditure and low tax revenue collection.**

The average fiscal deficit for the region is estimated at 4.9 percent of GDP in 2019 (Table 4). This is the second largest figure in African regions and exceeds the continental average deficit by 0.1 percentage point. Prior to COVID-19 pandemic, the fiscal deficit was projected to remain stable at 4.7 percent of GDP in 2020 and 2021, largely driven by fiscal consolidation

efforts. Though a signal of the region's inability to meet its financing needs, the fiscal deficit also signals the countries' commitments to expanding their economies through public expenditure as evidenced by the mega energy and infrastructure projects in the region. With COVID-19 pandemic, the fiscal deficit projections for 2020 have been revised to -6.1 percent of GDP in the baseline scenario and -6.8 percent in the worst-case scenario.

**Country level analysis shows that fiscal deficit levels vary significantly.**

The region's overall low fiscal deficit in 2019 masks the unique cases of Djibouti, Rwanda, Sudan and Uganda, whose fiscal deficits were greater than five percent (Rwanda, Sudan and Uganda) and double digits (Djibouti). Pre-COVID-19 projections indicated the rise in the fiscal deficit in Rwanda and Uganda as a commitment to support public investments and stimulate growth. In the cases of Djibouti and Sudan, it was a signal of distress and the inability of the government to meet its financial needs. Djibouti has been struggling as exports growth have failed to keep up with growth in food imports and it has been carrying out mega infrastructural projects in conjunction with Ethiopia. Sudan is struggling with low tax revenue collection, a narrow tax base and poor taxation monitoring mechanisms. COVID-19 will worsen the fiscal balance of all the East African countries (Table 4). This will be driven by decline in government revenues due to reduced economic activity in all countries and partial tax waivers in some countries and by additional government spending required to mitigate the social and economic effects on the COVID-19.

Table 4: Fiscal Balance Including Grants by Country (percent of GDP)

				Pre-COVID-19		Under COVID-19			
						Baseline		Worst-case	
	2017	2018	2019(e)	2020(p)	2021(p)	2020(p)	2021(p)	2020(p)	2021(p)
East Africa	-5.0	-4.5	-4.9	-4.7	-4.7	-6.2	-6.1	-6.8	-6.8
Burundi	-4.3	-3.3	-4.2	-4.9	-5.2	-9.0	-	-9.7	-7.6
Comoros	0.4	-1.7	-2.6	-2.8	-3.1	-3.8	-2.8	-4.6	-3.3
Djibouti	-16.7	-13.4	-14.2	-13.7	-13.5	-14.9	-14.6	-15.6	-14.5
Eritrea	1.8	10.9	0.6	-2.9	-4.0	-4.7	-4.3	-5.7	-4.9
Ethiopia	-3.2	-3.0	-3.8	-3.6	-3.4	-2.9	-3.3	-3.5	-3.7
Kenya	-8.8	-7.0	-7.4	-5.0	-4.8	-7.9	-6.7	-8.3	-7.3
Rwanda	-4.8	-4.3	-6.2	-6.8	-6.6	-7.4	-5.8	-8.2	-6.5
Seychelles	0.1	-0.2	-0.1	-0.2	-0.2	-13.8	-5.5	-15.2	-6.0
Somalia	0.0	0.0	0.1	0.1	0.1	-0.8	-0.3	-1.3	-0.8
South Sudan	-4.8	-6.1	-2.5	-1.3	0.5	-5.8	-4.9	-7.4	-6.3
Sudan	-6.5	-7.7	-5.7	-9.9	-10.9	-15.8	-17.2	-17.2	-19.0
Tanzania	-1.5	-1.3	-2.0	-1.9	-2.2	-2.5	-2.4	-2.8	-2.7
Uganda	-3.9	-5.0	-5.8	-7.2	-6.6	-8.3	-7.1	-8.6	-7.3

Source of Data: African Development Bank Statistics.

**Weak export performance and high import bills drive a current account deficit in the region, calling for more structural reforms.** The current account deficit is estimated at 5.9 percent of GDP in 2019 and was expected to deteriorate further (pre-COVID-19) to 6.1 and 6.3 percent in 2020 and 2021, respectively (Table 5). This deterioration is driven by a mix of a crisis and the desire for growth. For instance, Rwanda's deficit is due to increased infrastructure spending financing coupled with declining traditional exports. In Sudan, the current account deficit has been driven by the post-secession crisis that reduced Foreign Direct Investment (FDI) to the country and the limited openness due to US sanctions. In Somalia and

Seychelles, the deficit is explained by the countries' absolute dependence on imports. In Burundi, the narrow export base and rising international food and fuel prices have made the imports 6 to 7 times higher than its exports leading to the deficits. With the COVID-19 pandemic and its impact in the East Africa's most important trading partners, including the EU, China, US and India, East Africa's exports to these partners will reduce leading to further deterioration in the current account balance. April 2020 projections show that as a result of COVID-19, the region's current account balance will deteriorate in 2020 to -7.0 percent of GDP in the baseline scenario and -7.2 percent in the worst-case scenario.

**Structural reforms are required to narrow the current account deficits.** Other than the impact of COVID-19, the current account deficits in the region are structural, and are expected to persist in the medium term. This necessitates broader structural reforms to complement improvements in macroeconomic policies. Strengthening the investment climate and business regulatory environment will crowd-in FDI and ease the heavy public infrastructure spending burden. Measures to strengthen public investment management to improve public spending efficiency and promote export diversification and value addition would also be critical.

**Current account deficits in the region are financed mainly**

**by Foreign Direct Investment (FDI) and portfolio investments.** In Kenya, FDI increased from about USD 620 million in 2015 to USD1.6 billion in 2018 (1.8 percent of GDP), making Kenya one of the top recipients of FDI inflows in the region. In Ethiopia, FDI slowed by 19 percent to USD 3.01 billion in 2018/19 while in Seychelles, net FDI amounted to about 12 percent of GDP in 2018 and 8 percent in 2019. For Sudan, where FDI has declined over the past 10 years since secession coupled with huge external debt, accumulating arrears and the US residual economic sanctions, financing the current account deficit remains a challenge. With COVID-19 pandemic, FDI flows in the region is expected to decline significantly.

**Table 5: External Current Account Balance Including Grants by Country (percent of GDP)**

				Pre-COVID-19		Under COVID-19			
				2020(p)	2021(p)	Baseline		Worst-case	
	2017	2018	2019(e)			2020(p)	2021(p)	2020(p)	2021(p)
<b>East Africa</b>	<b>-6.9</b>	<b>-6.5</b>	<b>-5.9</b>	<b>-6.1</b>	<b>-6.3</b>	<b>-7.0</b>	<b>-6.4</b>	<b>-7.2</b>	<b>-6.8</b>
Burundi	-12.9	-10.3	-10.0	-9.6	-9.1	-11.0	-11.6	-11.3	-12.1
Comoros	-4.2	-9.1	-8.9	-8.8	-8.7	-5.3	-4.4	-5.9	-4.8
Djibouti	-19.0	-13.5	-12.5	-14.1	-15.1	-13.0	-12.9	-12.6	-11.9
Eritrea	23.8	16.6	11.3	13.2	8.1	10.3	9.4	10.9	9.7
Ethiopia	-8.5	-6.5	-5.7	-5.3	-5.0	-5.7	-5.0	-6.3	-5.9
Kenya	-6.2	-5.0	-4.9	-4.8	-4.9	-4.8	-4.5	-4.2	-3.9
Rwanda	-7.6	-7.7	-9.2	-9.1	-8.0	-16.8	-10.4	-17.5	-11.1
Seychelles	-18.4	-17.1	-16.9	-17.4	-18.2	-27.3	-23.8	-28.4	-25.4
Somalia	-9.0	-8.3	-8.0	-7.7	-7.6	-9.3	-8.8	-9.9	-9.1
South Sudan	-3.0	-4.5	-6.4	-1.8	-1.9	-8.8	-5.4	-9.3	-6.6
Sudan	-10.0	-13.6	-7.8	-10.1	-11.3	-14.9	-15.2	-16.3	-17.3
Tanzania	-3.4	-3.3	-3.4	-4.0	-4.3	-3.5	-3.3	-3.7	-3.4
Uganda	-5.5	-8.6	-9.8	-10.4	-11.0	-10.8	-10.2	-11.2	-10.4

Source of Data: African Development Bank Statistics.

### 1.3.6 East Africa region remains highly indebted

**On average, total debt stock in East Africa (domestic and external) stands at 62 percent of the region's GDP.**

This has been driven by attempts to grow the economies through borrowed funds spent mainly on infrastructural development amid revenue shortfalls (Box 1). The average debt masks variations in debt levels in the region. Total public debt as a percentage of GDP ranged from 24.3 percent in Comoros to 165.1 percent in Eritrea. The total debt to GDP ratio is greater than 60 percent for three countries (Burundi, Eritrea and Kenya), between 50 and 60 percent for Ethiopia and Seychelles and less than 50 percent in Comoros, Rwanda, Tanzania and Uganda. External debt component ranges from 14.1 percent in Burundi to 58 percent in Eritrea. For seven countries, representing 78 percent of those with debt statistics, the proportion of external debt averages at 31.2 percent (Table 6). On average, the debt portfolio is split equally between external and domestic borrowing. However, the country-wide

distribution of the debt portfolio presents a different picture. For instance, in Rwanda, external debt stands at 42.3 percent of GDP and domestic debt is only 6.8 percent, while in Eritrea domestic debt stands at 107.1 percent of GDP, compared to external debt at 58 percent of GDP. The COVID-19 pandemic will worsen the region's indebtedness and increase debt vulnerabilities as governments need additional resources to enhance the capacity of their health systems and to tackle the socio-economic effects of COVID-19. According to UNECA, Africa needs an immediate emergency economic stimulus to the tune of USD100 billion to respond to the COVID-19 crisis. IMF and the World Bank have already approved funding in response to COVID-19 for Rwanda amounting to USD 123.65 million, while World Bank approved a funding of USD 50 million for Kenya. Other East African countries are also expected to receive funding from lenders. African countries are also calling for a waiver in debt service in the short-to-medium term. These are clear indications that African countries will likely accumulate higher debt stocks under the COVID-19 pandemic.

**Table 6: Government Debt in the East Africa Region, by Country 2019**

	Total Debt /GDP percent	External Debt/GDP percent
Burundi	63.5	14.1
Comoros	24.3	22.7
Eritrea	165.1	58
Ethiopia	59.1	29.9
Kenya	61.6	32.1
Rwanda	49.1	42.3
Seychelles	53.8	26.5
South Sudan	34.4	-
Tanzania	37.7	26.2
Uganda	43.6	29.2
<b>East Africa</b>	<b>59.2</b>	<b>31.2</b>

Data on Djibouti, Sudan and Somalia is not available.

Source of Data: October 2019 IMF Regional Economic Outlook - Sub-Saharan Africa.

**Debt vulnerabilities have increased in some countries in the region during the 2013-2019 period.** Ethiopia went from low to high levels of debt distress, Kenya from low to moderate debt distress, South Sudan from moderate to extreme debt distress, and Eritrea and Sudan from high to extreme debt distress (Table 7). The situation

is alarming considering that debt accumulation is mainly driven by weak institutional capacity. The big push for infrastructure investments amid delayed returns notably in terms of exports has also contributed to deteriorations in debt sustainability as illustrated by Djibouti, Ethiopia and Kenya.

**Table 7: Risk of Debt Distress for the East African Countries, between 2013 and 2019**

Transitions, from Row to Column		2019			
		Low	Moderate	High	Distress
2013	Low	Tanzania Uganda	Kenya	Ethiopia	
	Moderate	Rwanda			South Sudan
	High		Comoros	Burundi Djibouti	Eritrea Sudan

*Note: Data for Somalia and Seychelles is not available.*

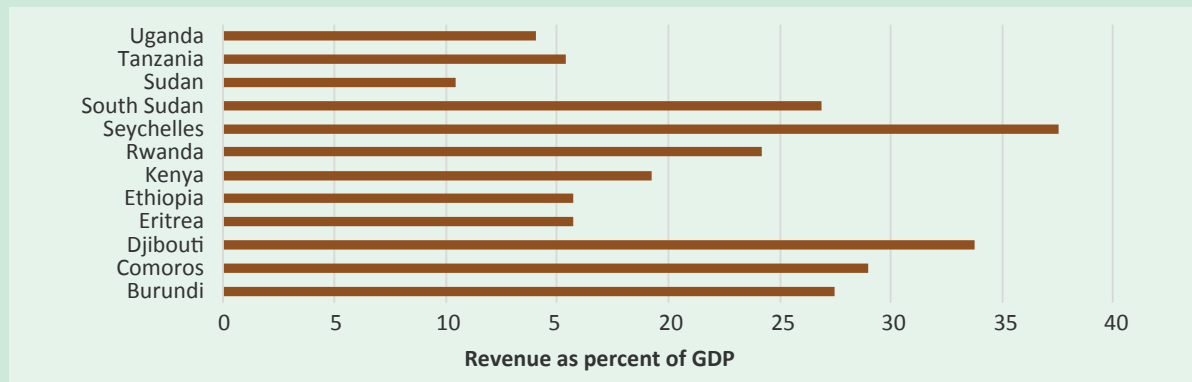
*Source of Data: IMF Debt Sustainability Analysis (Various years).*

### Box 1: Revenue Shortfall Driving Public Debt Surge in East Africa

On average, total public debt in East Africa stands at 62 percent of GDP, way above the IMF's recommended threshold of 40 percent for developing countries. East African governments have resorted to debt financing for infrastructural developments due to inadequate domestic revenue. Total domestic revenue to GDP ratio averages at 21.8 percent in the region, with : Seychelles at 37.6 percent, Djibouti at 33.7 percent on the top, Sudan at 10.4 percent and Uganda at 14.0 percent at the bottom. The low revenue performance is associated with low tax compliance, weak connection between tax policy and national development objectives, and complexities in tax administration. These call for efficient, effective and innovative ways of undertaking domestic resource.

In Kenya, total revenue collection in 2018/19 amounted to USD 16.71 billion, which was USD 1.2 billion short of the target. As much as 56 percent of the government revenue was spent on debt service, while recurrent expenditure consumed about 43 percent, leaving development expenditure entirely dependent on borrowing. Similarly, Tanzania missed its annual revenue target by about 9 percent (equivalent to USD 653 million) in 2017/18 despite a 7.5 percent rise in revenue collections, while Ethiopia's collection was 12 percent higher in 2018/19 but USD 474 million short of target. In contrast, Rwanda surpassed its revenue target in 2018/19 by 2 percent (USD 32.4 million) on account of increased efficiency, improved service delivery, enhanced tax compliance and increase in tax base.

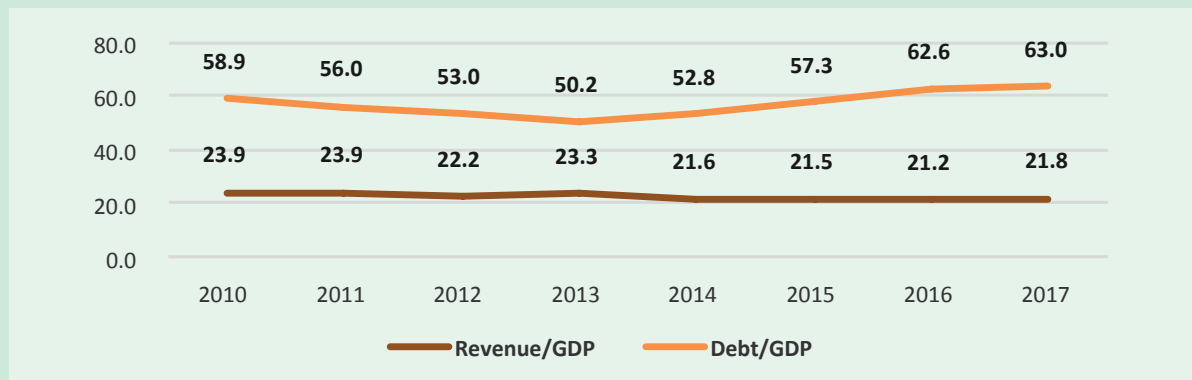
#### Total Domestic Revenue, 2010-2017 Average



Source: IMF data (2019).

It had been expected that the indebtedness will ease as government revenues rise over time. This, however, has not been the case, as the revenue-to-GDP ratio remains almost constant at about 22 percent while the debt-to-GDP ratio rose substantially from 50 percent in 2013 to 63 percent in 2017. To contain the rising indebtedness, East African countries must prioritize domestic resource mobilization, focusing on: adopting the right fiscal framework, sealing leakages in the tax system and enhancing non-tax revenue collection.

#### East Africa Total Revenue vs Total debt, 2010-2017



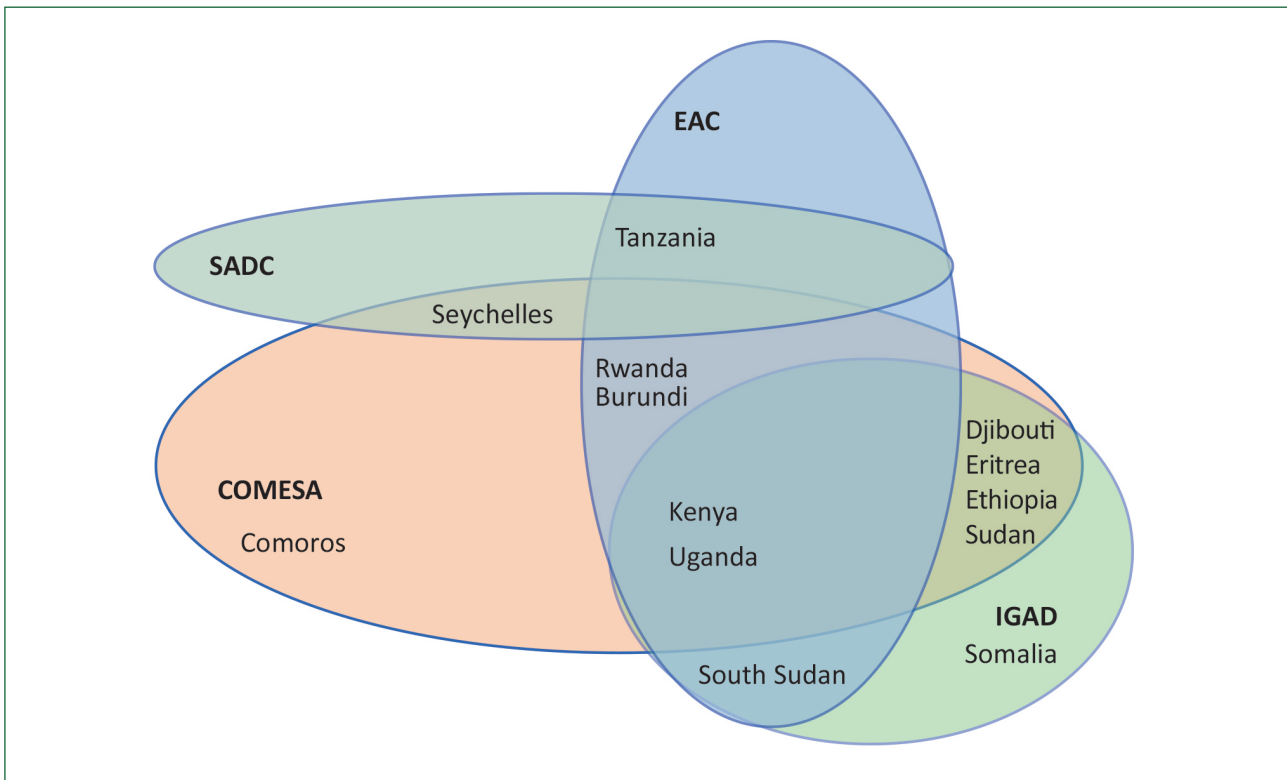
Source: Based on IMF data (2019).

### 1.3.7 COVID-19 slows down trade and integration in the regional blocs

The members of the East Africa region belong to five different and overlapping trading blocs: East African Community (EAC), Common Market for Eastern and Southern Africa (COMESA), Economic Community of Central African States (ECCAS/CEEAC), Intergovernmental Authority on Development (IGAD) and Southern African Development Community (SADC) – Figure 6. Multiple memberships can be explained by competing interests among the countries in East Africa. However, the overlapping

memberships also imply multiple and often conflicting agreements. Among the 5 blocs, EAC leads in progress towards full integration, followed by COMESA and IGAD. Movement towards macroeconomic convergence within the blocs, which is a prerequisite for full economic integration, plays a key role in regional macroeconomic stability and economic performance. Preventive and restrictive measures undertaken by member countries to control the spread of COVID-19 are slowing down trade, integration and other economic activity in the region. The movement of persons and goods across the borders have drastically reduced in the wake of COVID-19 outbreak.

Figure 6: Membership to regional trading blocs



Source: East Africa Economic Outlook Team.

**All East Africa countries, except Somalia, South Sudan and Tanzania, belong to COMESA where the export intensity index remains low.** The export intensity index<sup>5</sup> for COMESA member countries shows a mixed trend between 2013 and 2017 (Annex 1) but is generally below 30 percent except for the land-locked countries (Burundi, Rwanda and Uganda). Negative growth for intra-COMESA exports and imports suggests that intra-COMESA trade is not expected to increase in the short-term. The low trade volumes coupled with multiple and overlapping memberships in the regional trading blocs are indication of the rising protectionism in the form of trade and technology barriers and trade tensions among the member countries. Therefore, the main exports and imports (food commodities) that rely on intra COMESA trade are expected to have low prices in the producer countries in the medium term as a result of shrinking export markets.

### 1.3.8 COVID-19 worsens the already slow and inconsistent progress in reduction of poverty and inequality

**East African countries have made progress towards the attainment of sustainable development goals (SDGs).** The region is almost halfway towards achieving SDGs by 2030. This may be explained by the official endorsement and incorporation of SDGs into many action plans and

national strategies. However, compared to the rest of Africa, East African countries are performing dismally in the implementation of the SDGs. None of the countries made it to the top ten out of the 52 countries ranked on the African Dashboard<sup>6</sup> due to the dismal performance in SDG 3 (good health and well-being), SDG 9 (Infrastructure) and SDG 16 (peace and strong institutions). The poor performance is related to the conflict situation and institutional challenges in Somalia and South Sudan.

**Progress towards attainment of the SDGs varies widely across the SDGs and across the countries.** Least progress has been made towards achieving SDG 10 (reduced inequality) and most progress has been made towards achieving SDG 8 (decent work and economic growth) (Annex 2). This implies that the robust growth being experienced in the region is not fairly distributed among the populace. Indeed, more than half of the labor income goes to the 10th decile, or the highest-earning ten percent of labor force in the entire region apart from Djibouti, Kenya and Sudan (Annex 3). In terms of SDG 8, the region is slightly more than halfway towards achieving it in 2030. Though the progress in achieving SDG 8 is impressive, it is largely driven by economic growth rather than the creation of decent work. The ILO estimates that the situation will remain unchanged in the medium term with above 7 percent of the labor force being unemployed in Kenya, Sudan and South Sudan (Table 8).

<sup>5</sup> Export intensity index is the ratio of a trading partner's share to a country/region's total exports and the share of world exports going to the same trading partner. An index of more than 1 indicates that trade flow between countries/regions is larger than expected given their importance in world trade.

<sup>6</sup> <https://www.sdgindex.org/>



**Table 8: Unemployment among Labor Force Aged 25(+), percent annual**

	2017	2018	2019	2020	2021
Burundi	1.1	1.1	1.2	1.2	1.2
Comoros	3.1	3.1	3.1	3.2	3.2
Eritrea	4.5	4.5	4.5	4.5	4.6
Ethiopia	1.3	1.3	1.3	1.3	1.3
Kenya	7.2	7.3	7.3	7.4	7.4
Rwanda	0.7	0.8	0.8	0.8	0.8
Sudan	9.3	9.3	9.4	9.5	9.7
South Sudan	9.8	9.8	9.9	9.9	10.1
Tanzania	1.3	1.3	1.2	1.2	1.2

Data for Djibouti, Somalia and Seychelles Missing.

Source of Data: ILO modelled estimates.

### Progress towards ending extreme poverty among the region's workers by 2030 is slow and inconsistent.

On average, the region's movement towards 'no poverty' status stands at 41.8 percent. The progress is lowest in South Sudan and highest in Uganda (Annex 2). More than half of the workers in Burundi and Somalia are living in extreme poverty with the situation expected to worsen in 2020 and 2021. Close to half of the workers are living in extreme poverty in Rwanda and Eritrea. For the rest of the region over 20 percent of the workers are living in extreme poverty except of Comoros (Annex 4). The high levels of extreme poverty among the workers imply that the East Africa economies are not creating high quality jobs and that the robust growth experienced in the region has not been inclusive (Box 2). COVID-19 pandemic is likely to push up unemployment rates in the region in the short-to-medium term as production, supply chains and businesses are disrupted, leading to loss of income and increasing poverty rates and inequality.

Generally, lower regional economic growth would translate into an increase in the regional extreme poverty. ILO estimates indicate that up to 25 million people could become unemployed globally,<sup>7</sup> with a loss of workers' income of between USD 860 billion and USD 3.4 trillion by the end of 2020. A 1 percent reduction in the global economic growth attributed to COVID-19 would increase the number of people in extreme poverty (below PPP USD 1.90 a day) in Sub-Saharan Africa by between 1.3 percent and 3.0 percent, under different scenarios, translating into between 4.5 million and 10.4 million people.<sup>8</sup> In addition, several SMEs both in the informal and formal sectors are getting out of business as a result of decline in demand and shortage in supplies due to COVID-19 related disruptions. The restrictions in movements of persons, night curfews and lockdowns imposed in some East African countries to contain the spread of COVID-19 are affecting the SMEs and resulting in loss of jobs and income.

<sup>7</sup> ILO (March 2020). COVID-19: Protecting workers in the workplace.

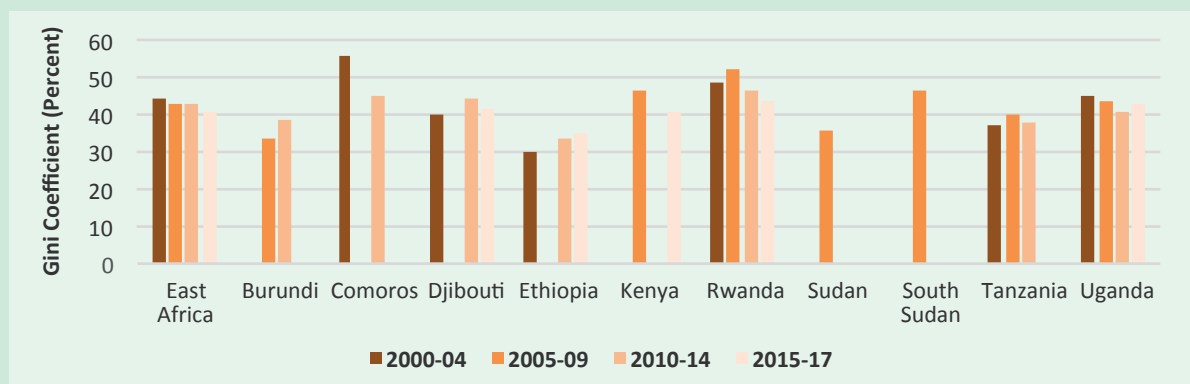
<sup>8</sup> IFPRI (March 2020). How much will global poverty increase because of COVID-19?

## Box 2: East Africa - Impressive Regional Economic Growth, but not inclusive

High and sustainable economic growth coupled with significant reduction in poverty levels, improvement in quality and quantity of employment and reduction in inequality remain an elusive goal of development strategies of East African governments. Growth is generally considered as inclusive if its benefits are widely shared across all the segments of the population. Despite East Africa being the fastest growing region in Africa since 2011, only 6 (Burundi, Comoros, Kenya, Rwanda, Tanzania and Uganda) out of the 13 countries achieved growth inclusiveness\*. The region's real GDP growth rate averaged at 5.8 percent for the period 2010-2019 (above the continental average of 4.0 percent) but the pace of poverty reduction is low and income inequality and unemployment rate remain high.

Poverty gap, which measures the depth of poverty at the national poverty lines, remains high in many countries in the region – 25.1 percent in Burundi, 23.7 percent in South Sudan, 16.3 percent in Kenya and 16.2 percent in Sudan, which are above the continental and global averages of 15.2 percent and 8.8 percent respectively. Income inequality is also high, with the Gini coefficient declining slightly from an average of 44 percent in the period 2000-2004 to about 42.5 percent in 2010-2014 and 40.8 percent in 2015-2017. The average regional unemployment stood at about 6 percent in 2018, less than one percentage point the rate it was a decade before (6.7 percent in 2008).

### Income Inequality in East Africa, by Country



Data on Eritrea, Seychelles and Somalia is not available.

Figures are based on unweighted averages for the countries and periods where data is available.

Source: Based on World Bank Data (2019).

Many East African countries have taken steps to achieve high and sustainable growth, with the goal of leaving no one behind. These include industrial park initiatives, fiscal decentralization initiatives, and agro-processing and value addition initiatives. But more needs to be done. Several policy mix – more pro-poor- must be formulated and implemented: (i) economic diversification and industrialization efforts need to be intensified to promote job creation and generate income; (ii) decentralization of government functions and bringing services closer to the people (effective access to quality education, healthcare, justice, housing and infrastructures); (iii) enhancing employability of the youth and women through capacity building initiatives that reduce the skills and knowledge gaps; and (iv) increasing access to finance to promote entrepreneurship and innovation.

\* This is based on the AfDB's Analysis in the 2020 AEO.

## 1.4 THE OUTLOOK: EAST AFRICA'S OUTLOOK IS CHALLENGING CONSIDERING THE COVID-19 PANDEMIC

East Africa's outlook is overshadowed by the COVID-19

crisis. Real GDP growth in East Africa is projected to decrease from 5 percent in 2019 to 1.2 and 0.2 percent in 2020 and 2021 in the baseline and worst-case scenarios, respectively, but still surpasses the average for Africa of -1.7 percent in 2020.

### Box 3: Potential Impact of the COVID-19 Pandemic on East Africa

The COVID-19 pandemic will likely be transmitted to East African countries through at least five major channels, namely reduced commodity prices and trade, FDI, tourism and travel, volatility in financial markets, and disruptions in the education and health sectors. The impact on commodity prices, tourism and financial markets is largely expected to be short-term while lasting effects are envisaged for FDI, education and health.

**Commodity prices and trade:** Intra-Africa trade accounted for less than 15 percent of Africa's total trade in 2018, with Europe, United States and China accounting for 36, 6 and 14 percent of Africa's trade with the rest of the world, respectively. Reduced economic activity in the COVID-19 affected countries is expected to dampen global demand and prices for commodities including oil and other minerals like zinc, copper, cobalt, and agricultural products. Most East African countries are net commodity exporters with heavy reliance on markets in Asia, notably China. For instance, China accounted for over 90 percent of South Sudan's oil exports and over 50 percent of Eritrea's market for zinc and copper ore. Consequently, economic slowdown in China will reduce East Africa's public revenues and foreign exchange inflows and weaken the trade balances. However, net importers will benefit from lower commodity prices. Asia is also a source of inputs for the region's budding industrial sector, but global supply chains have been disrupted, adversely affecting East Africa's industry and services sectors.

**FDI, overseas development assistance (ODA) and remittances to East Africa will be impacted.** East Africa is a leading destination of global investments in mining, manufacturing and related activities, notably construction (infrastructure) and financial intermediation. The COVID-19 induced global economic slowdown and increased uncertainty could significantly reduce FDI inflows to East Africa as investors postpone investment decisions. This is expected to affect countries like Ethiopia, which has consistently ranked among the top 5 FDI host economies in Africa. Implementation slippages are also foreseen for ongoing infrastructure and other investment projects due to delayed delivery of construction materials and equipment sourced from COVID-19 affected countries. Diaspora remittances (accounted for over 10 percent of Comoros' GDP during 2014-2018) and ODA will possibly be affected by COVID-19 following weak global economic activity.

**Tourism and travel:** Restrictions on travel to combat COVID-19 have reduced airline travel and accelerated cancellations of hotel reservations. These measures will affect receipts, thereby reducing foreign exchange inflows, and impact service sector-related employment in East African countries with a high dependence on tourism like Comoros (tourism accounts for over 50 percent of export revenues), Kenya, and Seychelles, among others.

**Financial markets:** Investors are likely to defer investment plans or channel portfolio investments into relatively more stable assets like gold. This is expected to put pressure on local currencies and stock exchanges particularly in Kenya, Tanzania and Uganda. Consequently, COVID-19 could result in short-term in capital flight, depriving East African countries of private finance amid a constrained fiscal space (due to lower public revenue collection) on account of reduced commodity prices, trade and tourism earnings.

**Education and health:** The COVID-19 driven global economic slowdown is likely to reduce developed nations' spending on education scholarships and exchange programs for East African countries, which could impede the region's access to specialized education and skills training. Containment measures such as closure of schools and other learning institutions could also slowdown the region's human capital development especially if COVID-19 persists for more than 6 months. Furthermore, the pandemic presents a significant risk to the region's healthcare systems due to low preparedness and weak investments in the sector. The direct costs of COVID-19 include loss of human capital as fatalities increase and reduction in productivity due to reduced work hours as workers recuperate from COVID-19 or stay away from work in line with containment measures. Severe COVID-19 cases require special medical attention, including ventilators to alleviate respiratory difficulties. Thus, health budgets in the region are likely to be depleted as East African countries scale-up preventive and containment health measures. The 2019 Global Health Security (GHS) Index confirms that national health security is weak in East Africa, with significant gaps in health security capacities and capabilities required to prevent, detect and respond to significant disease outbreaks. Kenya ranks highest on the GHS in East Africa at 55 out of 195 countries (score of 47.1 out of 100) followed by Uganda (63/195 and score of 44.3) and Ethiopia (84/195 and score of 40.6). The remaining countries in the region rank between 101 and 194 out of 195 countries.

**The subdued global growth outlook is due to effects of COVID-19, which was initially discovered in China in December 2019.** China's output is estimated to have decreased by 10.9 percent on a quarter-by-quarter basis during January-March 2020, although growth is projected to recover to 1.2 percent in 2020. During the first quarter of 2020, new epicenters emerged in the Middle East, Europe and United States, confirming that COVID-19 will have significant global health and economic impacts. The global economy is projected to go into recession in 2020 followed by a mild recovery in 2021. Service sectors, particularly aviation, hospitality, banking and finance, and logistics, are most susceptible to the effects of the pandemic. Weak global growth will reduce demand and prices for commodities, thereby affecting commodity markets. Global uncertainty is expected to affect liquidity in financial markets as investors postpone investments or divest into more stable assets like gold. Furthermore, disruptions in global supply chains will impede the distribution of production inputs, consumer goods and essential supplies thereby affecting businesses and job creation as well as human welfare, respectively. COVID-19 is expected to be transmitted to East Africa through five channels (Box 3).

**In the baseline scenario, real GDP growth rates for five East African countries (Ethiopia, Kenya, Rwanda, Tanzania and Uganda) are projected to exceed the regional average in 2020 compared to seven countries prior to the COVID-19 pandemic.** East Africa's real GDP growth rates are projected to decrease by 4 percentage points in 2020 compared to 2019 due to COVID-19's negative effects. However, these downside risks are expected to be lessened by diverse external and domestic factors such as improved peace and stability. Ethiopia's bold economic reform program, which seeks to address persistent macroeconomic imbalances and ease structural and sectoral bottlenecks, has received strong financial backing from the country's partners and is expected to mitigate the impact of COVID-19 on real GDP growth. Large-scale investments in transport, energy and tourism are expected to be delayed, but real GDP growth is projected to remain strong. Kenya's programmed growth enhancing structural reforms to boost industrialization and agricultural productivity, could lessen the impact of COVID-19, notably

on tourism and trade. Despite the projected slowdown, real GDP growth in Tanzania will benefit from increased prices of gold, a major national export (accounted for 29.3 percent of total exports in 2019) and reduced oil prices. Contraction in supply and demand will impact Uganda's growth. On the supply side, travel restrictions and a national lockdown will affect tourism, hospitality and trade, with the anticipated postponement of oil and gas investments on account of reduced oil prices affecting the demand side.

**Economic prospects for Djibouti and Eritrea are positive, although real GDP growth remain below the regional average in 2020 due to COVID-19.** All other East African economies are expected to post negative growth rates (baseline scenario). Planned public investments are likely to be postponed due to reduced domestic and external financing while coffee exports will be negatively affected by reduced commodity prices, thereby slowing growth in Burundi. Reduced tourism receipts (account for over 50 percent of export revenues) and remittances (over 10 percent of GDP) will lower growth in Comoros. In Eritrea, the removal of United Nations sanctions, peace dividends from the landmark peace agreements with Ethiopia and the cessation of hostilities with Djibouti could ease the impact of COVID-19, notably related to potential delays in investments in the mining and tourism sectors, on real GDP growth. Political stability in Somalia, debt relief and the anticipated access to external financing are expected to be offset by the effects of COVID-19 on investment and trade (China, India, and Oman accounted for about 45 percent of Somalia's imports in 2017 and China is the second largest export destination). Seychelles' anticipated recovery from a three-year slowdown is to be delayed due to reduced tourism receipts and trade. Trade with China, Europe and the US accounted for half of Seychelles GDP during 2014-2018, making the country vulnerable to global economic slowdown. For net oil exports like South Sudan, reductions in international oil prices are expected to offset the positive impact of the country's revitalized peace agreement and new transitional government, leading to negative growth. The improved investor sentiments, following the inauguration of Sudan's transitional government combined with prospects of reintegration into the global economy will be dampened by COVID-19's effects on commodity prices, trade, and FDI.

However, reforms to address macroeconomic imbalances and improve public sector governance could reduce the severity of these negative effects.

**Fiscal deficits are projected between 6.1 and 6.8 percent of GDP and between 5.9 and 6.5 percent of GDP in 2020 and 2021, respectively, about 1.5 percentage points higher than in 2019 due to reduced public revenues amid sustained public spending to offset the effects of COVID-19.**

Government revenues will be affected by the disruption of economic activities. In addition, Eastern African countries are commodity exporters and reduced prices for these exports will reduce foreign exchange earnings. On the other hand, the need to expand social safety net programs for vulnerable groups, improve health infrastructure and implement countercyclical fiscal policy measures to cushion productive sectors will increase public spending. Several countries in Eastern Africa are implementing subsidies for basic commodities, reduction in tax rates and exemption of income tax for low-income earners.

**Ensuring debt sustainability remains a key policy objective.**

Three East African countries are currently rated at high risk of debt distress (Burundi, Djibouti and Ethiopia) and another four are in debt distress (Eritrea, South Sudan, Sudan, Somalia). Remedial measures to improve debt sustainability are underway in Eritrea, Ethiopia, Kenya, South Sudan and Sudan. These measures include fiscal consolidation, debt restructuring, improved public investment management, export promotion and diversification, and strengthening debt management capacities. Public financing sources have also been diversified, notably through public-private partnerships like in Ethiopia. However, reduced public revenues and export earnings will reduce fiscal space and constrain the capacity to finance debt. Africa's total public debt-to-GDP ratio could increase from 60.2 percent in 2019 to 65.4 percent by the end of 2020, compared to 60.5 percent in absence of COVID-19. Consequently, multilateral and bilateral support will be necessary to avoid exacerbating debt vulnerabilities and weakening debt ratings in Eastern Africa. Some of the East Africa countries will benefit from the debt moratorium to be granted by the major international creditors suspending

debt payments for 76 of the poorest countries around the world, including 40 in SSA.

**Still in double digits, average inflation in East Africa is projected to increase during 2020 and 2021.**

Owing to cautious monetary policy, inflation is expected to remain single digit in all countries but Ethiopia (15.3 percent), Sudan (78.5) and South Sudan (27.9) according to the baseline scenario. Disruptions in global supply chains and production inputs, interruptions in domestic production due to containment measures and speculative increases in prices for basic consumables could exacerbate inflationary pressures. In Ethiopia, inflation is projected to ease in 2021 due to tighter monetary policy, reduced central bank financing of the fiscal deficit and reduced oil prices. Sudan's inflation rate is projected to remain above 80 percent in 2021, reflecting the effects of the 2018 devaluation on domestic prices. Tighter monetary policy in South Sudan to tame money growth is expected to reduce inflation by 8.7 percentage points to 19.1 percent by 2021.

**Average current account deficit is projected at about 7.0 percent of GDP (baseline scenario) in 2020, against 6.4 percent of GDP in 2019, reflecting increased structural imbalances as a result of COVID-19.**

Depreciation of exchange rates particularly for commodity exporting East African countries will reduce the region's terms of trade and weaken export competitiveness. In addition, lower demand for export and reduction in remittances should reduce foreign exchange receipts. While imports are expected to slow down, the reduction is not expected to compensate for the reduced export revenues, considering the pent-up import demand for COVID-19 related health supplies. Eritrea is projected to sustain its current account surplus in 2020 due to reduced imports. Double digit current account deficits are projected in 6 of the 13 countries in East Africa (baseline scenario) while 4 countries will post current account deficits above 5 percent. This reflects limited export diversification and reliance on exports of unprocessed primary commodities. Tanzania's current account deficit is projected at 3.5 percent in 2020, with the higher gold receipts falling short of the ramped-up import-intensive infrastructure investments. Ethiopia's export promotion measures, especially the development of industrial

parks, are expected to be impeded by reduced terms of trade. Kenya is expected to benefit from a reduced import bill although the envisaged growth in remittance inflows is likely to be lower than programmed due to COVID-19. Prior to the COVID-19 pandemic, stability in South Sudan's external account was anchored on the resumption of oil production, which is not likely to materialize due to the collapse in oil prices. Foreign exchange shortages are expected to persist.

**COVID-19 related disruptions in global supply chains will affect access to production inputs, with national containment measures restricting labor mobility.** Ongoing efforts to expand job creation are likely to be held back, restricting the impact on poverty and inequality. Pre-COVID-19 ILO estimates showed that East Africa was expected to marginally reduce extreme poverty, except in Burundi, by creating more high-quality jobs. Unemployment will largely remain unchanged, indicating that employment growth in the region will not keep pace with rapid expansion of the labor force. The impact of COVID-19 on labor and firm productivity is expected to exacerbate these challenges.

## 1.5 DOWNSIDE RISKS TO THE OUTLOOK

**The economic outlook in East Africa is overshadowed by several downside risks.** The external risks comprise trade tensions and increased protectionism, potential reduction or reversal of capital inflows, faster than anticipated slowdown in major economies, impact of the COVID-19 pandemic, and volatility in international commodity prices. Domestic risks include social unrest, slow structural transformation, weak export performance amid high import-intensive public infrastructure investments leading to low external buffers and increased public debt vulnerability.

### 1.5.1 External risks notably the health and economic effects of COVID-19 point to a weak economic outlook

**The COVID-19 pandemic is expected to affect East Africa through several transmission channels** including reduced commodity prices, trade disruptions, lower foreign direct investment, lower tourism visits, volatility in financial markets, and health and education disruptions (Box 3). Consequently, the region's real GDP growth rate for 2020 is projected at 1.2 percent under the baseline scenario against the 5.1 percent initially projected.

**Tensions in global trade relations and increased protectionism could affect market access for East Africa's exports.** Some leading global economies have signalled transition from trade liberalization to protectionism through trade policies and outright withdrawal from economic blocs.<sup>9</sup> Considering that several East African countries enjoy preferential market access to the US, European Union and China, protectionism will negatively affect global supply chains, commodity prices, and cross-border investments hence, fiscal and external account balances for the region's commodity exporters.

**Tightening of global financing conditions could reduce financial flows to the region.** A subdued global growth forecast, trade uncertainties and geopolitical tensions could potentially increase risk premiums in international financial markets and reverse capital inflows, diminishing East Africa's key source of public and private investment and finance for transformative infrastructure investments. Private transfers and remittances which are a major source of financing for household expenditures on education and healthcare could be negatively affected, thereby worsening East Africa's external sector vulnerabilities and slowing advancements in human development.

<sup>9</sup>For instance, there is the tariff imposition between US and China, and the withdrawal of United Kingdom from the European Union.

**A faster than anticipated slowdown in East Africa's strategic partners like China, the Euro area and the US could affect trade and capital inflows.** Should the global slowdown materialize earlier than previously anticipated, following heightened trade tensions between key global economies and the impact of the COVID-19 pandemic, East Africa's economic outlook will be adversely affected. Furthermore, countries that heavily depend on primary commodity exports and financial flows would be greatly affected.

**Volatility in international commodity prices is a major downside risk considering East Africa's reliance on agricultural commodity exports.** Forecasts project a reduction in commodity prices due to higher than expected shale oil production in the United States and price wars among key oil producers in the Middle East and Europe. Furthermore, the COVID-19 pandemic has reduced global energy demand, particularly in China. Lower oil prices will likely widen fiscal and external deficits in Kenya and South Sudan, the region's current oil producers. Weak commodity prices will also negatively affect current account balances and increase debt vulnerabilities considering the region's reliance on largely unprocessed agricultural commodities.

### 1.5.2 Domestic risks

**Civil unrest is a threat to national and regional cohesion and socio-economic progress.** Political reforms across the region have improved governance and strengthened peace and security. These include the landmark peace agreements between Ethiopia and Eritrea, cessation of hostilities between Eritrea and Djibouti, a revitalized peace agreement in South Sudan and a new transitional government in Sudan. In 2020, presidential elections are due in 4 East African countries (Burundi, Comoros, Seychelles and Tanzania). Perceptions of election irregularities or failure of the transitional arrangements could escalate the risk of civil protests in these countries. In addition, should the COVID-19 containment measures like national lock downs and restrictions on economic activities persist, large proportions of the population will be affected economically, which could increase insecurity and political instability.

**Vulnerability to natural calamities like locusts and droughts due to climate change is a risk to food security, growth, employment and exports.** East Africa experienced persistent droughts during 2015-2018 affecting agricultural productivity yet the sector employs over 70 percent of the workforce on average, contributes over one-third of GDP and accounts for over 60 percent of merchandise exports in the region. The possible recurrence of extreme weather conditions like El Niño is expected to result in droughts, further decreasing agricultural output. In addition, locusts have recently invaded several East African countries including Eritrea, Ethiopia, Djibouti, Kenya, Somalia and Uganda destroying crops, undermining food security and putting livelihoods at risk.

**Slow structural transformation process remains a major development risk in the region.** Excessive dependence on unprocessed agricultural commodity exports amid volatile international commodity prices and a subdued global growth and investment finance outlook will likely reduce public investment financing sources and impede the region's growth prospects.

**Weak export performance amid high import-intensive public infrastructure investments has eroded external buffers and increased external vulnerabilities in the region.** Export performance has been held back by a reliance on unprocessed agricultural commodities, a narrow export base, low intra-regional trade and limited access to global markets, leading to persistent trade deficits. The consequent deterioration in foreign exchange inflows weakens the region's ability to withstand external shocks such as volatile commodity prices and sudden reversal of capital flows.

**The elevated risks of public debt vulnerability have reduced the scope for sustained public investments in transformative infrastructure.** Increased budget allocations to debt financing and the drawing down of foreign exchange to finance external debt reduce access to external financing for transformative infrastructure spending. Given that real GDP growth in several East African countries is still driven by public investments, this will slow down the region's growth prospects

and advancements towards SDGs like elimination of extreme poverty and inequality as well as the creation of well-paid formal sector jobs.

## 1.6 CONCLUSION AND POLICY RECOMMENDATIONS

**Multiple political and socio-economic policy interventions are necessary to harness East Africa's growth prospects and mitigate the underlying external and domestic risks.**

These include a bold and coordinated response to the COVID-19 crisis, consolidating peace and stability, accelerating structural transformation, strengthening macroeconomic policy coordination and diversifying the development financing sources. Other interventions may include deepening regional integration and developing skills for the workforce of the future.

**A decisive and coordinated response is necessary to contain the spread of COVID-19 and mitigate its health and socio-economic effects.**

It should comprise: health sector interventions to contain COVID-19 and reduce mortality; countercyclical fiscal policy to lessen the adverse effects on the vulnerable population and boost production; and a monetary policy stimulus to smoothen liquidity constraints. Health care provision should be strengthened by improving the health infrastructure, reducing the health professionals-to-population ratios and equipping the healthcare professionals with emergency response and management skills. Regarding the countercyclical fiscal policy, targeted interventions to assist vulnerable households and small and medium enterprises (SMEs) through cash and food transfers as well as tax relief, respectively, will be necessary. Social safety nets programs should be expanded to cover the envisage increase in vulnerable population. Granting temporary amnesty to firms on the remittance of statutory payments like pension, an outright moratorium or postponing the deadlines for remitting taxes will allow SMEs to absorb the COVID-19 related disruptions. The monetary policy responses comprise targeted central bank liquidity injections to mitigate banking sector instability due to sudden variations in asset prices and possible loan

defaults. Maintaining financial sector stability and mitigating risks of banking sector crises will require a careful assessment of banking sector liabilities to inform the restructuring of risky or non-performing loans. Multilateral and bilateral partners will need to step-up their concessional support to avoid worsening debt vulnerabilities and weakening debt ratings in East African countries, respectively. The Bank Group has taken bold steps to accompany African countries in addressing the health and socio-economic impacts of COVID-19. This support includes a USD 2 million emergency assistance to the World Health Organization-led efforts to contain COVID-19 in Africa and a USD 10 billion COVID-19 Response Facility to address COVID-19 related healthcare and medical expenditures, social protection for vulnerable groups and fiscal responses to boost economic activity.

**Consolidate peace, security and stability.** Ongoing reforms to strengthen good political governance and institutions in East Africa needs to be sustained to ensure an enabling environment for social inclusion; voice and accountability; peace, security and stability.

**Accelerate structural transformation.** Advancing the transition from low value-added production to higher value-added activities will mitigate vulnerabilities to domestic and external shocks. Emphasis should be placed on addressing macroeconomic imbalances, easing structural and sectoral bottlenecks, and improving private sector financing. Measures to promote and diversify exports are similarly critical.

**Strengthen macroeconomic policy coordination.** As average inflation is in double digits in East Africa, macroeconomic policy coordination is important with a tighter monetary policy stance necessary to control inflation; particularly in Ethiopia, Sudan and South Sudan and supplement ongoing fiscal consolidation across the region. Containing inflationary pressures will reduce the overvaluation of national currencies, for instance in Ethiopia, and improve export competitiveness. Improvements in public investment management will boost public spending performance, strengthen the quality of fiscal adjustment and enhance fiscal policy effectiveness.

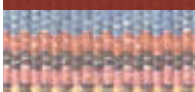


**Diversify development financing sources.** East African countries have largely relied on government borrowing to finance public investments, which has contributed to a rise in the risk of debt distress. Mitigating this risk will require diversification of development financing sources, including the use of public private partnerships and securitization of infrastructure assets. Complementary measures to boost domestic savings mobilization like the development of domestic debt and equity markets are equally important.

**Deepen regional integration and economic cooperation** to increase the share in intra-Africa exports and imports, diversify export products and markets, consolidate regional peace, and reduce vulnerability to fluctuations in international

commodity prices. The African Continental Free Trade Agreement (AfCFTA) and the Horn of Africa initiative should be harnessed to maximize the benefits of regional integration and economic cooperation (see Box 4).

**Harness the strong human development achievements to nurture skills for the workforce of the future.** Strong achievements in human development notably in school enrollment, gender parity in primary and secondary education, and high life expectancy, among others, provide a solid foundation to nurture employable skills for the future workforce in East Africa. Thus, emphasis should be placed on aligning education and training with skills required to advance high value-added production, science, technology and innovation.



## Box 4: Implementation of the African Continental Free Trade Area

### Main Features

The African Continental Free Trade Area (AfCFTA) was launched in March 2018 in Kigali with the signing of agreement by 44 African countries. The AfCFTA will potentially cover the 55 Member States of the African Union, making it the world's largest free trade area by number of participating countries since the formation of the World Trade Organization in 1994. To date, 54 Member States have signed the agreement – a remarkable degree of consensus in a large, diverse continent (only Eritrea has not yet signed the agreement). Moreover, its scope is wider than that of a traditional free trade area. The main objectives are to (i) create a single continental market for goods and services – with free movement of business people and investments –, and (ii) lay the foundations for the establishment of a Continental Customs Union. In March 2019, 22 countries (the number required for the agreement to come into force) had deposited their instruments of ratification. Therefore, the operational phase of the AfCFTA was launched in July 2019. With a combined market of over 1.2 billion people, and a GDP of USD 2.5 billion, AfCFTA could potentially make Africa the largest free trade area in the world.

### Challenges

Although many technical parts of the Agreement are in place, services liberalization will not happen instantly – with the Protocol for services merely establishing the parameters for a first round of negotiations on business, communications, financial services, tourism and transport services.

The next steps for the materialization of the AfCFTA include the following: Finalizing remaining critical components; Increasing the number of state parties; Establishing institutions, operative mechanisms, obligations into law and regulation; Optimizing implementation through complementary measures such as national strategies; Concluding Phase II of negotiations; and Using the AfCFTA as a vehicle for achieving the African Single Market. These steps can be challenging if the cooperation between countries is not optimal.

The AfCFTA will touch on so many aspects of people's lives that there is a need for an intense period of dialogue between civil society, the public and the private sectors. Accompanying measures will be required. The elimination of tariff barriers will be futile without the necessary supporting infrastructure. Work across the region to establish one-stop border posts needs to be expanded and accelerated. The inter-connectivity of the region will depend on improvements in port facilities and greater investments in roads and inland waterways in the Great Lakes region. These constitute vital arteries in the transport corridors of the region.

### Potential Impact

A first assessment of the potential gains carried out before COVID-19, specifically for East Africa, from the implementation of the AfCFTA revealed that the lower cost for goods and services will result in welfare gains amounting to USD 1.8 billion for the region. Depending on the methodology used, it could boost East African trade by between USD 737 million and USD 1.11 billion, creating 700,000 to 2 million new jobs. Many of those new employment opportunities are likely to emerge in sectors where there is a significant predominance of female labor, thereby contributing to the economic empowerment of women in the region. The larger regional market will incentivize greater investment by national and multinational investors, opening the door to the emergence of regional value chains, and stronger or more resilient economies.

Increased intra-regional trade associated with AfCFTA implementation is expected to accelerate industrialization in East Africa since manufacturing will be among the main beneficiaries from the increase of intra-regional trade and investment. A breakdown of trade by sector shows that deficits are driven almost exclusively by manufactured goods imports. The region's heavy reliance on intermediate goods and manufactured products imported from the rest of the world impedes the full utilization of local productive capacities. It has been estimated that manufacturing firms in East Africa are typically operating at around 20 percent to 40 percent.

The benefits of the AfCFTA was expected to go far beyond the manufacturing sector. It was promised to create new opportunities in high value-added services trade, helping countries achieve their goals of economic diversification and structural transformation. Before COVID-19 crisis, most countries in East Africa posted a better trade balance in services than they do in merchandise trade. Kenya and Tanzania for instance had a net service trade balance of over USD 1.6 billion and USD 2.1 billion, respectively in 2017. The intra-African liberalization of services trade could bring great benefits to East Africa and make the region more competitive. Intra-regional tourism, a good example of the growing intra-regional trade in services, had been gaining prominence and constituted 30 percent of total international tourist arrivals in the East African Community (EAC) for example.

The COVID-19 pandemic that hits trade, tourism, financial markets, and consumer and business markets in East Africa will lower the potential positive impact of the AfCFTA on the region. So far, no quantitative assessment of the adverse impact of COVID-19 on AfCFTA's initial expected results in the region has been undertaken.

Sources: UNECA and Trade Mark East Africa (2020); and Authors.





## PART 2

# SKILLS DEVELOPMENT AND EDUCATION FOR THE WORKFORCE OF THE FUTURE IN EAST AFRICA

## 2.1 INTRODUCTION

**Labor productivity is an important economic indicator that is closely linked to economic growth, competitiveness and living standards.** It provides information about the efficiency and quality of human capital in the production process. East Africa's labor productivity, measured as annual growth rate of GDP per worker, was expected to average 1.2 percent per annum over the period 2018-2020, slightly above Africa's initial target of 0.9 percent, and Sub-Saharan Africa's projection of 0.7 percent. However, the growth prospects in labor productivity in the region is set to be dulled as a result of COVID-19's impact. An initial analysis of COVID-19's economic effect shows that the region's GDP growth could be reduced by 3-8 percentage points, directly impacting labor productivity.

**All East African countries are expected to experience low growth in labor productivity in the year 2020.** Prior to COVID-19, Djibouti had the highest level of labor productivity of East African countries. This marginally improved from 4.5 percent in 2018 to 4.6 percent in 2019 but was estimated to decline to 3.8 percent in 2020. Rwanda's labor productivity was expected to remain at 3.9 percent in 2019 and 2020. Ethiopia's labor productivity is estimated to have declined to 3.7 percent in 2019 and was projected to slip further to 3 percent in 2020. Tanzania experienced similar trends, with

labor productivity projected to decrease marginally from 3.5 percent in 2019 to 3.4 percent in 2020 while Kenya's labor productivity increased slightly from 2.4 per cent in 2018 to 3 percent in 2019 and was projected to decline to 2.6 percent in 2020. South Sudan recorded negative growth in labor productivity during 2018-2020 (Annex 5). The region's projections on labor productivity growth are expected to be dampened due to the demand and supply shocks from COVID-19.

**Only a few of the region's workers will have high quality jobs despite being among the fastest growing in the world.** East Africa's economies were expected to experience a 5.1 percent growth before the COVID-19 pandemic, which growth prospects will be downscaled. It was estimated then that much of this growth would emanate from the 9.8 million workers in agriculture and the 4.1 million in the services sector. However, the travel bans and lockdowns put in place by East African governments to control the spread of the COVID-19 are not only limiting the movement of people across borders and within countries, but also disrupting ways of working for many individuals, businesses and government agencies. Continuation of employment in a safe working environment in the face of COVID-19, adjustment to shift or remote work with the required tools, and preservation of employees' health through safe working facilities and strict isolation of suspected COVID-19 cannot be guaranteed.

## 2.2 OPPORTUNITIES AND CHALLENGES FOR BUILDING SKILLS AND EDUCATION OF EAST AFRICA'S LABOR FORCE

This section takes stock of the education systems in the region, the region's stock of skills and the skill demands and looks at the bottlenecks to skills development and education, assessing the extent to which the skills and education gaps pose a constraint to labor productivity and contribute to unemployment problem in East Africa.

### 2.2.1 The performance of the diverse education systems is mixed

**East African countries variously implement three-cycle, two-cycle and dual cycle education systems with years of schooling ranging between 11 and 16 years.** East African countries have a variety of education systems but most of them have a three-cycle system covering primary, secondary and tertiary levels of education. The countries with the three-cycle education system are Kenya and South Sudan (8-4-4 years of school); Burundi (6-6-4); Rwanda (9-3-4); Ethiopia (6-2-4); Sudan (2-8-3); Djibouti (5-4-3); and Eritrea (5-2-4). Tanzania and Uganda operate a four-cycle system of 7-4-2-3 (primary, lower secondary, upper secondary and tertiary) while Comoros has a two-cycle system (6-7) that

comprises six years of primary school and seven years of secondary school. Somalia has a dual two-cycle system of 9-3 or 8-4. The years of schooling for primary, secondary and tertiary levels for the countries in the region ranges between 11 and 16 years.

**Kenya is implementing a new education system to better prepare learners for the world of work.** Kenya adopted a new education system in 2018 that is meant to progressively replace the 8-4-4 system by 2026. The new system (2-6-6-3) with 2 years of pre-primary is based on a formative competency-based education curriculum for basic education and a competency-based education and training curriculum for tertiary education. The system is designed to better prepare learners for the world of work and to stimulate involvement of the industry in the education system at the tertiary level.

**In 2018, East Africa's adults had a level of knowledge, on average, equivalent to five years of schooling.** The United Nations Development Programme (UNDP) estimates that on average a child of school-entry age could only expect to receive 9.5 years of schooling of the 16 years in East Africa based on the prevailing patterns of age-specific enrolment rates (Table 9). By 2018, the region's varied education systems equipped the population with an average of five years of schooling. Increasing the average years of schooling will require that the region addresses issues relating to education access and quality.

Table 9: Years of Schooling in East Africa, 2018

	Expected Years of Schooling	Mean Years of schooling
Burundi	11.7	3.1
Comoros	11.2	4.8
Djibouti	6.2	4.1
Eritrea	5.4	4
Ethiopia	8.5	2.7
Kenya	12.1	6.5
Rwanda	11.2	4.1
Seychelles	14.8	9.5
Sudan	7.4	3.7
South Sudan	4.9	4.8
Tanzania	8.9	5.8
Uganda	11.6	6.1
<b>East Africa</b>	<b>9.5</b>	<b>5</b>

Data for Somalia is not available (expected years of schooling was 3.04 years in 1976).

Source of Data: United Nations Development Programme, 2018.

**Most countries in East Africa have mean years of schooling below the region's average of five years.** Positive relationship between education and labor productivity is well established (Kampelmann, Rycx, Saks and Tojerow, 2018; Bunger and Teal, 2014). Both human capital theory and empirical studies posit that education develops skills that makes workers more productive. Mean years of schooling is an important indicator of quality of education and the resultant productivity of the labor force. Table 9 indicates that Seychelles has the highest mean years of schooling (9.5 years) in the region followed by Kenya, Uganda and Tanzania. These are the only countries with mean years of schooling above the average for the

region. Ethiopia has the lowest mean years of schooling at 2.7 years, about half the region's average. Countries with more years of schooling will have more productive workers in the future. In this respect, Seychelles is poised to have a more productive workforce if it maintains longevity of learners in schooling. This is demonstrated by Seychelles' high Human Capital Index (HCI).<sup>10</sup>

**Close to eight million children and five million adolescents are still out of school in East Africa.** East African countries marginally reduced the number of out of school children by about six percent from 8.5 million in 2010-2014 to 8.2

<sup>10</sup>HCI is a measure of human capital optimization based on 21 indicators that are segregated using age-group data and four equally weighted dimensions: capacity, deployment, development and know how. The score for each sub-index is obtained by a population distribution weighted sum of the aggregate scores for each age group (Samans, Zahidi and Leopold, 2017).

million during 2015-2018. The UNESCO (2018) reports that Sudan has 2.6 million children out of school. This is slightly more than Ethiopia and South Sudan (Table 10). But it is feared that the number of out of school children in South Sudan go up due to ongoing socio-economic instability (UNESCO, 2018). Similarly, the number of

adolescents that are out of school in East Africa eased from 8 million in 2010-2014 to 5.4 million in 2015-2018, about 45 percent of whom were from Ethiopia. This means that more children are out of school than adolescents, signaling access challenges particularly at pre-primary levels of education.

**Table 10: Out of School Children in East Africa**

	Out of school children (000)		Out of school Adolescents (000)	
	2010-2014	2015-2018	2010-2014	2015-2018
Burundi	60	94	77	77
Comoros	14	17	15	15
Djibouti	38	34	-	24
Eritrea	123	196	159	159
Ethiopia	2,555	2,250	2,402	2,403
Rwanda	-	48	-	24
Seychelles	74	187	1,677	789
South Sudan	894	1,088	991	991
Sudan	1,901	2,579	2,240	-
Tanzania	1,025	1,663	-	895
<b>East Africa</b>	<b>8,490</b>	<b>8,156</b>	<b>7,561</b>	<b>5,377</b>

Data for Kenya, Somalia and Uganda is not available.

Source of Data: UNESCO Institute for Statistics (2019).

**Conflict, and demand and supply side bottlenecks explain the high numbers of out of school children and adolescents in most countries in the region.** In Sudan and South Sudan, the high numbers of out of school children are as a result of conflict. However, in Ethiopia, Kenya and Tanzania, supply and demand side bottlenecks are key drivers, despite the free primary and secondary education in these countries. The demand side constraints include negative attitude towards school with some pupils finding

school useless or uninteresting; poverty and vulnerability; and migration. The supply side factors include negative attitude by schools particularly on pupils with disability; distance to school; and lack of basic services such as textbooks and learning materials (UNICEF, 2018). The relatively large numbers of out of school adolescents are explained by early marriages, retrogressive cultural practices, poverty, care and domestic work responsibilities particularly for girls in rural areas, limitation faced by adolescents with disabilities as well as engagement



by the adolescents in paid and unpaid work, particularly for boys in pastoral communities. Indeed, Delprato et al. (2015) argue that delaying early marriage by one year is associated with an increase of half a year of education as well as a lower likelihood of dropping out of school. Even in countries such as Ethiopia, Kenya and Tanzania with subsidized primary and secondary education, the non-tuition costs of education such as the cost of buying uniforms, books, remedial teaching and extra-curricular activities, lunch fees for day scholars and other hidden levies keep adolescents out of school.

**The higher the number of out of school children, the lower the mean years of schooling in a country.** As shown in Table 10, Ethiopia, Sudan, South Sudan and Tanzania have a relatively high number of children and adolescents who are out of school. This has a strong influence on the countries' mean years of schooling. Furthermore, if schooling indeed leads to learning, Ethiopia and Sudan are poised to have the least productive labor

force and a low quality of education should the high number of out of school children persist.

**Besides access to education, East African countries are confronted by high school dropout rates, especially at primary school level** (Table 11). Primary school dropout rates increased from 35 percent in 2010-2014 to 49.7 percent in 2015-2018. Ethiopia (62 percent) had the highest primary school dropout rates in 2010-2014 followed by Rwanda and Burundi. In 2015-2018, Sudan (65 percent), Uganda, Burundi and Rwanda posted the highest primary school dropout rates. In Sudan, the dropouts are mainly explained by conflicts while in Ethiopia and Rwanda it is explained by late entry into the first grade of primary school, prevailing pervasive poverty and parent's preference for work. The high dropout rates in Uganda is attributed to early marriage, and shortage of infrastructure such as classrooms. The International Labour Organization (ILO, 2017) indicates that most primary school dropouts are engaged in child labor.

**Table 11: School dropout rates in East Africa (percent)**

	Primary School		Lower Secondary School	
	2010-2014	2015-2018	2010-2014	2015-2018
Burundi	51	56	22	33
Comoros	29	-	33	-
Djibouti	16	-	9	11
Eritrea	27	-	17	-
Ethiopia	62	-	38	-
Kenya	7	-	19	19
Rwanda	60	43	33	21
Seychelles	-	-	5	3
South Sudan	25	20	-	-
Sudan	-	65	8	7
Uganda	-	64.5	23	37
Tanzania	-	-	42	23
<b>East Africa</b>	<b>35</b>	<b>49.7</b>	<b>23</b>	<b>19</b>

Data for Kenya, Somalia and Uganda is not available.

Source of Data: UNESCO Institute for Statistics (2019).

**Most adolescents in East Africa drop out of school due to poverty, education-related costs and inadequate learning infrastructure.** In contrast to the worsening primary school dropout rates, school dropout rates in lower secondary slowed from 23 percent in 2010-14 to 19 percent in 2015-18 (Table 11). Overall, relatively high cases of adolescent dropouts are in Tanzania, Uganda, Rwanda, Ethiopia and Burundi. In Tanzania, the school dropouts among adolescents are blamed on poverty despite the

government's free primary and secondary education policy. Poverty reduces adolescents' ability to cover education-related. Inadequate infrastructure and transportation to school particularly in the rural remote areas where secondary schools are far from homes constitute other impediments (UNICEF, 2018). The dropout rates could explain the region's 82 percent literacy rate in 2015-2018 (Table 12). South Sudan has the lowest literacy rate in the region at 47.9 percent.

**Table 12: Literacy rates in East Africa (percent)**

	Primary School	
	2010-2014	2015-2018
Burundi	79.6	88.2
Comoros	71.6	78.3
Eritrea	-	93.3
Ethiopia	-	72.8
Kenya	86.5	87.8
Rwanda	80	86.8
Seychelles	99	99
South Sudan	-	47.9
Sudan	-	73
Tanzania	80	89.4
Uganda	85.4	86
<b>East Africa</b>	<b>83</b>	<b>82</b>

Data for Kenya, Somalia and Uganda is not available.

Source of Data: UNESCO Institute for Statistics (2019).

**Lack of knowledge and relevant skills is contributing to youth unemployment in most countries in East Africa.**

Considering the region's mean years of schooling of five years, the implication is that many East Africans can read and write but lack the vocational and professional skills required to advance the countries' structural transformation agenda. Lack of required skills and competencies among the youth is the main factor contributing to the high rate of youth unemployment.

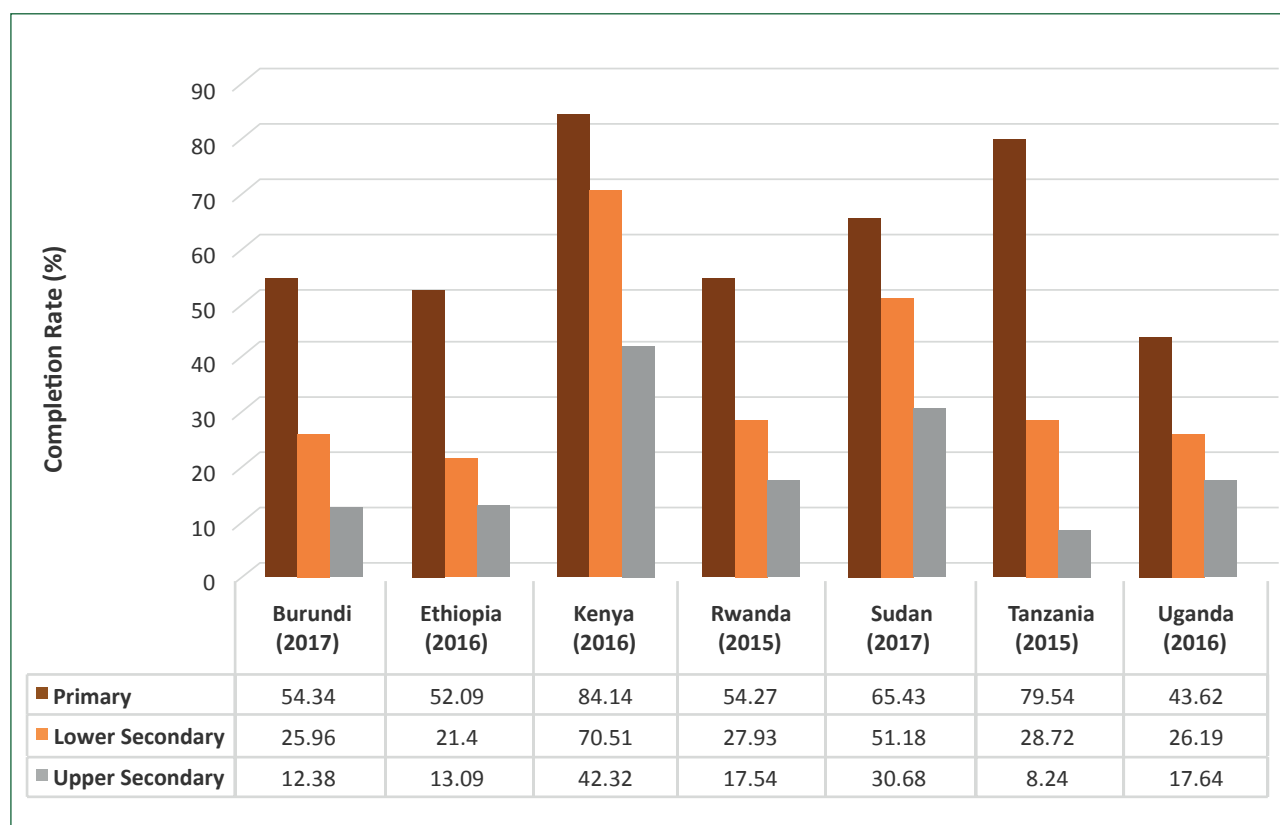
**Kenya has high completion rates at all levels of education**

**compared to other countries in East Africa.** There is a dearth of consistent and up-to-date data on school completion rates for East African countries. For countries with such data, trends show higher rates of completion at primary compared to lower and upper secondary school levels. Over the period 2015-2017, seven of the region's 13 countries that had data on completion rates reported an average primary school completion rate of 61.9 percent compared to 36 percent for lower secondary and 20.3 percent for upper secondary. This

means that completion rates reduce with years of schooling. Relative to other countries, Kenya had higher completion rates at all levels of education (Figure 7). Uganda had a relatively lower completion rate at all levels of education,

which signals little progress made by the country towards universal education. According to the World Bank (2019), Uganda's poor-quality education gives it learning outcomes that are below comparable countries.

Figure 7: School completion rates

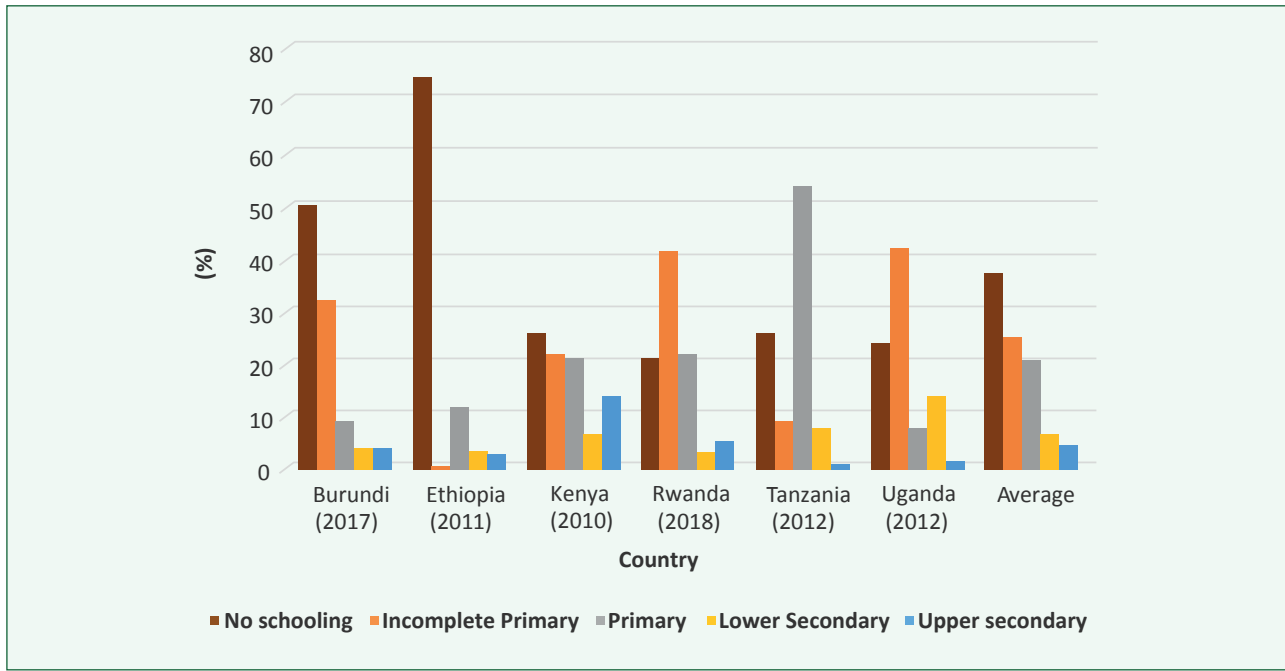


Source of Data: UNESCO Institute for Statistics (2019).

**Most countries in East Africa have few learners who have attained lower secondary and upper secondary levels of education.** Ethiopia and Burundi have higher proportions of the population that is 25 years and older who have no schooling while Rwanda has the lowest proportion of this population (Figure 8). Uganda had the

highest proportion (42.2 percent) of the 25 years and older who did not complete primary education. Most of the countries in the region exhibit low proportions of the population that is 25 years and older who have completed lower secondary and upper secondary levels of education.

Figure 8: Share of population of 25 years and older by educational attainment (percent)



Source of Data: UNESCO Institute for Statistics (2019).

**COVID-19 may stagnate or reverse gains in expanded access to education and create longer-term human capital challenges in East Africa.** East Africa's mean years of schooling, number of out of school children and adolescents, school dropout rates and school completion rates all point to low learning outcomes. The implication is that the impact of COVID-19 on education is likely to be devastating. All countries in East Africa, except Burundi, have closed schools and universities to mitigate the spread of the virus. Close to 90 million learners at all school levels of whom 49 percent are girls are out of school<sup>11</sup> and might remain out for unforeseeable future. While school closures seem to present a logical solution to enforcing social distancing within communities, prolonged closures tend to have a disproportionately negative impact on the most vulnerable students.

Learners in East Africa particularly have fewer opportunities for learning at home due to poor access to internet and digital device making it hard to continue with online programs on which students in developed world count.

**East African countries are likely to experience a COVID-19 effect of at most 10 percent of a standard deviation on educational outcome.** Even a relatively short period of missed school has consequences for skill growth. Carlsson et al. (2015) show that even just ten days of extra schooling significantly raises scores on tests of the use of knowledge by one percent of standard deviation while Lavy (2015) finds that one more hour per week of teaching over the school year in the main subjects increases test scores by around six percent of a standard deviation. By extrapolation, 60 school days less

<sup>11</sup> <https://en.unesco.org/covid19/educationresponse>.

of schooling would result into a loss of 6 per cent of a standard deviation, suggesting a likely COVID-19 effect of at most 10 percent of a standard deviation loss on test scores, which is an important element of educational outcomes. The implication is that hard-won gains in expanded access to education in East Africa could, therefore, stagnate or reverse as school closures are extended and accessibility to alternative options like distance learning and home-schooling remain out of reach for those without means to connect. COVID-19 could create longer-term human capital issues for East African economies, widen learning inequalities, and hurt vulnerable children and youth disproportionately particularly girls who may never return to school even after schools reopen.

**East African countries are pursuing six strategic thrusts towards strengthening TVET in the region** (UNESCO, 2017). East African countries continue to emphasize TVET as an additional pathway to skills development, increased labor productivity and economic transformation. In 2016, they identified the following strategic thrusts: developing quality assurance mechanisms; enhancing the quality of TVET teacher training; strengthening the teaching of entrepreneurship, basic and generic skills in TVET; facilitating transition to self-employment; developing and strengthening partnerships with the private sector; and developing and strengthening funding mechanisms for youth enterprise start-ups.

**TVET in East Africa receives less policy and financial support from governments.** The UNESCO Institute of Statistics (2019) estimated that East African countries spent an average of 3.2 percent of their GDP on education in 2010-2019. The World Bank (2018) also estimated that the countries dedicate 2-6 percent of education budgets to TVET compared to 10-30 percent to higher education. In Kenya, government expenditure on education was 14.9 percent of total government expenditure in 2019. This was much higher than the 0.6 percent of total government expenditure dedicated to secondary and post-secondary non-tertiary

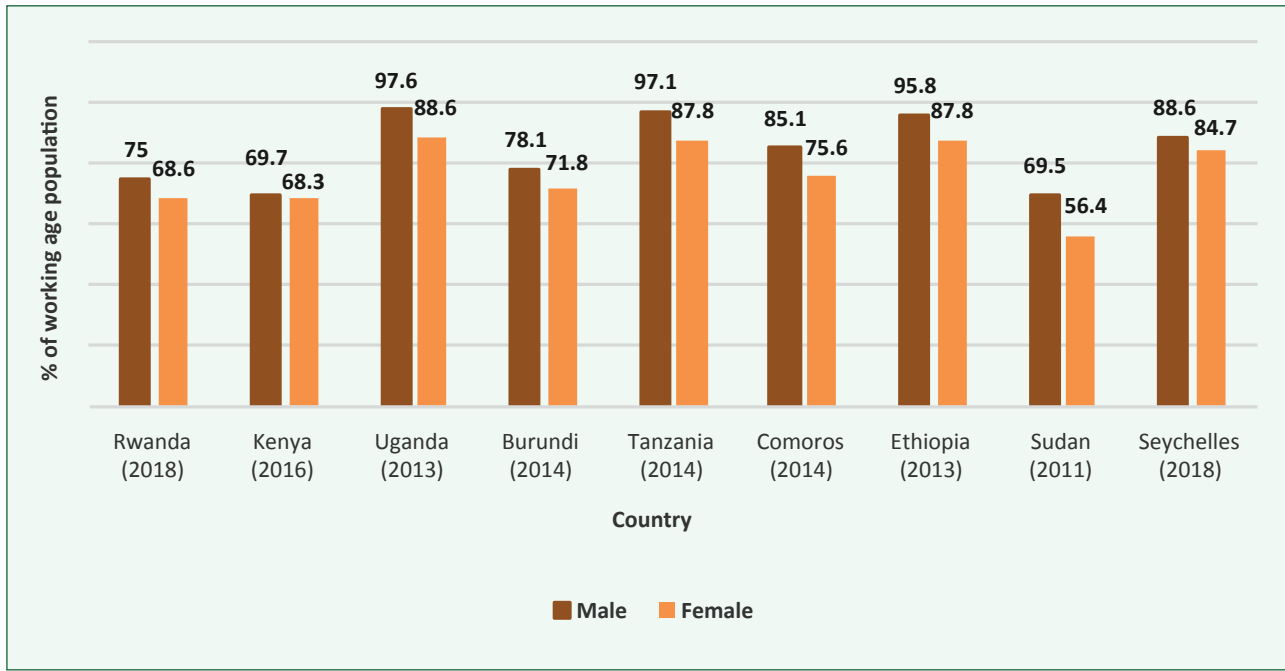
vocational education.<sup>12</sup> The education budgets to TVET are likely to be squeezed further as governments exercise expenditure cuts in non-health areas to finance COVID-19 emergency responses.

**The TVET institutions in East Africa suffer inadequate training facilities and equipment, outdated curriculums and staff with low technical capacity.** They have not established systematic approaches to engage industry with the aim of understanding their needs and integrating the market demands into the curricula. According to the World Bank (2018), the TVET in Uganda and Tanzania manifest low quality and relevance of skills development programs, outdated curricula with no soft skills, focus on theory at the expense of practical orientation, TVET instructors without industry-based or in-service training, and poor infrastructure and ill-equipped workshops with nonfunctioning equipment. The World Bank (2018) avers that a 2016 assessment in 50 TVET institutions in Kenya found that only 60 percent of the institutions had functional equipment of which less than 30 percent had enough equipment for all students.

**Seychelles has a high percentage of its working age population with an advanced level of education in the labor force.** No coherent and credible data exist on the level of education of East Africa's labor force and stock of human capital in the region. However, the percentage of working age population with advanced level of education (short-cycle tertiary education, a bachelor's degree or equivalent educational level, a master's degree or equivalent educational level, or a doctoral degree or equivalent educational level) who are in the labor force is shown on Figure 9. In 2018, Seychelles had an average of 86.7 percent of the working age population with an advanced level of education in the labor force compared to 71.8 percent for Rwanda. Also, more males than females with an advanced level of education participate in the labor force of the respective countries.

<sup>12</sup> UNESCO World TVET Database, <https://unevoc.unesco.org/go.php?q=fwd2World+TVET+Database>.

Figure 9: Percent of working age population with advanced level of education



Source of Data: ILOSTAT (2019).

**Three-quarters of grade three children are not achieving minimum proficiency levels in reading.** The share of population by educational attainment and the percentage of the working age population with an advanced level of education in the labor force, are proxies for the stock of skills or human capital with measures of schooling. However, using schooling as a proxy for human capital assumes that being in school translates into learning, which often is not the case (Angrist et al., 2019). UNESCO (2017) indicated that six out of ten children and adolescents globally could not meet minimum proficiency levels in reading and mathematics. Sub-Saharan Africa registered the highest average (88 percent). The gap between schooling and learning is acute in East Africa. In Kenya, Tanzania and Uganda three-quarters of grade three students cannot read a basic sentence (Angrist et al., 2019). The wastage in human capital represented by the gap between schooling and learning shows that besides getting children into the classroom, East African countries must also focus on ensuring that every child in school is learning the minimum skills they need in reading and mathematics.

**Ongoing economic transformation and regional integration projects in East Africa are boosting the region's demand for educated and skilled labor.** Ethiopia estimates a demand for 82,878 railway technical workers between 2015 and 2044; about 400,000 skilled workers for textile, leather and garments, and agro-processing; 1.2 million workers for manufacturing sector by 2025; and 8,000-11,500 TVET-level graduates for the energy sector by 2025. The NCIP and LAPSSSET Corridor Project has 3.4 times (4,500-15,500) demand for workforce for maritime transport and shipping logistics in ten years while the LAPSSSET is to generate 200,000 jobs through the port and related activities (World Bank, 2018). The NCIP's regional demand for Information and Communications Technology (ICT) skills is expected to increase 3.7 times over the next ten years, translating to 8,300-30,600 skilled people in the ICT workforce. East Africa's regional strategy for scaling up access to modern energy services projects a demand for 12,044 professional and technical staff in the geothermal industry against 861 technical staff working in the geothermal institutions in the region.

**Discoveries of oil, gas and other mineral resources in some countries in East Africa has boosted opportunities for growth and employment across the region.** Discoveries of oil and gas in Kenya, Tanzania and Uganda have created considerable demand for local workers in the respective countries. It is projected that the oil, gas and mining industry in Kenya will create 6,000-15,000 new jobs over the next 10 years. The industry will also support 42,000-98,000 jobs over the next 10 years through its upstream needs.

**Eight of the top 15 occupations needed by oil, gas and mining industry in Kenya and over 60 percent of the new jobs will require vocational training.** The greatest hiring need for the oil, gas and mining industry in Kenya will be for technical and vocational positions. These occupations include welders, pipefitters, drilling and servicing laborers, truck drivers and heavy equipment operators, and service operators. Five of the top 15 occupations will require geologists and geophysicists, petroleum engineers, process engineers and operators, and managers with university degrees specializing in oil, gas and mining. The remaining two of the top 15 occupations will be support positions, which will require university degree level qualifications in areas such as environmental management and purchasing and supply chain management. Corporate functions such as accounting, human resources and legal counsel will support between 1,000 and 3,000 jobs in the industry annually.

**Uganda's oil and gas sector will create at least 150,000 direct and indirect jobs, increasing to 50,000 fulltime jobs in the longer-term.** It is estimated that 60 percent of the jobs will be for technicians and skilled craftsmen, and about 15 percent will be for engineers and managers.

**Three of the five countries with the highest returns to education globally are from East Africa but this benefit is likely to be undermined by the low levels of education and training in the region.** Montenegro and Patrinos (2014) observed, in a global comparative study, that the five economies with the highest returns are Rwanda, South Africa, Ethiopia, Namibia and Burundi, three of which are from East Africa. This finding may, however, not come to fruition in the case of East Africa due to the large gap between demand and supply

of education and skills in the region. Low levels of education and training impedes productivity of East Africa's labor force.

**About 41 percent of all firms in Tanzania, 30 percent in Kenya, 28 percent in Rwanda, 14 percent in Uganda, 9 percent in Burundi and 3 percent in Ethiopia cite an inadequately skilled workforce as a major constraint to their businesses (World Economic Forum, 2017).** The shortage of a skilled workforce is a major hindrance to growth and development within the region. The 2015 World Bank Enterprise Survey indicated that 25 percent of firms in Sub-Saharan Africa identified inadequately educated workforce as a major constraint with over 29 percent of all production workers being rated unskilled by these firms. This assertion is reinforced by the Inter-University Council of East Africa's finding that at least 63 percent of Uganda's graduates lack skills required by industry. This was followed by Tanzania (61 percent), Burundi (55), Rwanda (52) and Kenya (51).

**East Africa's deficiency in specialized TVET skills is particularly acute in transport, energy, manufacturing including agro-processing and ICT, which could dampen the region's industrialization and integration agenda.** Kenya, for example, lacks workers with the requisite skills to match the skills demands of her extractive sector. The shortage is severe for vocational skills like pipe fitting, welding, drilling, and operation and repair of heavy equipment, and skilled welders who can work on a live oil pipeline. Companies in Kenya's downstream oil, gas and mining industry require potential candidates to be certified by recognized global industry associations such as International Association of Drilling Contractors (IADC), British Standards, Occupational Safety and Health (OSH) Standards and American Society of Mechanical Engineers (ASME), which are not integrated into the country's TVET qualification framework.

**Employers require graduates with work experience besides technical and soft skills.** Ethiopia's 2010 Higher Education and Relevance Quality Agency (HERQA) Satisfaction Survey found that graduates in the fields of engineering, medicine, and management lacked practical skills required for the job. This means that higher education institutions were not responding to employer needs and there appeared

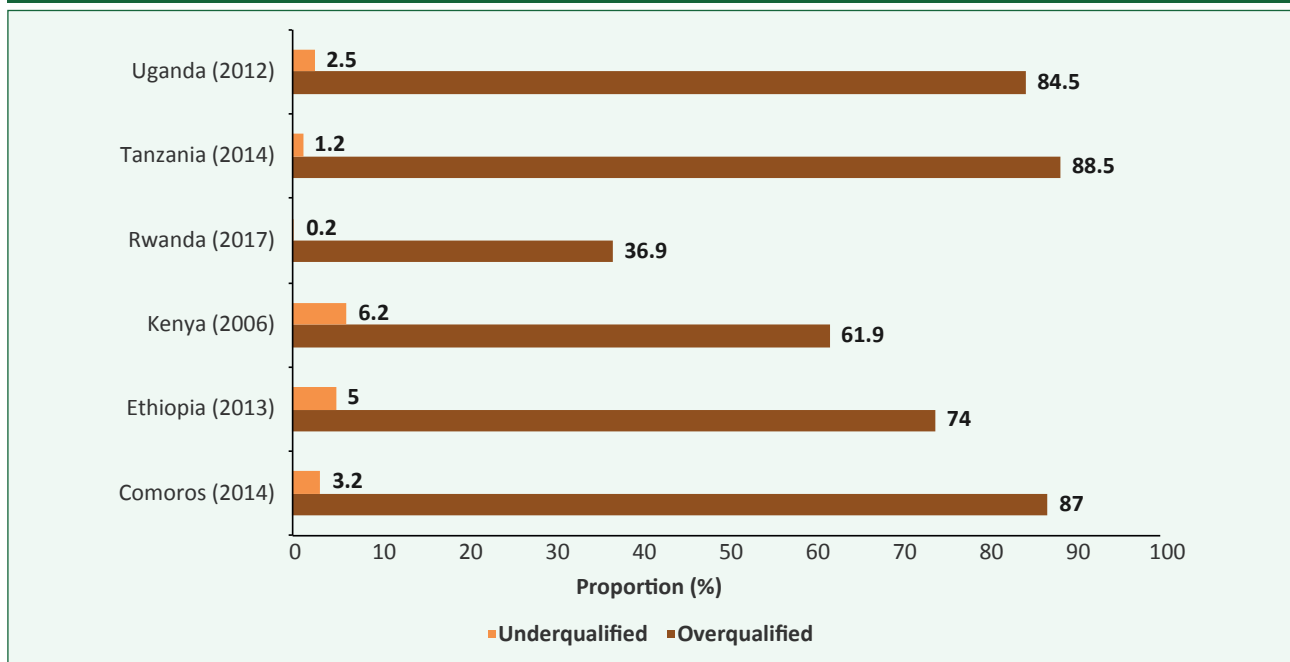
to be no linkages between academia and industry. Furthermore, employers in Ethiopia were overlooking recent graduates and only employing those with five years of work experience. Most employers in the region identify expertise in verbal and written communication as an important factor in employability. Apart from academic qualifications, employers also require workers with analytical, investigative, entrepreneurial, managerial, teamwork, time management and computer skills besides other soft skills.

**There is no sync in prioritization of job functions by industry and universities in East Africa.** East Africa is lagging in terms of the skills required to attain industrial competitiveness. Specifically, the priority ranking of skill requirements for various job functions do not match the weight given by the universities in training for the respective job function as identified by industry. Universities in East Africa only match industry demands for business-oriented job functions such as operations, sales and business development but fail to align to all the other job functions (Annex 6).

The region's universities, for example, give priority to legal training, marketing, program and project management, accounting, entrepreneurship, purchasing, product management and healthcare services, which areas are not prioritized by industry.

**East African countries suffer a severe mismatch between the skills possessed by young workers and those demanded by employers.** The ILO (2014) proposes two indicators of skills mismatch: (i) the index of dissimilarity which reflects the differences between unemployment rates by educational attainment and (ii) the incidence of over/under education which measures the mismatch between the qualification requirements of jobs held by workers and the qualifications that they possess. Many workers in East Africa take up jobs for which they are underqualified (Figure 10). Tanzania leads with 88.5 percent of workers holding jobs for which they are underqualified followed by Comoros and Uganda. Rwanda has a lower incidence of underqualification at 36.9 percent.

Figure 10: Incidence of Over/Underqualification in selected East African countries



Source of Data: ILOSTAT.

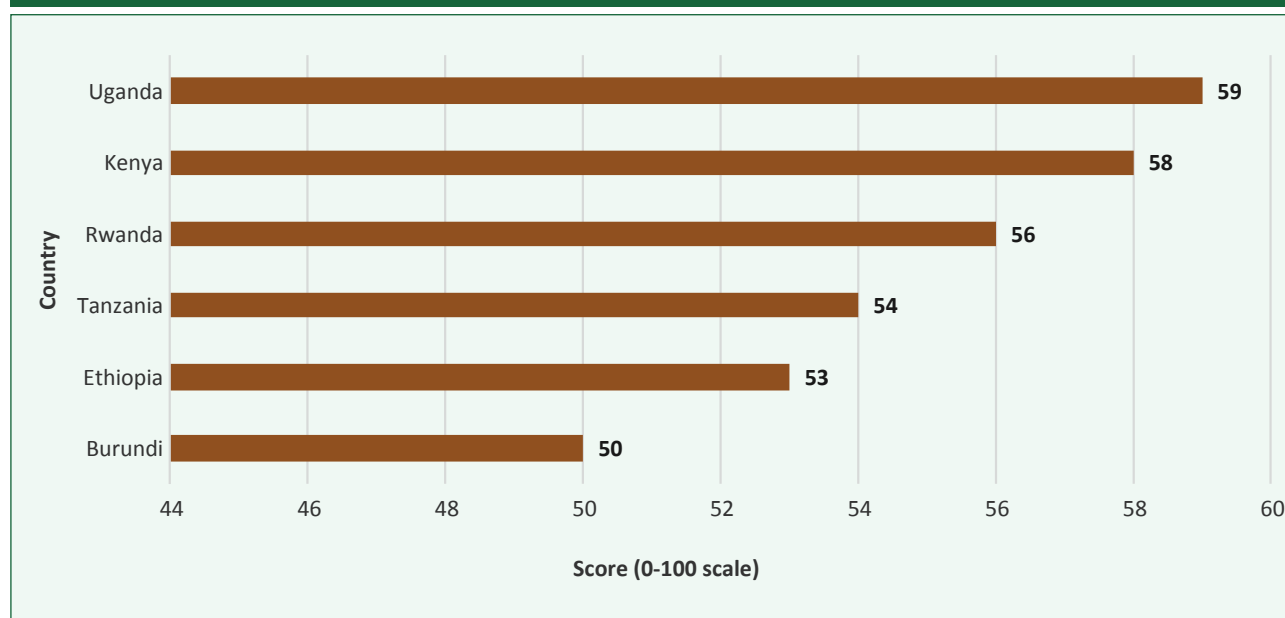


## 2.2.2 Key bottlenecks dwarf skills development and education in East Africa

**East Africa's education systems have inadequacies that result in a less productive workforce.** The HCI, which measures the extent to which countries and economies optimize their human capital through education and skills development and its deployment throughout the life-course, indicates that only five of the 13 countries in East Africa exploited at least half of their full human capital potential in 2017 (Figure 11). The index measures human capital based on the ability to acquire, develop and use new skills beyond their years of schooling and during their professional lives. The figures show that East Africa's human capital

optimization averaged 42 percent, 12.6 percentage points below Sub-Saharan Africa average (52.5 percent) and 19.5 percentage points below the global average of 61.5 percent. The implication is that in East Africa, children have an earning potential of only 42 percent of what it could be if the region's resources were fully invested in knowledge, skills and health that people accumulate over their lives. A child born in East Africa will be 42 percent as productive as they could be as a future worker if they enjoyed complete education and health. Of the countries listed the human capital development gap is highest in Ethiopia (55.6 percent), Tanzania (47.4 percent), Burundi (44.5 percent), Uganda (41.3 percent), Kenya (40.5 percent) and Rwanda (38.9 percent).

Figure 11: Human capital optimization of selected countries in East Africa



Source of Data: World Economic Forum (2017).

**A key bottleneck to skills development and education in East Africa relates to the state and operations of the TVETs.** The effectiveness of TVETs is undermined by the low perception of this pathway amongst learners, inadequate and obsolete infrastructure, low staff capacity both in terms of

numbers and quality, non-responsive curriculums, weak industry linkages and high affinity to degree programs by young people as opposed for vocational qualifications (World Bank, 2018). The TVETs across East African countries, both public and private, do not conduct tracer studies to gauge

the effectiveness of their programs. Furthermore, though the TVETs face shortages of infrastructure particularly modern equipment and instructional resources, there is no established framework for the sharing of infrastructural resources by the TVETs.

**The youth in East Africa are caught in a double bind where they have no work experience to show in their job applications because they have been unable to get a job in the first place.** Beyond skills, lack of career guidance is a major weakness of education systems in East Africa. Career guidance systems ideally should encompass the provision of reliable labor market information on relevant economic trends, job opportunities, and entry-level skills requirements in one's area of interest; job placement; and opportunities to network with role models, mentors and other professionals, particularly alumni. Lack of information on the skills needed in the labor market, and career prospects in different fields means that young people are not able to make informed decisions. In addition, training institutes are not able to align their curricula to labor market demands. Employers greatly value work experience and, in most cases, prefer to recruit people who are employed or have been out of work for a short period of time. This severely affects East Africa's workforce, especially the youth who lack opportunities for work experience through internships, attachments, apprenticeships, volunteer positions, and student vacation jobs. Though several higher education

institutions in the region require their students to go for industrial attachments and internships, the same has not been effectively integrated into the curricula and mainstreamed with industry for maximum mutual benefit.

**When poor households are faced with the prospect of sending their children to school, they decline to shield the value that their children provide to the households through child labor.** *Habitat for Humanity* has identified 13 barriers to development of education and skills in Africa.<sup>13</sup> The most pronounced is poverty, as evidenced by the number of learners dropping out of school due to high direct and indirect costs of education. Education has direct costs in form of tuition fees, transportation costs, purchase of books, school uniforms, supplies, accommodation costs and food costs. Whenever, a poor household is unable to meet these costs a child is forced to drop out of school. For households living in extreme poverty, education has indirect costs such as value of production foregone in family business/farm and value of services performed in the household foregone whenever their children go to school. Thus, education is perceived as an opportunity cost by families trapped in poverty. Africa accounted for five out of every ten children in child labor with four out of the five children being engaged in hazardous work in 2016.<sup>14</sup> Most of the children in child labor are engaged in agriculture (85.1 percent), followed by services at 11.2 percent and industry at 3.7 percent.

<sup>13</sup> <https://www.habitatforhumanity.org.uk/blog/2017/04/poverty-and-education-east-africa/>

<sup>14</sup> <http://data.uis.unesco.org/#>

Table 13: Number of guaranteed years of free primary and secondary education

	2010	2018
Burundi	-	-
Comoros	6	6
Djibouti	12	12
Eritrea	8	8
Ethiopia	8	8
Kenya	8	12
Rwanda	6	9
Seychelles	10	11
Somalia	-	-
South Sudan	8	8
Sudan	8	-
Uganda	7	6
Tanzania	7	7

Source of Data: UNESCO Institute for Statistics (2019).

**COVID-19 will have spillover effects on education.** The indirect costs of education to households is likely to be aggregated by the weak social protection systems in East Africa in the face of COVID-19. Economic hardships caused by the crisis will have spill-over effects on education as families consider the financial and opportunity costs of education particularly of their daughters. While many girls will continue with their education when schools and universities reopen, others will never return to school. In many cases, school dropouts will be caused by an increase in domestic and caring responsibilities and a shift towards income generation as vulnerable girls and their families struggle to cover basic needs.

**The rate of school dropouts is lower in countries where the direct costs of education are borne by governments.** Most countries in East Africa offer free basic education as

manifested in the guaranteed years of schooling as per the countries' legal frameworks (Table 13). Provision of free basic education by the countries, however, sharply contrasts with the high number of out of school children across the region.

**About three in every ten pupils in East Africa's primary schools are two years over age for their current grade.**

Access to education and development of skills in East Africa is further curtailed by poor health and nutrition. The UNESCO Institute for Statistics estimates that the proportion of children under 5 years of age who are on track in health, learning and psychosocial well-being were 40.6 percent in Burundi, 63.1 percent in Rwanda and 63.3 in Uganda.<sup>15</sup> This means that more than half of the children in Burundi and close to 40 percent of the children in Rwanda and Uganda did not have sufficient nutritional status to attend school as at the official school

<sup>15</sup> <http://data.uis.unesco.org/#>

entry age. Though data is not available for most East African countries, the situation is largely expected to be the same in the rest of East Africa. This is confirmed by the percentage of children who are two years older than their current grade (Table 14). The situation is severe for countries with economic and political instability such as South Sudan. Other than

repetition across the grades and conflict, poor health and nutrition is the sole explanation for over age children in various grades. Since children who start school late are more likely to drop out before they complete the cycle,<sup>16</sup> poor health and nutrition and the drivers of over age learning inhibits learning and acquisition of skills in East Africa.

**Table 14: Percentage of overage pupils enrolled in primary schools in East Africa**

Country	Proportion (%)
Burundi	31
Comoros	25
Djibouti	10
Eritrea	31
Ethiopia	23
Kenya	41*
Rwanda	38
Seychelles	0
Somalia	-
South Sudan	77
Sudan	28
Uganda	34
Tanzania	8
<b>East Africa</b>	<b>28.8</b>

Source of Data: UNESCO Institute for Statistics (2019).

\*As per class three estimates.

### 2.2.3 Good education and soft skills could drive employment in the region

**Behavioral or soft skills are critical in explaining the employability of a workforce.** Education is supposed to provide basic and technical skills that are relevant to the world of work. Basic skills include functional literacy and numeracy, which are typically learned in school. Technical skills are those

needed for a task or process used in making a product or providing a service in an industry. While some level of technical skills is often required even for entry-level jobs, most technical learning takes place on the job. In addition to basic and technical skills is behavioral or soft skills that are critical in explaining the employability of a workforce. Soft skills include interpersonal skills such as teamwork and communication skills; intrapersonal skills such as time management, problem

<sup>16</sup> <https://unesdoc.unesco.org/ark:/48223/pf0000219351/PDF/219351eng.pdf.multi>

solving, and creativity; and workplace cultural skills, which include understanding and navigating norms in the workplace. Education and training curriculum in East African countries have been blamed for contributing to unemployment through emphasis on basic and technical skills at the expense of behavioral or soft skills. This is evident in Kenya where the country has abandoned the 8-4-4 system to a competency-based curriculum to inculcate behavioral and soft skills in learning. In Uganda, there is clamor for curriculum review to include soft and behavioral skills for employability<sup>17</sup> while in Rwanda, schools are exploring new teaching models to help the learners acquire both technical and soft skills by implementing work readiness curriculum.<sup>18</sup>

**Besides skills and education, countries in East Africa premise employment creation on economic growth.**<sup>19</sup> The expectation is that economic growth will translate into increased jobs to absorb the region's growing labor force. The same argument is maintained by the Sustainable Development

Goals (SDGs) launched in 2015. Goal 8 of the SDGs seeks to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Specifically, it requires countries to attain and sustain at least a 7 percent growth rate in GDP per annum.

**Employment growth in East Africa has not matched the rate of growth in the economies.** Employment growth in Africa has been maintained at about 3 percent per annum in 2009-2018 while the GDP growth rate ranged between 2.1 and 7.3 percent during the same period (Table 15). The data points to low responsiveness between Africa's GDP growth and growth rate in employment, especially youth employment. It shows a high rate of youth unemployment, averaging 12 percent per annum compared to adult unemployment rate of 6 percent with females bearing the greatest brunt of unemployment. A similar situation obtains in East Africa, which is confronted with high youth unemployment.

Table 15: Economic and Employment Growth in Africa

Indicator/Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP Annual Growth Rate	3.3	5.8	2.9	7.3	3.6	3.7	3.5	2.1	3.6	3.4
Annual Employment Growth Rate	Total	2.8	2.9	3.0	3.1	3.1	3.1	3.1	3.1	3.1
	Male	2.7	2.9	3.1	3.1	3.1	3.2	3.2	3.1	3.1
	Female	2.9	2.9	2.9	3.1	3.0	3.1	3.1	3.0	3.0
	Youth	2.1	2.4	2.7	2.7	2.7	2.8	2.8	2.7	2.7
	Adult	3.0	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2
Unemployment Rate	Total	7.7	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.5
	Male	7.1	7.0	6.9	6.9	6.9	6.9	6.8	6.8	6.7
	Female	8.4	8.3	8.4	8.3	8.4	8.4	8.4	8.3	8.3
	Youth	12.1	12.0	11.9	11.9	11.9	11.8	11.7	11.7	11.7
	Adult	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0

Sources of Data: AfDB for GDP data, and ILO (2014) for other data.

<sup>17</sup> <https://www.softpower.ug/experts-want-education-system-to-inculcate-soft-practical-skills/>

<sup>18</sup> <https://www.voanews.com/africa/soft-skills-education-kicks-african-schools>.

<sup>19</sup> Omolo, 2010; Page, 2012; ILO, 2014.

**Educated youth in East Africa bear a disproportionate burden of unemployment, confirming the existence of a skills mismatch in the region.** For East Africa's youth aged 15-24 with a first university degree, the unemployment rate was high in Burundi at 47.5 percent in 2014, Sudan (35.9 percent) in 2011, Comoros (29.4 percent) in 2011, Uganda (24.8 percent) in 2012 and Rwanda (20.8 percent) in 2017. For Ethiopia, the youth aged 25-34 with a second university degree (Master) had the highest rate of unemployment of 12.2 percent of all the youth cohorts with different educational attainment (Annex 7). Generally, higher levels of youth unemployment are reported for youths with higher levels of education than those with lower levels of education or those with no schooling, confirming existence of skills mismatch in East Africa.

## 2.3 EDUCATION, SKILLS DEVELOPMENT AND LABOR PRODUCTIVITY

### 2.3.1 Skills mismatch hampers labor productivity

**A skills mismatch, manifested by both incidences of overqualification and underqualification, has a negative effect on labor productivity.** The realization of East Africa's growth potential relies on the relevance of the skills acquired by the labor force through education and training. The region manifests high incidences of overqualification. This arises due to increasing supply of tertiary educated workers and their employment in jobs previously held by workers with lower educational attainment. This may be as a result of increase in skill supply at a pace that is higher than that of skills demand, and the resultant competition for jobs. On balance, both over qualification and under qualification are important labor market issues in East Africa as they weigh directly on the productivity of the region's labor force (Omolo and Anyidoho, 2017). Widespread under qualification points to the need for more education, even if it occurs alongside relatively high unemployment rates for tertiary educated workers as is the case in East Africa.

### 2.3.2 The future of productivity in the region lies in advanced ICT skills and connectivity

**The demand for skills in East Africa will be shaped by three phases of automation until the 2030s.** The future of East Africa will be characterized by key disturbances in form of automation, changes in how people work and the ICT intensity of skills (World Economic Forum, 2017). Automation is expected to revolutionize the way the world operates in three phases: the first wave will be algorithmic; the second wave will be augmentation; and the third will be the autonomous wave. The three waves are overlapping and are expected to last to the 2030s (*Price Water House Coopers*, 2018). The algorithmic wave will involve automation of simple computational tasks and analysis of structured data. It will affect tasks such as manually conducting mathematical calculations or using basic software packages and internet searches, and data driven sectors like financial, insurance, information and communication, and professional, scientific and technical services. The automation wave will affect routine activities in the service sectors of East African economies. The augmentation wave will involve dynamic interaction with technology for clerical support and decision making as well as robotic tasks in semi-controlled environments such as moving objects in warehouses. This will affect tasks such as filling in forms and decrease need for many programming languages as repeatable programmable tasks are increasingly automated, and through machines themselves building and redesigning learning algorithms. The augmentation wave is expected to have a continued impact on financial and insurance services. It will also affect new sectors that rely on clerical work such as public administration, transport and storage.

**The future worker in East Africa will not be required to simply have basic but also intermediate to advanced skills in ICT in order to transition to the new economic arrangements.** The dynamic wave will involve automation of physical labor and manual dexterity, and problem solving in

dynamic real-world situations that require responsive actions, such as in transport and manufacturing. It will affect routine tasks and those that require manual work. The implication is that workers in construction, transportation, water and sewage management will be affected, which aspect is

already happening in East Africa. Rwanda is using drones to transport urgent blood supplies to hospitals instead of using the conventional road transport. The labor market adjustment due to technology particularly affects drivers in the health sector.

**Table 16: Number of Internet users in East Africa**

Number of Internet Users				
	2000 (number)	2019 (number)	Growth (percent)	Penetration (percent)
Burundi	3,000	617,116	201,471	5.3
Comoros	1,500	130,578	8,605	15.3
Djibouti	1,400	548,832	39,102	55.7
Eritrea	5,000	71000	1,320	1.3
Ethiopia	10,000	20,507,255	39,102	55.7
Kenya	200,000	46,870,422	23,335	89.8
Rwanda	5,000	5,981,638	119,532	46.8
Seychelles	6,000	67,119	1,018	70.1
Somalia	200	1,500,000	749,900	9.6
South Sudan	-	2,229,963	-	16.8
Sudan	30,000	13,124,100	43,647	30.9
Uganda	40,000	18,502,166	46,155	40.5
Tanzania	115,000	23,142,960	20,024	38
<b>East Africa</b>	<b>417,100</b>	<b>86,422,727</b>	<b>20,619.9</b>	<b>36.6</b>

Source of Data: <https://www.internetworldstats.com/>

**The effect of automation on employment in East Africa will be moderated by labor laws and regulations.** The anticipated automation will have offsetting effects on jobs. Some jobs will be completely decimated. This is more so in routine tasks that require low level skills. It is estimated that those with low education requirements are at a risk of bearing the brunt of automation. This is significant since majority of East Africa's workforce have basic skills. These workers will need retraining to acquire higher educational qualification and

skills set that will help them get jobs that are inelastic to automation.

**East Africa has the potential for increasing productivity by deepening internet penetration.** The Future of Work in East Africa will further be disrupted by ICT, especially the internet of things. Internet will shape how people will work and collaborate. A survey of the number of internet users shows that in 2019, there were 86.4 million internet users

in East Africa up from 0.42 million users in 2000, implying a 205-fold growth (Table 16). Internet penetration averaged 36.6 percent of the population, way below the global penetration rate of 58.8 percent.<sup>20</sup> Most governments in East Africa are urging employers to put in place mechanisms to facilitate workers to work from home as a way of reducing the contagious effect of COVID-19, an aspect which is likely to deepen internet penetration.

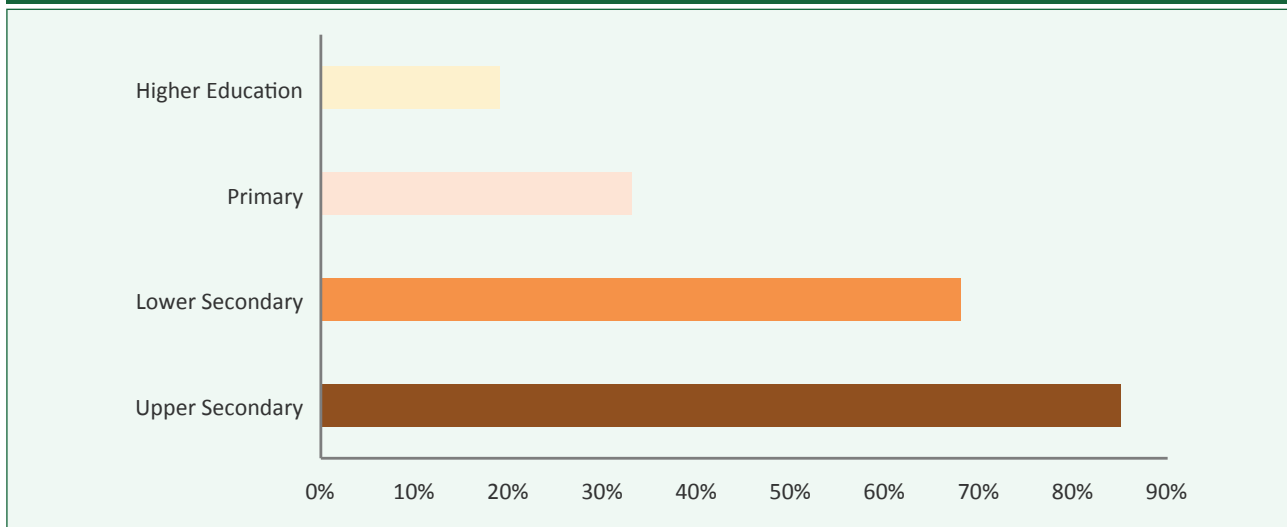
## 2.4 FINANCING SKILLS DEVELOPMENT: POLICIES AND STRATEGIES IN EAST AFRICA

### 2.4.1 Secondary education in the region is mainly financed privately

Households in East Africa bear more of the expenses in secondary education than in primary and tertiary education. Education is excludable but non-rivalrous. Education is further

associated with positive social externalities that the society would wish to promote. The exclusive nature of education coupled with the desirable positive externalities means that both the government and the households should contribute towards its provision. In most cases, the household complements areas that the government is either not providing fully or adequately.<sup>21</sup> A lower government provision of education implies a higher burden for the household. An analysis of the contribution by households to education financing in Africa by various levels of education revealed that households shoulder more of the expenses in secondary education, followed by primary education and tertiary education (Figure 12). The contribution by households is mainly in meeting the direct costs of tuition fees, transportation costs, purchase of books, school uniforms, supplies, accommodation costs and food costs to hiring of community teachers to compensate for the shortage of state funded teachers. Besides, households also incur indirect costs, in form of forgone labor in farms or grazing fields and forgone care services at home.

Figure 12: Household financing of education in Africa



Source of Data: UNICEF (2015).

<sup>20</sup> <https://gs.statcounter.com/about>

<sup>21</sup> [https://www.unicef.org/publications/files/Investment\\_Case\\_for\\_Education\\_and\\_Equity\\_FINAL.pdf](https://www.unicef.org/publications/files/Investment_Case_for_Education_and_Equity_FINAL.pdf)



**The fact that households finance more of the basic education rather than higher education means that governments finance education in a regressive manner.** Basic education is for all whether poor or rich. However, in East Africa, higher education is mostly accessed by the rich,<sup>22</sup> implying that government subsidies to higher education mainly benefit the rich. This contrasts with the financing structure in the developed world where much of public finances go to pre-primary and primary education. Since, higher levels of education are associated with less social benefits to education, the regressive provision of public support to education in East Africa means that the countries get less benefits per each unit of expenditure compared to the developed world.

#### 2.4.2 Public spending on education is low, and largely focuses on recurrent expenditures

**Commitment by governments to education is demonstrated by various correlated measures.** The measures range from education expenditure as a percentage of GDP or total

government expenditures on education. The two measures are correlated, and all communicate how the governments prioritize education. A higher percentage of GDP spent on education shows a higher government priority for education, but also a higher capacity of the government to raise revenues for public spending considering the size of the country's economy.<sup>23</sup>

**East African governments have prioritized primary education followed by tertiary education.** Data on education expenditure shows that East African countries spent an average of 0.14, 1.45, 0.44, 0.44 and 0.77 percent of their GDP in pre-primary, primary, lower secondary, upper secondary and tertiary education, respectively in 2010-2019 (Table 17). Pre-primary education, and lower and upper secondary education receive less priority with the least priority being attached to pre-primary education. This position corroborates the fact that households have a relatively higher financial burden at lower and upper secondary school levels. The situations also reinforce the complementary role between government and households in financing education.

**Table 17: Government expenditure on education (percent of GDP)**

	Pre-Primary	Primary	Lower Secondary	Upper Secondary	Tertiary
Burundi	-	2.9	-	-	1.26
Comoros	0.19	1.5	0.49	0.24	0.24
Djibouti	-	2	0.02	0.04	0.74
Eritrea	-	0.30	0.09	0.30	0.10
Ethiopia	0.06	1.3	0.65	0.49	2.22
Kenya	0.05	1.9	0.51	1.76	0.77
Rwanda	0.06	1.4	1.09	0.58	0.78
Seychelles	0.43	1.2	0.7	0.43	0.27
South Sudan	0.01	0.6	0.06	0.13	-
Uganda	-	1.4	0.5	0.26	0.34
Tanzania	0.2	-	0.32	0.29	1
<b>East Africa</b>	<b>0.14</b>	<b>1.45</b>	<b>0.44</b>	<b>0.44</b>	<b>0.77</b>

Data on Somalia is not available.

Source of Data: UNESCO Institute for Statistics (2019).

<sup>22</sup> <https://ourworldindata.org/financing-education>

<sup>23</sup> [http://data.uis.unesco.org/OECDStat\\_Metadata/ShowMetadata.ashx?Dataset=EDULIT\\_DS&Coords=%5bEDULIT\\_IND%5d.%5bXGDP\\_FSGOV%5d&ShowOnWeb=true&Lang=en](http://data.uis.unesco.org/OECDStat_Metadata/ShowMetadata.ashx?Dataset=EDULIT_DS&Coords=%5bEDULIT_IND%5d.%5bXGDP_FSGOV%5d&ShowOnWeb=true&Lang=en)

**Much of public expenditure on education in East Africa goes to recurrent items, leaving limited budget for expansion and improvement in the quality of education.**

An evaluation of the uses into which public expenditure on education is put reveals that 89 percent of the expenditures by East African countries is on recurrent items while 11 percent goes to capital expenditures (Table 18). The statistics imply that much of government funding in East Africa is used on staff emoluments, and purchases of textbook and learning

materials. Little is spent on construction of schools and other infrastructure projects. A disaggregation of recurrent expenditure reveals that, on average, East African countries spend 60 percent of their recurrent budget on salaries and 37 percent on non-salaries. This has implications on the expansion and quality of education since more staff emoluments imply less capital spending hence less expansion and less expenditures on learning materials such as textbooks.

**Table 18: Public spending on Education in East Africa (2010-2019) percent**

	Recurrent Expenditure	Capital Expenditure
Burundi	95	5
Comoros	100	0
Ethiopia	65	35
Kenya	94	6
Rwanda	88	12
Seychelles	92	8
South Sudan	96	4
Uganda	86	14
<b>East Africa</b>	<b>89</b>	<b>11</b>

Source of Data: UNESCO Institute for Statistics (2019).

**Most governments in East Africa finance education and skills development through the budget, cost-sharing with parents and guardians, and grants and/or loans from development partners.** The primary source of the funds provided by East African governments to finance education

and skills development in the region is from taxes and official development assistance. It is estimated that the East Africa region received USD 38.2 million from Organization for Economic Co-operation and Development (OECD) countries in 2010-2017 to fund education (Table 19).

Table 19: Official Development Assistance from OECD to Education Sector in East Africa

Country	Amount (USD)
Burundi	1,268,905.38
Comoros	3,227,988
Djibouti	933,784.88
Eritrea	972,066
Ethiopia	5,657,037.50
Kenya	6,600,203.13
Rwanda	6,295,502.75
Seychelles	781,304.75
South Sudan	623,687.86
Sudan	2,117,079.88
Uganda	4,346,070.75
Tanzania	5,430,493.75
<b>East Africa</b>	<b>38,254,124.61</b>

Source of Data: UNESCO Institute for Statistics (2019).

**In East Africa, cost sharing in education is mostly at secondary and post-secondary level.** Ethiopia, Kenya, Rwanda and Tanzania all have higher education loan facilities to finance higher education. This is achieved through income contingent loans, under which students borrow funds from the government to partly cover the costs of tuition, food and accommodation (Wainaina, 2010). The students are then expected to pay these loans through fractions of earned income to cover the costs of their loan including interest.

As education financing options, East African countries are yet to experiment with graduate taxes and matching grants, notably for private entities that assist in raising funds for higher education. With the graduate taxes, a student pays a fixed percentage of income over the entire working life, regardless of how much is repaid. This would work in the context of an effective tax system. The matching grants can be used to encourage the internal generation of funds by educational institutions since the more funds an institution mobilizes the

higher the matching grant. The countries in the region have also not experimented with public-private partnership options such as education levies on the private sector as is the case with tourism levy in the tourism industry.

### 2.4.3 The dominance of private sector in pre-primary and tertiary education in the region is declining

**The private sector owns, runs and finances much of the pre-primary education in East Africa.** Globally, demand for education services is rising at a faster rate than governments can supply.<sup>24</sup> Coupled with this is the notion that the public education system is not providing high-quality education thereby leaving a gap for private sector involvement in provision and financing of education. The private sector accounted for more than half of the enrollments in pre-primary schools in 2010-2019 (Table 20). This means that more than half of the daycare services, pre-kindergarten and kindergarten education services in East Africa is privately owned and financed, up to 100 percent in countries such as Uganda.

<sup>24</sup> [https://www.ifc.org/wps/wcm/connect/news\\_ext\\_content/ifc\\_external\\_corporate\\_site/news+and+events/news/features\\_education\\_caf\\_041010](https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/features_education_caf_041010)

Table 20: Enrollment in Private institutions in East Africa (percent of total)

	Pre-Primary		Primary		Lower secondary		Upper Secondary		Tertiary	
	2010-14	2015-19	2010-14	2015-19	2010-14	2015-19	2010-14	2015-19	2010-14	2015-19
Burundi	37	52	1	2	8	4	13	16	58	59
Comoros	35	45	17	19	48	47	54	63	-	-
Djibouti	61	86	12	13	8	9	12	12	-	-
Eritrea	55	63	8	10	6	9	3	5	-	-
Ethiopia	71	18	5	5	10	5	29	15	-	-
Kenya	31	33	16	-	16	13	-	-	-	15
Rwanda	91	45	2	4	8	7	42	27	54	61
Seychelles	10	11	10	11	8	11	8	14	100	-
South Sudan	70	72	-	-	-	-	-	-	-	-
Sudan	28	29	5	8	9	11	22	25	23	18
Uganda	100	100	15	18	-	-	-	-	47	-
Tanzania	5	6	2	4	19	17	21	28	25	35
<b>East Africa</b>	<b>50</b>	<b>47</b>	<b>9</b>	<b>9</b>	<b>14</b>	<b>13</b>	<b>23</b>	<b>23</b>	<b>51</b>	<b>38</b>

Source of Data: UNESCO Institute for Statistics (2019).

**The importance of the private sector in provision of education sharply declines from 47 percent in pre-primary to 9 percent in primary level of education.** The sharp decline may be explained by the crowding out effect that occurred with the implementation of free primary education under the Millennium Development Goals (MDGs) and now the SDGs. After primary education, the prominence of private education rises from lower secondary (13 percent) through upper secondary (23 percent) to tertiary education (38 percent).

**The private sector in East Africa leverages government financing gaps in education.** A cross tabulation between household financing of education and private sector financing reveals that much of the financing of private education comes from the households. For instance, the rise in enrollment from 9 percent in primary schools to 23 percent in upper secondary in the private institutions (Table 20) is matched by

an increase in household financing of education from 33 percent to 85 percent, and a reduction in government financing from primary education to upper secondary education. The implication is that private players in lower and upper secondary are complementing government provision and financing of education services.

**Education financing by the private sector is declining over time, especially in higher education, lower secondary and pre-primary.** An inspection of the evolution of private sector participation in education reveals that the role of the private sector in financing education is declining. The highest decline is in higher education, from 51 percent in 2010-2014 to 38 percent in 2015-2019. The decline, though marginal, is still notable in pre-school and lower secondary. Private sector participation in financing education has remained constant in primary and upper secondary education.

## 2.5 PRODUCTIVE SKILLS AND EDUCATION FOR THE FUTURE

### 2.5.1 East Africa workforce must prepare for job displacement through digitalization and automation

Technology, globalization, demographic shifts and the impact of the social media are rapidly changing and defining the Future of Work (FOW, 2016 and OECD, 2016). These trends shaping the FOW will continue to offer new opportunities and challenges for individuals and organizations to achieve success (World Economic Forum, 2016). Many of the major drivers of transformation affecting global industries are expected to have a considerable impact on jobs. This is envisaged to range from job creation to job displacement and from heightened labor productivity to widening skill gaps.

**East African countries are likely to continue experiencing job creation and displacement as a result of changes in technology.** New technologies as manifested in digitalization and automation are increasingly penetrating the domain of task. Technological advances and innovations in areas such as robotics, computing power, artificial intelligence and medical sciences is causing disruptive labor market changes. Nedelkoska and Quintini (2018) note that innovative technology has the potential of displacing workers to new jobs rather than replacing them entirely.

**A person in the food preparation industry is twice as likely to lose his/her job to automation as a person in the teaching profession.** Nedelkoska and Quintini (2018) did a survey of the risk of automation for the 32 OECD countries. They established that certain professionals are at a higher risk of automation than others (Annex 8). Occupational groups that have the highest probability of becoming automated typically do not require specific skills or training. These include food preparation assistants, assemblers, laborers, cleaners and helpers and refuse workers. The next category are workers with a large part of their job content being interacting with machines, mainly in the manufacturing sector. Occupations in this category include drivers and mobile plant operators, machine operators, workers in processing industry, skilled agricultural workers and metal and machine workers. At the

end of the spectrum are occupations that require high level of education and training, and which involve high degree of social interaction, creativity, problem-solving and caring for others.

**Most workers in East Africa are in primary and secondary sectors with a high risk of automation.** It includes agriculture and hunting, manufacture of wearing apparel, fishing and aquaculture, other mining and quarrying, manufacture of wood, manufacture of food products, printing and reproduction of recorded media and manufacture of textiles. Sectors in service industry with high average risk of automation include postal and courier activities, land transport and transport via pipes, services to buildings and landscape and waste collection treatment.

**Knowledge intensive business services have a low mean probability of being automated.** Industries with low average probability of being automated are all part of the service sector except for oil extraction (Nedelkoska and Quintini, 2018). The industries fall into the category of knowledge intensive business services, which are the services and operations that are heavily reliant on professional knowledge and concerned with providing knowledge-intensive support for the business processes of other organizations. Their employment is heavily weighted towards science, technology, engineering and mathematics professionals (J-Figueiredo, Neto, Quelhas and Ferreira, 2017).

**East African countries are poised to produce more sophisticated products and services at the core of their product space.** East Africa has been experiencing structural transformation which in turn has led to the evolution of its product space, from the production of less sophisticated products to more sophisticated activities (Abdon and Felipe, 2011). East Africa economies have been transitioning from the production of goods that required intensive use of unskilled labor and land to goods requiring infrastructure, institutions, and human and physical capital. Since what a nation produces today determines its future trajectory or future production, this implies that East African countries will be producing more of sophisticated products and services in future.

### 2.5.2 Low education and skills development reflect on the region's product complexity

East Africa's export basket to the rest of the world is not well diversified and the region is not capable of producing products requiring specialized skills. The Economic Complexity Index (ECI) for East Africa was -0.885 in 2017 (Table 21). Higher values of the index show higher levels of diversity and sophistication of a country's or a region's exports with respect to the rest of the world. The low (negative) values depicted for a few East African countries means that the export basket to the rest of the world is not adequately diversified and sophisticated. The index further measures the knowledge embedded in a country or region's exports. In this context, low values indicate that East African countries are not capable of producing products requiring complex and specialized know-how.

Intra-African trade is more intensive in manufacturing while trade between Africa and the rest of the world is dominated by primary commodities. The Product Complexity Index (PCI) for East Africa's trade with the rest of Africa in 2014-2016 was -0.979 while that with the rest of the world was -1.837. Both figures are low confirming that production of East Africa's exports to Africa or the rest of the world does not require complex and specialized know how. The low figures indicate that East Africa's export basket comprises primary level products such as crude oil, ores and concentrates, mining and tropical agriculture. However, the higher PCI value for East Africa's trade with the rest of Africa, relative to the rest of the world, indicates that intra-African trade is more intensive in manufacturing, which generally requires more know how. East Africa's trade with the rest of the world is dominated by primary commodities. This trend is the same for other countries in Africa such as Angola, South Africa and Zambia.

Table 21: East Africa's Product Complexity Index (PCI) and Economic Complexity Index (ECI), 2017

Country	PCI- Trade with Africa	PCI-Trade with the Rest of World	ECI
Burundi	-0.4	-1.8	-
Comoros	-1.25	-1.65	-
Djibouti	-0.9	-0.8	-
Eritrea	-1	-2.25	-
Ethiopia	-1.1	-1.55	-1.31
Kenya	-0.75	-1.7	-0.49
Rwanda	-1.05	-2.1	-
Seychelles	-1.4	-2	-
Somalia	-0.8	-	-
South Sudan	-1.05	-2.5	-
Uganda	-0.85	-1.8	-0.55
Tanzania	-1.2	-2.06	-1.07
<b>Comparator Countries</b>			
South Africa	-0.1	-1	0.269
Zambia	-1.20	-1.75	-0.514
Angola	-2.25	-2.5	-1.318
<b>East Africa</b>	<b>-0.979</b>	<b>-1.837</b>	<b>-0.855</b>

Source of Data: The Growth Lab at Harvard University, (2019).

**Low literacy rates and low level of human capital optimization in East Africa have a dampening effect on the region's product complexity.** East Africa's limited success in exporting sophisticated and diversified products to the rest of the world is an indicator of the region's inadequate skills and education levels. Abdon and Felipe (2011) observed that economic development involves the accumulation of capabilities or productive knowledge that allows a country to produce a diverse range of increasingly complex products. Higher levels of complexity are strongly correlated with a higher level of income and education in a country.

### 2.5.3 Multi-skilled workforce can reduce technology related net employment losses

**Changes in the world of work are likely to lead to a net employment loss of 5.1 million jobs between 2015 and 2020.** The world of work is fast changing, and today's jobs might be disrupted by automation, digitalization and other technological advances. It is estimated that 65 percent of children entering primary school today will ultimately be employed in new job types that currently do not exist (World Economic Forum, 2016). In the next five years, 35 percent of the skills that are considered important in today's workforce will have changed. The implication is that the global workforce is expected to experience significant churning between job families and functions, and that this trend could lead to a total loss of 7.1 million jobs and a minimal gain of 2 million jobs, yielding a net employment loss of 5.1 million jobs between 2015 and 2020 (World Economic Forum, 2016).

**Digitalization and automation are reducing demand for routine and manual tasks while increasing demand for problem-solving and interpersonal skills.** Digitalization and automation are rapidly defining the nature of work, which raises questions on the potential of technology to substitute work. They have opened the ground for new forms of work organization, confirming that workplaces are increasingly getting digitally focused and automated.

**The future workforce has to train in completely new skill areas and be multi-skilled for ease of transition into the labor market.** Therefore, automation increases the

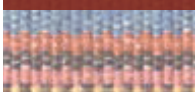
complexity of workers' tasks and reduces the domestic demand for low-skilled jobs and export of highly-skilled tasks to offshore locations where labor possesses the required training and knowledge. Technology is also changing skills demand and job content. In this context, entry level positions will require more sophisticated skills, necessitating re-skilling and re-tooling for existing workers. Changes in technology also affect recruitment processes.

### 2.5.4 Creativity and innovation are critical for the workforce for the future

**The future worker has to be creative and innovative and embrace lifelong learning to be responsive to the changing dynamics in the world of work.** East Africa's education and skills development must evolve if it is to satisfy the future human capital needs of the region. The future workers should be equipped with the requisite know how to deal with the demand for complex specialized skills for economies producing more sophisticated products. They need to be equipped with basic and technical skills augmented with soft skills that are aligned to the dynamic labor and product markets in the region and globalized economy, and to adapt to technological changes with ease. The education and skills development landscape must prepare the labor force for the changes in the FOW such as digitalization and automation. The future workers have to learn creativity and innovativeness to meet the demands of the changing dynamics in the world of work. Lifelong learning should be encouraged to help the substituted workers regain new skills or take up jobs in other areas of the economy where they might be needed.

## 2.6 CONCLUSION AND POLICY RECOMMENDATIONS

**The foregoing discussion proves that East Africa is varied in terms of the years spent schooling, which presents quality of education issues.** An East African child can only expect to have 9.5 years of learning out of the 11-16 years of schooling for learners between the ages of 6 and 17 as envisaged in the region's education systems. On average, most of the learners will only achieve five years of schooling out of the expected 9.5 years, which is 53 percent of the



systems potential. This is reinforced by the HCI estimate of 42 percent for East Africa, which imply that a child born in East Africa will only be 42 percent productive compared to what he/she would have been had he/she received complete health and education. Overall, closures of schools and universities due to COVID-19 affecting 90 million learners in East Africa could create longer-term human capital issues in the region, and disproportionately affect girls, many of whom may not return to school, after the COVID-19 crisis. A COVID-19 effect of at most 10 percent of a standard deviation loss on educational outcomes is estimated.

**Invest in education technology infrastructure.** Closure of schools and universities due to COVID-19 calls for change in the way East African countries think about provision of education. The pandemic could be used as a best test for the education technology interventions for digital and distance learning in the region. This would call for measures to ensure adoption of inclusive methods of digital and distance learning that considers the gender digital divide.

**Address demand and supply side factors that inhibit children from attending school.** The evaluation of education systems in East Africa reveals that progress has been made in addressing dropout rates in lower and upper secondary schools. However, despite this progress few gains have been made in reducing the number of children who drop out of primary schools. Close to eight million children of primary school going age are out of school. This is perplexing considering the efforts the governments are making in providing Education for All (EFA). Therefore, policy makers in East Africa should focus on addressing the demand side and supply side factors that inhibit children from attending school. These include, bad attitudes towards school by the households, child labor, conflict, distance to school and unpleasant experiences in schools.

**Establish academia-industry linkages.** The evaluation of the stock of skills available in East Africa reveals that there is a mismatch between what the graduates are preferring and what the market is offering. Analysis shows that East Africa's universities match the industries demands in business-oriented functions such as operations, sales, business development, administration and entrepreneurship but fail in

all the other functions. For instance, universities prioritize legal training, product management, purchasing and marketing when Africa's industries do not prioritize such job functions. This means that the work force in the region may not be ready to meet the skills demand by the competitive Africa's industries. Policy should endeavor to link the universities and the education system in general with the industry. Furthermore, in addition to provision of soft skills highlighted earlier, there is need for education and training in the region to strengthen imparting analytical, investigative, entrepreneurial, managerial, teamwork, time management and computer skills on learners.

**Integrate creative thinking and emotional intelligence in education and training curricula.** The future of East Africa and Africa in general will be characterized by key disturbances in the Future of Work manifested in automation, changes in how people work collaborate and the ICT intensity of skills. It is projected that 52 percent of tasks in East Africa can be automated based on existing technologies. Further, it is projected that the intensity of ICT among various tasks will increase in the short term to the medium term. For instance, in Kenya, over the last decade 18.4 percent of formal sector employment occurred in occupations with high ICT intensity. Since automation threatens the jobs of those with basic education, it means that the future of jobs in East Africa is in activities with higher levels of education. Further, the high intensity of ICT skills implies that the future belongs to workers who are endowed with intermediate to advanced skills in ICT. Therefore, policy makers in East Africa should endeavor to integrate ICT skills in the curricula of higher learning institutions. Indeed, the education systems should be remodeled to create critical and creative thinkers who are emotionally intelligent to fit in an automated and ICT intensive society.

**Make education financing progressive.** An inspection of the provision and financing of education in East Africa reveals that governments fund education in a regressive manner. In East Africa, tertiary education receives 0.84 percent of the region's GDP compared to 0.48 and 0.46 percent for lower and upper secondary education. This means that East African countries prioritize tertiary education over secondary education,



meaning that governments prioritize the rich over the poor. Households provides 85 percent of the financing required for secondary education, implying that many of the poor who cannot afford to pay for secondary education drop out after primary school, contrary to the rules of social justice. Tertiary education in East Africa is disproportionately in favor of the rich unlike secondary education that is mandatory for both rich and poor. Therefore, policy should endeavor to make the financing of education progressive. This is currently working in Kenya through the subsidized secondary education program and in Uganda through the universal primary and secondary education.

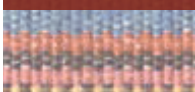
**Ensure that increased government involvement in the provision of education does not crowd out the private sector.** Analysis of the evolution of private sector participation in education reveals that the role of the private sector in financing education is shrinking. The financing of education by the private sector in East Africa is declining with time particularly in higher education, lower secondary and pre-primary. This is against a backdrop of demand that is outstripping supply of educational services. The decline may be explained by the crowding out occasioned by the growing public education in East Africa. Policy makers should, therefore, ensure that expanded state involvement does not jeopardize private sector's participation in education. Indeed, public provision of education should be done in a manner that ensures optimal utilization of resources in private entities. This may mean allowing more government sponsored students in private institutions.

**Undertake broad based reforms to improve education and training and better prepare the future labor force.**

Many countries in East Africa focus on the provision of primary, secondary and tertiary education, leaving out early childhood education, which has the greatest social benefits and constitute the foundation for learning. East African countries, therefore, need to integrate early childhood care and education, basic education, tertiary education and active labor market programs including on the job training for acquisition of practical and job-relevant skills.

**East Africa's commitment to industrial transformation and regional integration is expected to boost the region's demand for educated and skilled labor.**

The low quality of education and skills development within the region will, however, call for focus on addressing the demand side and supply side factors that inhibit children from attending, remaining in and completing school. It is important to address access and quality issues at secondary and tertiary levels of education including university. Similarly, it is key to expand and increase the quality of TVET training and strengthen the teaching of analytical, investigative, entrepreneurial, managerial, teamwork, time management and computer skills on learners particularly at tertiary levels of education. The adoption of a regional approach to delivering specialized TVET skills would be crucial besides establishment of academia-industry linkages to address skills mismatch and integrating creative thinking and emotional intelligence in education and training curricula.





## ANNEXES

Annex 1: Trade indicators for East African countries in COMESA

Country	Indicator Name	2013	2014	2015	2016	2017
Burundi	COMESA Export Intensity Index	23.84	51.56	53.46	53.73	48.66
	Trade Openness Index (Trade to GDP Ratio (%))	42.79	34.92	22.12	17.02	21.26
	Intra-COMESA Export Growth (%)	-1.30	89.40	-36.50	-15.56	9.39
	Intra-COMESA Import Growth (%)	97.10	-66.80	-24.50	6.10	12.16
Djibouti	COMESA Export Intensity Index	.13	.09	1.55	1.14	.01
	Trade Openness Index (Trade to GDP Ratio (%))	121.75	249.72	142.33	252.31	96.11
	Intra-COMESA Export Growth (%)	-94.40	32.20	757.30	-96.70	-94.28
	Intra-COMESA Import Growth (%)	-6.90	-2.00	-.10	50.58	-16.03
Eritrea	COMESA Export Intensity Index	24.78	1.03	2.62	1.13	6.32
	Trade Openness Index (Trade to GDP Ratio (%))	13.80	22.48	17.96	14.28	6.85
	Intra-COMESA Export Growth (%)	-23.80	-15.60	105.00	-68.33	75.89
	Intra-COMESA Import Growth (%)	-86.00	608.60	-34.20	61.21	41.48
Ethiopia	COMESA Export Intensity Index	11.24	7.53	8.97	8.04	11.65
	Trade Openness Index (Trade to GDP Ratio (%))	30.89	40.80	35.63	26.60	22.28
	Intra-COMESA Export Growth (%)	5.20	.80	-42.10	-30.56	22.05
	Intra-COMESA Import Growth (%)	-17.60	63.40	-6.80	5.97	.51
Kenya	COMESA Export Intensity Index	30.65	31.11	30.67	34.11	33.30
	Trade Openness Index (Trade to GDP Ratio (%))	50.97	46.47	34.31	28.08	28.21
	Intra-COMESA Export Growth (%)	1.40	-11.30	-10.80	-.90	-5.11
	Intra-COMESA Import Growth (%)	-7.40	-1.60	-7.20	11.68	61.69
Comoros	COMESA Export Intensity Index	16.68	34.70	27.01	28.36	11.93
	Trade Openness Index (Trade to GDP Ratio (%))	33.66	36.66	102.35	37.09	39.72
	Intra-COMESA Export Growth (%)	67.00	422.00	-56.90	89.17	-54.33
	Intra-COMESA Import Growth (%)	-24.80	-27.30	-46.90	11.10	-32.26
Rwanda	COMESA Export Intensity Index	60.91	57.52	61.74	73.24	62.96
	Trade Openness Index (Trade to GDP Ratio (%))	31.23	28.33	25.11	25.41	39.70
	Intra-COMESA Export Growth (%)	8.70	1.00	-1.70	-12.55	38.94
	Intra-COMESA Import Growth (%)	-11.10	19.80	-11.90	-8.44	16.96
Seychelles	COMESA Export Intensity Index	.74	.45	.38	2.95	.66
	Trade Openness Index (Trade to GDP Ratio (%))	136.67	124.61	115.75	144.64	447.60
	Intra-COMESA Export Growth (%)	-23.90	-39.70	-26.50	619.45	39.93
	Intra-COMESA Import Growth (%)	13.50	-22.20	114.30	-43.15	1.74
Sudan	COMESA Export Intensity Index	3.20	6.61	41.68	26.14	18.70
	Trade Openness Index (Trade to GDP Ratio (%))	25.18	18.31	20.49	25.41	30.39
	Intra-COMESA Export Growth (%)	-42.10	60.00	448.30	-41.89	-2.65
	Intra-COMESA Import Growth (%)	18.20	-22.40	52.70	7.27	-3.51
Uganda	COMESA Export Intensity Index	22.25	31.05	31.18	31.55	37.36
	Trade Openness Index (Trade to GDP Ratio (%))	41.92	43.15	35.94	33.81	38.44
	Intra-COMESA Export Growth (%)	8.70	67.60	-6.90	-2.96	23.82
	Intra-COMESA Import Growth (%)	-1.40	13.30	-12.30	-16.97	19.00

Source of Data: COMESA trade Statistics.

## Annex 2: SDG Index Rankings by Country (2019)

Country	No Poverty	Decent Work and Economic Growth	Reduced in equality	Overall Score	Rank in East Africa	Rank in Africa
Rwanda	44.4	75	13.7	57.90	1	12
Kenya	52.3	70.7	18.1	56.55	2	15
Tanzania	44	71.8	55.7	55.95	3	16
Uganda	71.9	63.5	47.9	54.88	4	18
Ethiopia	58.9	71	56.2	53.22	5	21
Burundi	8	44.8	57.6	50.25	6	34
Djibouti	66.7	59.7	31.6	49.67	7	36
Comoros	40.7	35.3	26	47.57	8	41
Sudan	44.4	39.2	65.9	47.40	9	42
Eritrea	41.8	38	39.5	43.33	10	47
Somalia	27.5	21.8	37.5	40.12	11	49
South Sudan	1.1	43.5	22	29.19	12	52
<b>East Africa (Average)</b>	<b>41.81</b>	<b>52.86</b>	<b>39.31</b>	<b>48.84</b>	<b>-</b>	<b>-</b>

Data for Seychelles is missing.

Source of Data: Africa SDG Dashboard (2019).

## Annex 3: Percentage of Labor Income Earned by Decile 10 (percent annual)

Country	2015	2016	2017
East Africa	59.8	59.8	59.8
Burundi	74.3	74.3	74.4
Comoros	53	53	53
Djibouti	44.7	44.6	44.5
Eritrea	59.1	59	58.8
Ethiopia	67.9	67.6	67.4
Kenya	49.2	49	48.9
Rwanda	61.5	61.4	61.3
Sudan	43.4	43.3	43.2
South Sudan	68.6	69.3	69.7
Tanzania	62.6	62.5	62.3
Uganda	74	73.9	73.8

Data for Somalia and Seychelles Missing.

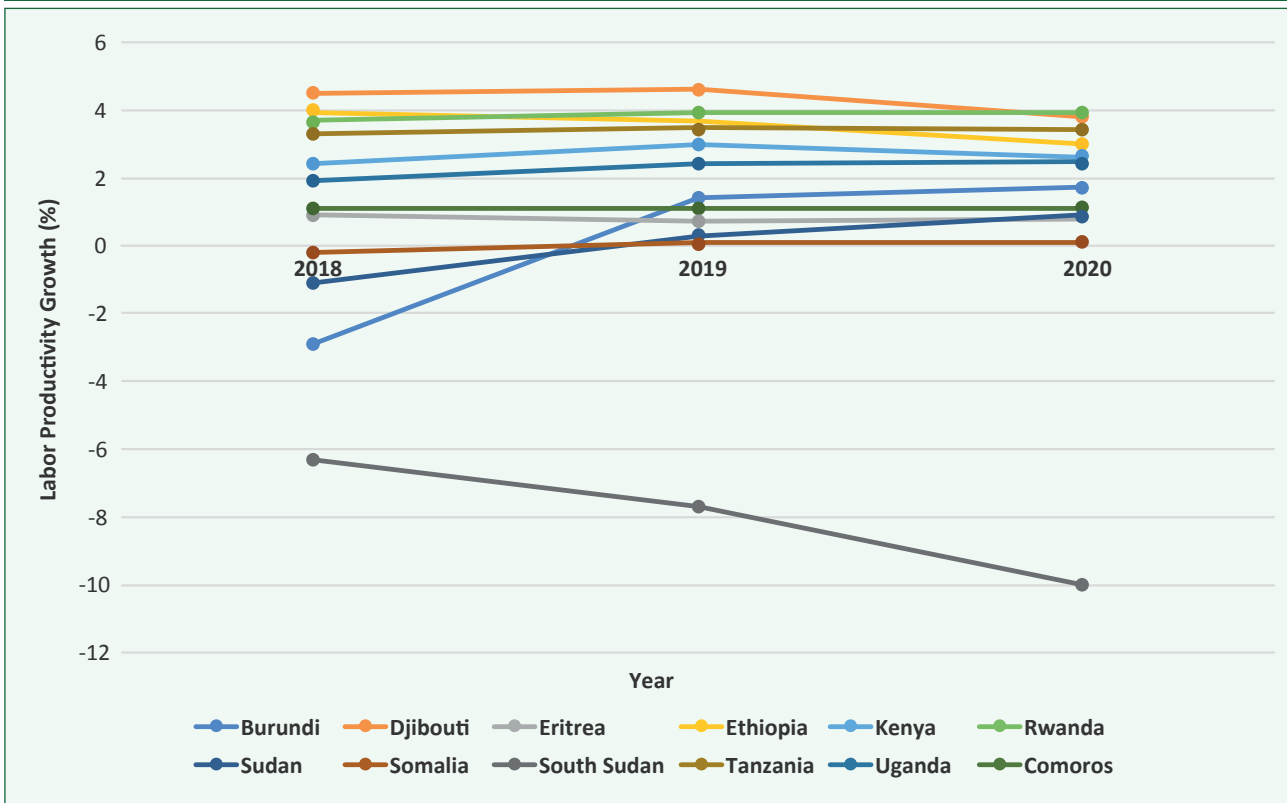
Source of Data: ILO modelled estimates (July 2019).

**Annex 4: Extreme Poverty Rate - workers living below USD1.90 per day (2017-21, percent annual )**

Country	2017	2018	2019	2020	2021
Burundi	71	71.5	71.9	72.2	72.9
Comoros	13.8	13.5	13.1	12.8	12.4
Eritrea	45.9	45.4	44.8	44.1	43.4
Ethiopia	22.4	20.5	18.8	17.3	15.9
Kenya	30.2	29.3	28.3	27.3	26.3
Rwanda	46.9	45.5	44	42.3	40.5
Tanzania	38.5	37.4	36.3	35.1	33.9
Uganda	37.8	37.1	36.3	35.4	34.5
Somalia	63.2	63.2	63.1	63	62.9

Data for Djibouti, Seychelles, Sudan and South Sudan is not available.  
 Source of Data: ILO modelled estimates (2018).

**Annex 5: Trends in labor productivity in East African countries**



Source of Data: ILOSTAT, <https://ilostat ilo.org/resources/methods/description-labour-productivity/>

## Annex 6: Prioritization of Job functions by Industry and Universities

Job Function	Industries Rank	Universities rank
Operations	1	1
Business Development	2	1
Sales	3	1
Information Technology	4	7
Education	5	9
Engineering	6	4
Finance	7	9
Entrepreneurship	8	1
Administrative	9	1
Accounting	10	1
Arts and Design	11	6
Community and Social Services	12	8
Human Resources	13	8
Healthcare Services	14	3
Program and Project Management	15	1
Media and Communication	16	9
Research	17	9
Marketing	18	1
Support	19	9
Consulting	20	9
Legal	21	1
Real Estate Military and Protective	22	9
Services	-	-
Quality Assurance	23	9
Purchasing	24	1
Product Management	25	1

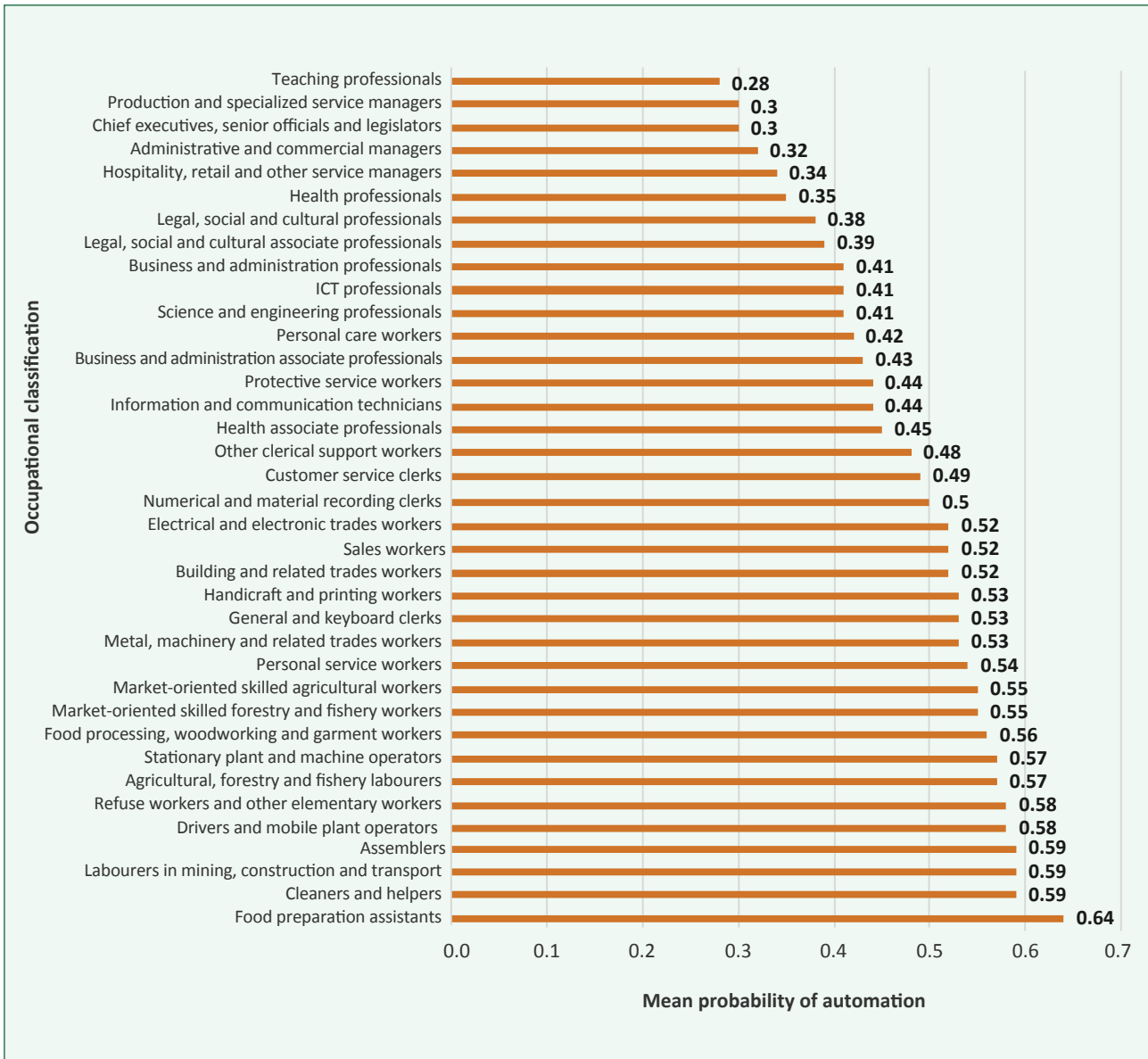
Source of Data: UIS and World Economic Forum,  
[http://www3.weforum.org/docs/WEF\\_EGW\\_FOJ\\_Africa.pdf](http://www3.weforum.org/docs/WEF_EGW_FOJ_Africa.pdf)

## Annex 7: Education and youth unemployment in East Africa

Country	Most Affected Age Group	Level of Education	Year	Unemployment Rate
Rwanda	15-24	Primary	2017	13.8
	25-34	Lower Secondary	2017	15.7
	15-24	Bachelors	2017	20.8
	25-34	Masters	2017	8.0
	15-24	No Schooling	2017	11.1
Sudan	15-24	Primary	2011	14.5
	15-24	Lower Secondary	2011	18.1
	15-24	Bachelors	2011	35.9
	35-44	Doctoral	2011	16.3
	25-34	No Schooling	2011	10.4
Comoros	25-34	Primary	2011	10.8
	25-34	Secondary	2011	6.8
	15-24	Bachelors	2011	29.4
	25-34	Masters	2011	9.8
	15-24	No Schooling	2011	11.9
Burundi	15-24	Lower Secondary	2014	3.3
	15-24	Bachelors	2014	47.5
	15-24	No Schooling	2014	0.8
Ethiopia	25-34	Primary	2013	1.5
	15-24	Lower Secondary	2013	3.9
	15-24	Bachelors	2013	7.5
	25-34	Masters	2013	12.2
	15-24	No Schooling	2013	0.8
Uganda	15-24	Primary	2012	3.4
	15-24	Lower Secondary	2012	4.6
	15-24	Bachelors	2012	24.8
	35-44	No Schooling	2012	2.5

Source of Data: ILOSTAT.

**Annex 8: Risk of automation by occupation**



Source of Data: Nedelkoska and Quintini (2018).



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