EAC

EAC: Scenarios

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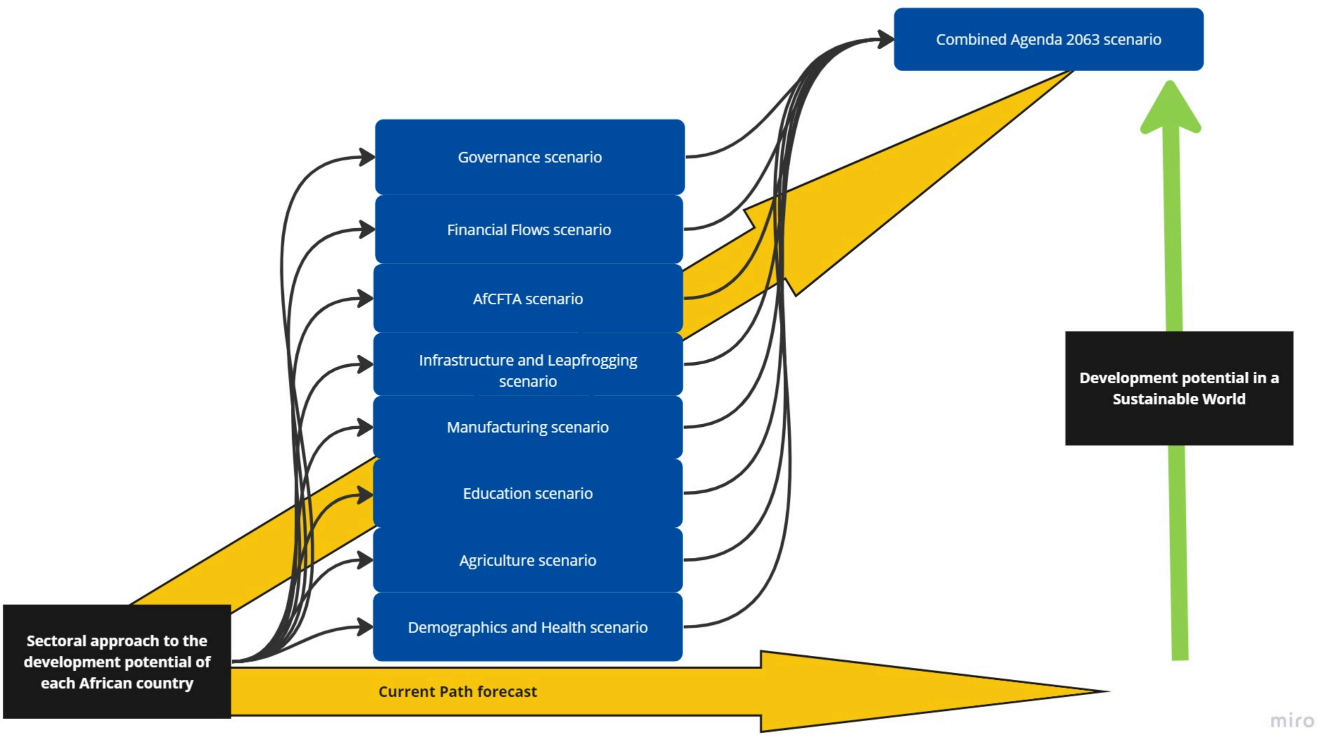
EAC: Scenarios

Briefly

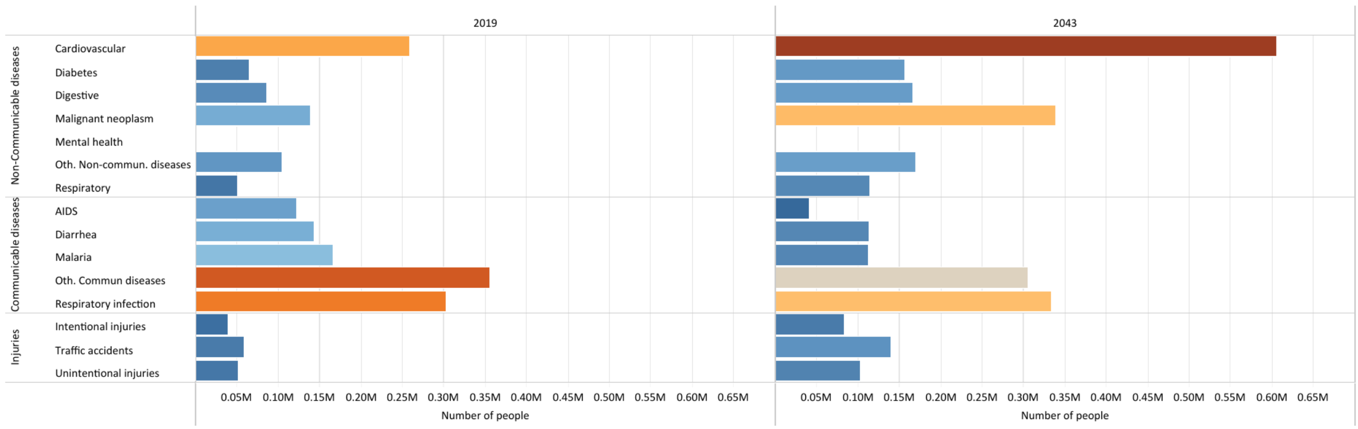
Chart 10: Relationship between Current Path and scenarios



The eight sectoral scenarios as well as their relationship to the Current Path and the Combined scenario are explained in the About Page. Chart 10 summarises the approach.

Demographics and Health scenario

Chart 11: Mortality distribution in the Current Path, 2019-2043



Source: IFs 8.22 initialising from IHME data

Chart 11 presents the mortality distribution in 2023.

The Demographics and Health scenario envisions ambitious improvements in child and maternal mortality rates, enhanced access to modern contraception, and decreased mortality from communicable diseases (e.g., AIDS, diarrhoea, malaria, respiratory infections) and non-communicable diseases (e.g., diabetes), alongside advancements in safe water access and sanitation. This scenario assumes a swift demographic transition supported by heightened investments in health and water, sanitation, and hygiene (WaSH) infrastructure.

Visit the themes on Demographics and Health/WaSH for more detail on the scenario structure and interventions.

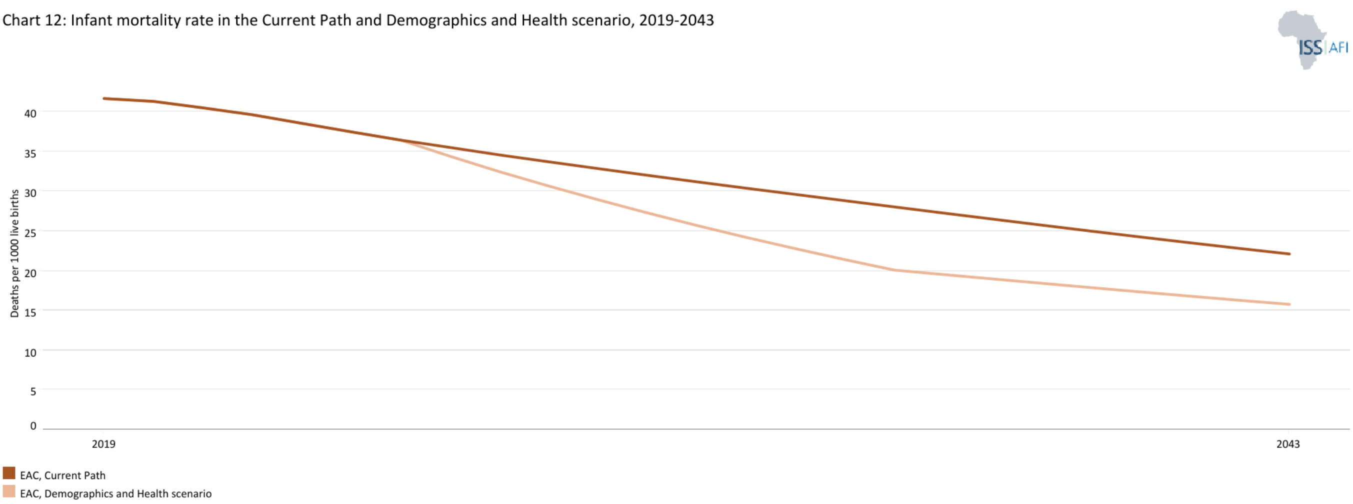
Generally, the main causes of death within a country slowly shift in line with its level of expenditure on healthcare, changing age distribution of the population and increased food security, transitioning from those illnesses which more easily affect children to those who plague the elderly. As populations age, the prevalence of communicable diseases, which are relatively cheaper, declines and the burden of non-communicable diseases, often linked to lifestyle choices such as diet or smoking habit, increases. In addition, a lack of basic sanitation and water infrastructure ins member states mean infants and children are more likely to contract communicable diseases. EAC member countries are at different stages of this epidemiological transition, which is also affected by the level of WaSH infrastructure available to the population. African states in general are in the unique position where the non-communicable disease burden is rising at lower levels of income than in other countries globally.

In 2023, communicable diseases accounted for 53% of all deaths in the EAC, but the EAC will undergo its epidemiological transition in 2031 when non-communicable diseases overtake communicable diseases as the leading cause of death in the region. Due to the nature of these diseases, and the high costs involved, countries will struggle to combat the dual burden of communicable and non-communicable diseases. By 2043, non-communicable diseases will account for 56% of all deaths, highlighting the need for immediate investment in healthcare services to be prepared for the coming stress these diseases will have on health systems. The leading causes of death in 2043 will be cardiovascular diseases, malignant neoplasms, respiratory infections and other-communicables diseases (excludes respiratory infections, AIDS, diarrhea and malaria).

Across the EAC, only Rwanda has undergone this transition. Somalia will be the sole country that does not experience a transition over the forecast horison. Multiple countries in the Horn of Africa region, such as Somalia and Ethiopia, are burdened with severe food insecurity, which leads to large-scale displacement that heightens the risk of infectious diseases spreading through the region. As the population becomes less nourished, they become more susceptible to disease, requiring additional treatments and care, for which governments are ill-prepared. The recent flooding in 2024 also spread water-borne diseases such as cholera and dengue fever in the area, leading to added costs and stress for EAC members' healthcare systems.

Improved access to water and sanitation is an important way to combat communicable diseases. The EAC lags behind the rest of Africa access rate to both improved water and sanitation: in 2023, 73% of the REC's population had access to improved water, 9 percentage points below the African average. Access to improved sanitation was far lower, standing at 30% in 2023 compared to Africa's rate of 43%. On both measure the EAC narrows the gap to the continental average over the forecast period, but fails to fully catch up. Individual countries perform very differently: Rwanda had the highest rates for access to improved water and sanitation in 2023, at 71 and 84% respectively. Burundi and Rwanda are the only countries whose rates outperformed Africa's average in 2023 with access to improved sanitation, while Burundi, Rwanda, Somalia and Uganda scored higher than continental average in access to improved water. Access rates will only improve slowly in the Current Path, especially in access to improved sanitation. By 2043, only Kenya and Rwanda will exceed Africa's average of 55% in access for improved sanitation. Increased investment in improved sanitation is a clear priority, particularly as better WaSH infrastructure aides in the fight against communicable diseases.

Chart 12: Infant mortality rate in the Current Path and Demographics and Health scenario, 2019-2043



Source: IFs 8.22 initialising from IHME data

Chart 12 depicts the infant mortality rate in the Current Path versus the Demographics and Health scenario, from 2019 to 2043.

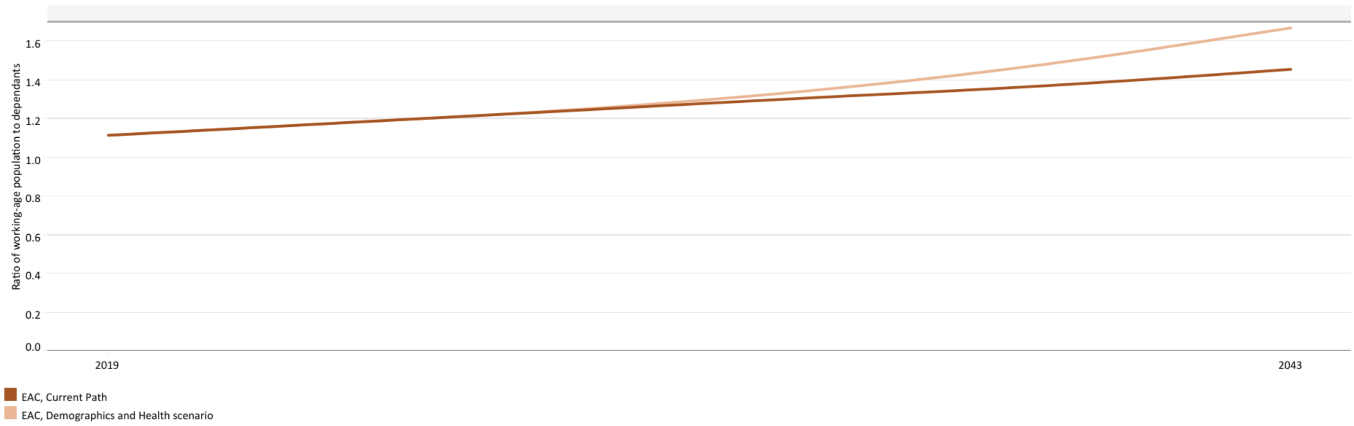
In this scenario, we assume a more rapid demographic transition and increased investments in better health and water, sanitation and hygiene (WaSH) infrastructure.

The infant mortality rate is the probability of a child born in a specific year dying before reaching the age of one. It measures the child-born survival rate and reflects the social, economic and environmental conditions in which children live, including their health care. It is measured as the number of infant deaths per 1 000 live births and is an important marker of the overall quality of the health system in a country.

Rates of infant mortality in the EAC in 2023 were at 38.5 deaths per 1 000 live births and will reduce to 22.1 in the Current Path by 2043. In the Demographics and Health scenario, the average by 2043 will be 15.8 deaths, 6.3 fewer compared to the Current Path and 10.7 fewer deaths compared to the Current Path average for Africa in the same year. The REC recovers to reach levels akin to the World except Africa grouping in the scenario by 2043, significantly reducing the gap to the Rest of the World from 19.6 in 2023 to 4.7 deaths per 1000 live births by 2043.

South Sudan and Somalia were in much worse positions compared to the rest of the REC's members. In 2023, they had infant mortality rates of 62.1 and 56.5 respectively, where the next worst country, Burundi, had a rate of 42.2. Both see significant reductions in the scenario and see reductions above 10 deaths per 1000 live births compared to the Current Path by 2043. In contrast, Kenya and Rwanda see lesser reductions, but they have both seen positive downward trajectories for some time, especially Rwanda. The rapid improvements in Rwanda is mainly due to the drastic change brought about the central government following the genocide in 1994, pivoting to universal health coverage provided by the state and international funders. A much greater emphasis was placed on primary health care and bringing services closer to the largely rural population. From a high of 94.3 in 1996, Rwanda has seen a dramatic drop to 29.2 by 2023, only 0.6 deaths above Kenya. By 2043, Rwanda will have the lowest rate in the REC, at 10.6, followed by 12.5 for Kenya and 13.8 for DR Congo.

Chart 13: Demographic dividend in the Current Path and the Demographics and Health scenario, 2019-2043



Source: IFs 8.22 initialising from UNPD Population Prospects data

Chart 13 presents the demographic dividend in the Current Path compared to the Demographics and Health scenario, from 2019 to 2043.

Demographers typically differentiate between a first, second and even a third demographic dividend. We focus here on the contribution of the size of the labour force (between 15 and 64 years of age) relative to dependants (children and the elderly) as part of the first dividend. A window of opportunity opens when the ratio of the working-age population to dependents is equal to or surpasses 1.7.

In 2023, the ratio of working-age persons to dependants for the EAC was 1.17 to 1, well below the average of 1.31 to 1 for Africa. It means that for every dependant in the region, there are about 1.2 workers. In the Current Path forecast, the EAC enters the demographic dividend in 2053, given its large population momentum and its high fertility rates, and reflecting the very low median age in the REC. In the Demographics and Health scenario, the EAC reaches a ratio of 1.7 working-age persons to every dependant in 2043, 8 years earlier than Africa on its Current Path forecast.

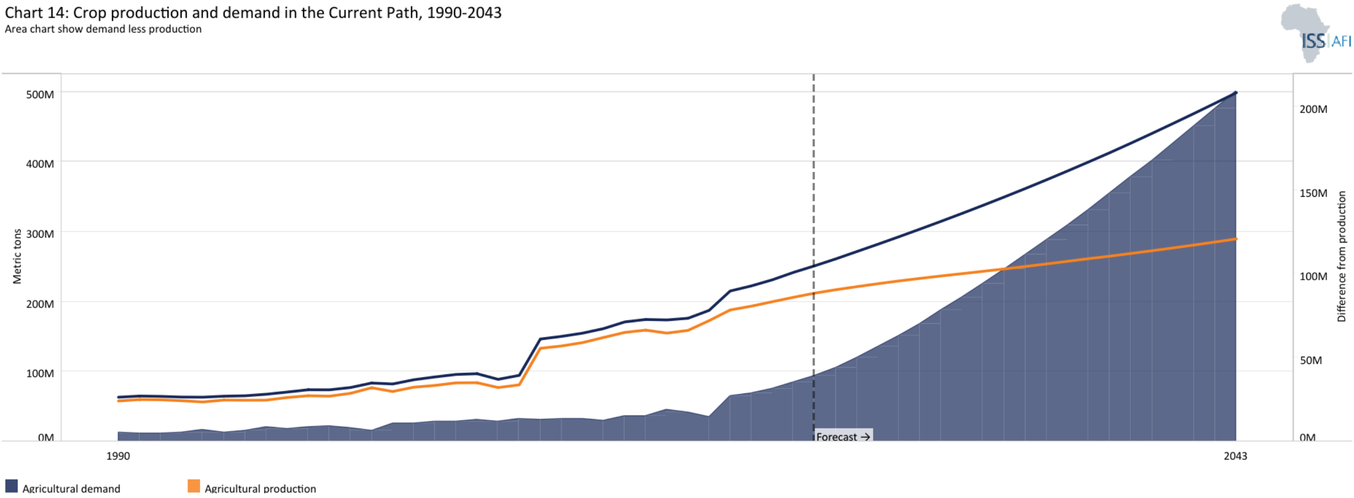
Kenya (in 2032) and Rwanda (in 2035) are the only countries set to enjoy a demographic dividend in the Current Path forecast before 2043. The scenario has two effects on the demographic dividend: it shortens the amount of time it will take for countries to reach a ratio of 1.7, and heightens the peak of this ratio above the Current Path forecast.

Compared to the Current Path forecast, two countries, Uganda and Tanzania, will reach their demographic dividend within the forecast cast horison, in 2040 and 2043 respectively. DR Congo will also reach the ratio of 1.7 twelve years earlier, in 2049 instead of 2061. Kenya on the other hand will see its ratio grow the most, reaching a ratio of 2.3 by 2043 compared to

1.9 in the Current Path forecast. Somalia will see the least impact, with its ratio only growing by 0.06 by 2043.

Agriculture scenario

Chart 14: Crop production and demand in the Current Path, 1990-2043
Area chart show demand less production



Source: IFs 8.22 initialising from FAO food balance sheets data

Chart 14 shows the crop production and demand from 1990 to 2043.

The Agriculture scenario envisions an agricultural revolution that ensures food security through ambitious yet feasible increases in yields per hectare, thanks to improved management, seed, fertiliser technology, and expanded irrigation and equipped land. Efforts to reduce food loss and waste are emphasised, with increased calorie consumption as an indicator of self-sufficiency and prioritising it over food exports. Additionally, enhanced forest protection signifies a commitment to sustainable land use practices.

Visit the theme on Agriculture for our conceptualisation and details on the scenario structure and interventions.

The agriculture sector in EAC faces a series of challenges that complicate this situation:

- Technology-related factors
  - Inadequate research, extension services and training
  - Prevalence of pests and diseases

- Nature-related factors
  - Degradation of natural resources
  - Climatic and weather unpredictability

- Cross-cutting and cross-sectoral related factors
  - High incidence of poverty
  - Inadequate social infrastructure
  - Gender inequality

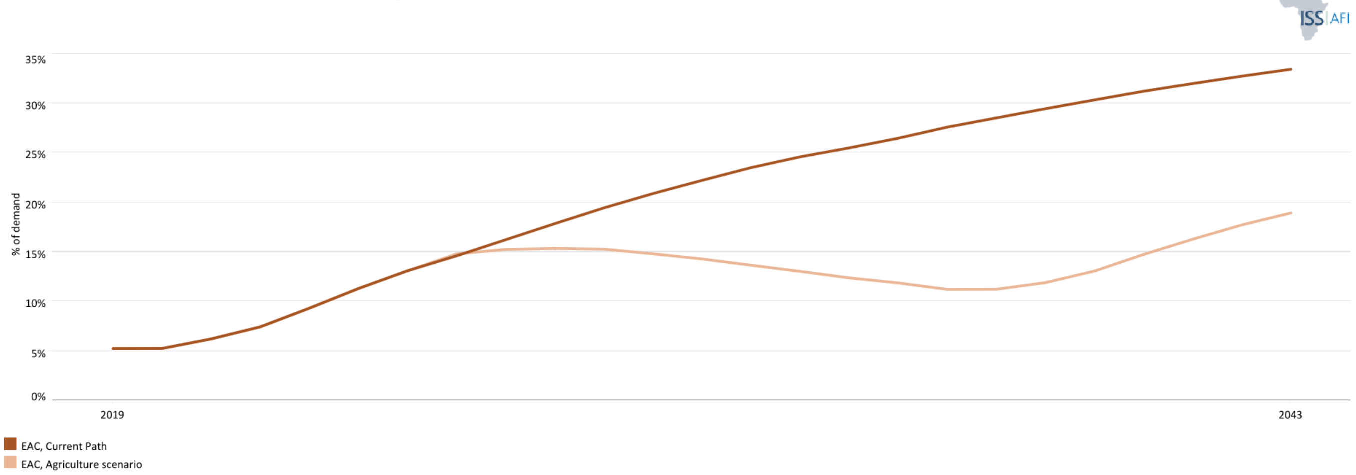
EAC member states produces a large variety of crops, the main types being maize, rice, potatoes, bananas, cassava, beans, vegetables, sugar, wheat, sorghum, millet and pulses. The region also produces cash crops,which are tea, cotton, coffee, pyrethrum, sugar cane, sisal, horticultural crops, oil-crops, cloves, tobacco, coconut and cashew nuts. However, East Africa, and the Greater Horn of Africa region in particular, has been experiencing a severe drought since 2020, leading to crop losses, livestock deaths, and severe water and food insecurity. The severity of the drought has been amplified by climate change, leading to a much longer dry spell. In a region where most farmers depend on rainfall for their crops, this has been devastating for the local population, causing an estimated 20 million people to be food insecure and the death of at least 8 million farm animals. As of April 2024, 10.8 million children were assessed as being malnourished by the Integrated Food Security Phase Classification (IPC) initiative, while 27.8 million people were assessed as food insecure and in need of assistance in Somalia, South Sudan, Kenya, Uganda and Ethiopia. At the same time, parts of the region experienced unseasonal rainfall, leading to widespread flooding that further hampered agricultural activities as people were forced to leave their homes in search of safe living conditions.

These adverse weather conditions have further entrenched the EAC's food insecure status. Since 1990, the REC has failed to meet agricultural demand, with the shortfall growing from 5.3 million metric tons in 1990 to 39.1 million metric tons in 2023. These shortages in agricultural production will worsen considerably over the forecast horison. By 2043, the REC's deficit will balloon to 209 million tons by 2043. At the country level, only South Sudan produced enough food in 2023 for its population, but all 8 member states will have significant shortfalls by 2043. Somalia will fare the worst, with agricultural production falling 73% below demand by 2043, followed by Uganda at 53%. South Sudan will have the smallest shortfall at 27%.

Failing to compensate for the shortfall through increased imports and drastically improved yields per hectare will worsen an already troubling food security situation over the medium term. Furthermore, agricultural activity is a key source of employment for the EAC. In 2022, 56% of the REC's labour force was employed in the agriculture sector. The worsening weather conditions threaten the livelihoods of these workers and will worsen poverty in the region as smallholder farmers struggle to earn a living. At a country level, Burundi has the highest share of workers working in the sector, at 85%, with the percentage rising to 92% when considering the female labour force only. In all 8 countries, women working in agriculture make up a larger share of the female labour force than the male equivalent. Thus, underperformance in the agriculture sector is not only a threat to food security but will also worsen gender inequality in the EAC. South Sudan, for example, has a female labour force where 74% of women earn their living in agriculture, whereas male farmers make up only 47% of the male labour force. At the REC level, 62% of female labourers are employed in agriculture, compared to 50% of male labourers.

Implementing strategies and frameworks developed at the REC level will be key for member states in addressing these issues. One such strategy is the EAC Food and Nutritution Security Action Plan, which emphasizes the need for member states to better implement regional objectives at the national level, harmonisation between regional and national development plans and the Action Plan's goals, better monitoring and evaluation frameworks to track progress and increasing the capacity of the EAC's own Department of Agriculture and Food Security to better serves EAC members.

Chart 15: Import dependence in the Current Path and Agriculture scenario, 2019-2043



Source: IFs 8.22 initialising from FAO Food Balance Sheets data

Chart 15 presents the import dependence in the Current Path and the Agriculture scenario from 2019 to 2043.

No country globally is expected or capable of producing all the agricultural products it needs to feed its population partly due to dietry preference. All states need to import food to sustain their people, but the more a country relies on others for sustenance, the higher the uncertainty and risks become. The outbreak of war in Ukraine in 2022 serves as a prime example of an external shock which dramatically impacted the food availability and security of African states. Many African states rely on Ukrainian and Russian wheat and grain, and the disruptions in trade due to war severely affected these countries.

On average, the EAC steers clear of these risks as food imports equated to only 9% of agricultural demand, 2 percentage points lower than the average for Africa in 2023. Over the forecast horison however, the REC will increasingly depend on imports to satisfy growing demand, with import dependence rising to 33.4% by 2043 in the Current Path forecast. The Agriculture scenario will mitigate this situation lowering the import dependence to 28.9% by 2043, which highlights the potential the REC's agricultural sector has to provide for its populace should the right interventions be made.

Somalia had the highest level of dependence in 2023, importing the equivalent of 48% of its agricultural demand. The Current Path and Agriculture scenario will both see this rate rise, but in the scenario import dependence only reaches 58%, 6 percentage points lower than in the Current Path forecast. The country will continue to have the lowest agricultural production per capita amongst EAC members, and requires continued external assistance to feed its population. On the other end of the scale. Kenya and Burundi will have the lowest levels of dependence by 2043, at 0.5 and 6.9% respectively. Even though most of Burundi's work force is already employed in the agriculture sector, the scenario's focus on improving yields through better farming practices unlocks the country's agriculture potential and increases self sufficiency. Kenya likewise realises the full potential of its agriculture sector, with an emphasis on reduced agricultural losses boosting production.

Education scenario

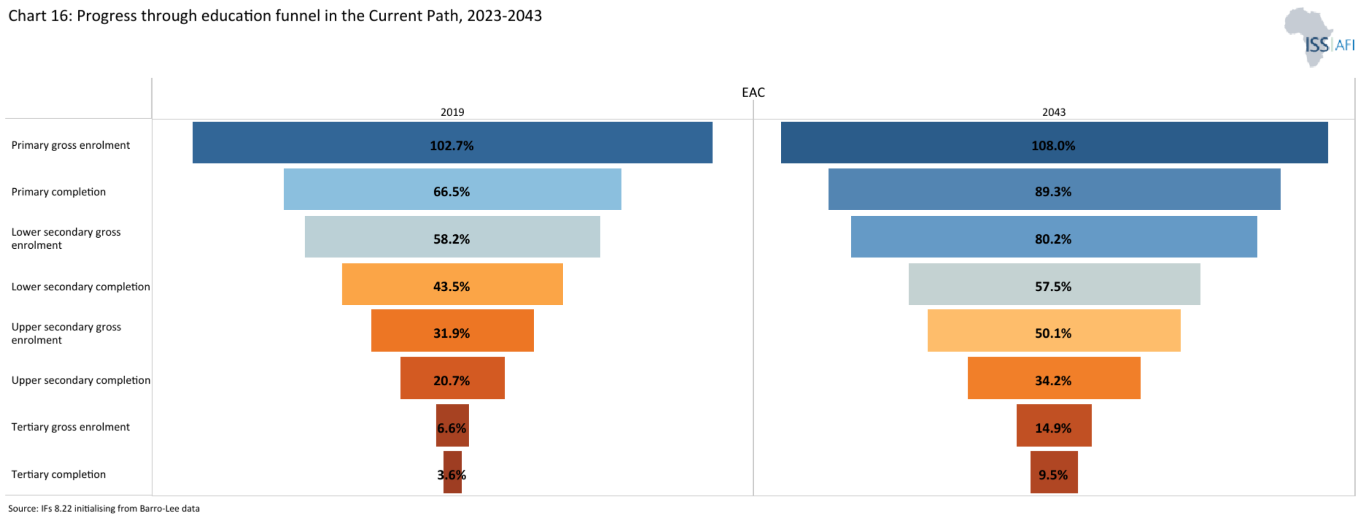


Chart 16 presents the progress through the educational system compared to the Africa income group (primary gross enrolment, primary completion, lower secondary gross enrolment, lower secretary completion, upper secondary enrolment, upper secondary completion, tertiary enrolment, and tertiary completion (2023 and 2043)).

The Education scenario represents reasonable but ambitious improved intake, transition and graduation rates from primary to tertiary levels and better quality of education at primary and secondary levels. It also models substantive progress towards gender parity at all levels, additional vocational training at the secondary school level and increases in the share of science and engineering graduates.

Visit the theme on Education for our conceptualisation and details on the scenario structure and interventions.

When considering the success of an education system, several factors need to be considered, two of which is the level of enrolment and completion. The members of the EAC have, like most countries in Africa, reached a level of universal primary school enrolment, making rapid progress in the last few decades. However, as learners progress through the education funnel, moving to secondary and tertiary education, an increasing number drop out and fail to complete their schooling at each level. In 2023, East Africa is the region where the highest share of learners were out-of-school at both the lower and upper secondary school levels. High levels of instability, conflict and climate related crises partly account for this as children are often needed to attend to other chores and tasks necessary for survival in difficult living conditions.

The region also faces challenges related to higher education, with funding for universities a particular problem across EAC members. The rapid increase in the amount of students enrolling at universities has placed an added burden on higher education financing and stretched already severe capacity shortages even further. A related are of concern is the quality of higher education, as students who exit university training often struggle to find gainful employment, often due to a mismatch between their learned skills and the needs of the labour market. Strengthening technical and vocational eduaction training (TVET) in the area has been touted as a possible solution to this skills mismatch. Implemented in May 2022, a Regional TVET Qualifications Framework developed under the the Eastern African Skills for Transformation and Regional Integration Project (EASTRIP) aims to promote “regional mobility of students and skilled workers” and help harmonise TVET education across the region.

Gender disparities in educational enrolment and attainment undermine the effectiveness of the region’s education system. In 2023, male students attained higher levels of gross enrolment across all four levels of education in the EAC, ranging from 2.1 percentage points at tertiary level, to 4.9 percentage points at upper secondary level. Four countries stand out for their poor performance in the EAC: DR Congo, South Sudan, Somalia and Uganda. DR Congo and South Sudan have not reached parity at any level , while Somalia and Uganda have only reached gender parity in at one level each. Furthermore, the disparities are large: at lower secondary and upper secondary level, DR Congo's gender disparity was 31 and 23 percentage points respectively. The inequality at primary level for South Sudan stood at 27 percentage points in 2023, Somalia's imbalance equated to 5 or 6 percentage points at primary and both secondary levels.

These countries struggle with child marriage and violence against women, which negatively affect the ability of girls to attend and complete school. In the latest version of the OECD's Social Institutions and Gender Index (SIGI), child marriage rates[1] for these four countries were high: South Sudan had a rate of 40%, followed by 20% in Uganda, and 18% in Somalia and DR Congo. The global median score stood at 7.5%, while Africa's median score was considerably higher at 17%.

Furthermore, in DR Congo, Somalia and Uganda, a large share of women aged 20-24 have had children before the age of 18, at 25%, 27% and 28%. Coupled with laws and social norms and attitudes which see women as primarily responsible for household tasks and childrearing, these practices and laws contribute to girls being marginalised and excluded from the education system. These deep seated problems will take time to change and in the 20 years, equality in education will worsen in the EAC: by 2043, gender gaps will have widened at every level, except in tertiary education, where the gap will be reversed in favour of female students.

The EAC's gross enrolment rate of 103% in 2019 for primary school is above Africa's average of 100%, but only 73% of of-age learners complete primary school. Net enrolment, which only accounts for enrolment by children of the appropriate age group, was significantly lower than gross enrolment, at 85%, but still outperformed Africa's average by nearly 3 percentage points. The trend continues throughout the funnel, as the EAC lags behind the continental average across all four levels. The gap is widest at the upper secondary level: Africa saw 42% of of-age children enrolled in upper secondary schooling by 2023, while the EAC's rate was 8 percentage points lower. Tertiary education gross enrolment in the EAC is also lagging behind the continental average: in 2023, gross enrolment stood at 6.6% in the EAC, 7.4 percentage points below Africa's average. Over the forecast period, the REC will see significant improvement throughout the funnel: lower and upper secondary enrolment will increase by 18 and 16 percentage points respectively, while primary completion will jump by 16 percentage points too. Tertiary enrolment will increase by 8.3 percentage points, while tertiary completion will rise to 9.5%, 5.9 percentage points higher than in 2023.

Country level performances between EAC members vary significantly: although Kenya does not have the highest primary gross enrolment rate, 105%, it succeeds in keeping children in school for longer, as the primary completion rate only drops to 93%, and lower secondary gross enrolment rises to 95%. The country outperforms its EAC peers across the pipeline, with its upper secondary completion rate of 55% considerably higher than the DR Congo's 22%, which ranked second in 2023.

Rwanda, Somalia and Tanzania all attained primary completion rate above 80% in 2023, but saw lower levels lower secondary enrolment. Uganda and Burundi had very high primary gross enrolment rate, 110% and 125% respectively, but both countries saw low primary completion rates at 47% and 67% in 2023.

On the other end of the scale, South Sudan performs poorly, not only having the lowest primary gross enrolment rate, 84%, but also failing to keep children in school, as primary completion drops to 31%. By the upper secondary level, only 6% of of-age children are completing high school. The country's struggles stem from a lack of government coordination, low levels of funding, and continous weather and conflict related crises. In 2021, UNESCO found that nearly 60% of primary and secondary school children were not in school. Sizeable differences between rural and urban locations exist, with those living in pastoralist communities disproportionately affected. Orphans and girls in early marriages were two groups also more likely to miss school.

All eight members will see their educational attainment and completion rates increase by 2043, but a few improvements are noteworthy: Somalia, Kenya, Rwanda and Tanzania will have primary completion rate above 95%, while Uganda and Burundi make signifant progress to reach rates of 82% and 86% respectively. South Sudan also catches up to a degree, reaching a primary gross enrolment rate of 99%, while primary completion will stand at 68%, a 37 percentage point rise from 2023.

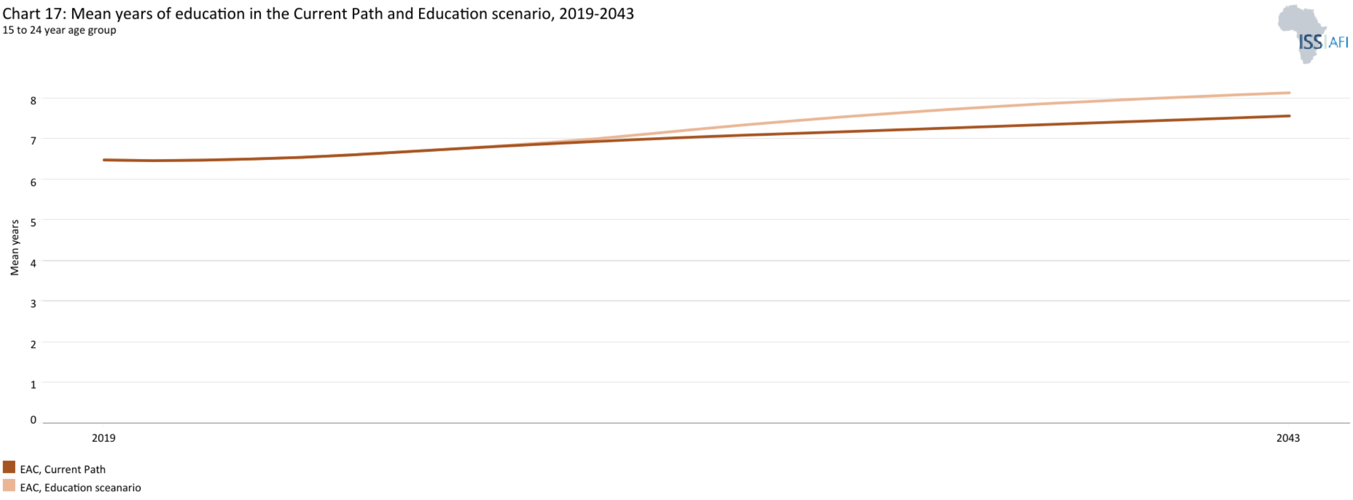
Education quality is another key consideration, and is as important, if not more important, than access to education. Of key concern to the EAC, and in Africa as a whole, is the low level of proficiency of learners, with the quality of content learnt so low as to be of little to no value for the labour market. One factor which helps explain low levels of educational quality is the lack of qualified teachers, leading to low teacher-to-pupil ratios and necessitating temporary measures such as parents paying teachers to make up the deficit. Lack of infrastructure and sound learning curriculums also play a part. Countries such as Rwanda, DR Congo and Kenya have taken steps to address these issues, focusing on increasing classroom-to-pupil ratios, reducing distances between students and schools, increasing the number of teachers through international funding projects, and including gender-sensitive strategies to ensure girls receive the same quantity and quality of schooling at their male peers.

Although quantifying and comparing the quality of education is difficult, IFs uses the test performance of students to track progress. In 2023, the average test score for primary learners was 27, which is set to only increase to 31 by 2043. The secondary education test score in the Current Path improves from 37 in 2023 to 40 by 2043. At both levels the EAC outperforms the African average, but will continue to lag behind the rest of the World, with primary test scores 4 points lower and secondary test scores 3 points lower by 2043.

When considering education quality at the member state level, three groupings appear. Kenya, Uganda, DR Congo and Tanzania, had similar scores in 2023, ranging between 28 and 30 for primary level test scores, and 38 and 40 for secondary level test scores. Rwanda, Burundi and Somalia were clustered between score of 18 and 22 for primary level test scores and 30 and 32 for secondary test scores in 2023. South Sudan is an outlier, scoring 8 at primary level, 10 points behind the next best country, and 22 at secondary level, 8 points behind. South Sudan's poor performance partly stems from ongoing weather and conflict crises, affecting the quality of education substantially. The constant flux of displaced persons leaving and returning to the country puts additional strain on existing educational infrastructure, while a lack of government funding inhibits progress in both enrolment levels and quality of education, as no public-funded schools have been built since 2011 and budget allocation fails to translate into actual expenditure.

On the Current Path, all eight EAC members will see their scores increase between 2 and 5 points, where South Sudan will see a larger rise from their low base by 2043. Kenya's increase of 5 points in primary scores is notable, as it comes from a high base in 2023 and outperforms others in the REC. However, South Sudan will fail to surpass the next best country's, Somalia, score in 2023 at both the primary and secondary level.

Chart 17: Mean years of education in the Current Path and Education scenario, 2019-2043
15 to 24 year age group



Source: IFs 8.22 initialising from Barro-Lee data

Chart 17 depicts the mean years of education in the Current Path compared to the Education scenario (for the 15 to 24 age group), from 2019 to 2043.

The average years of education in the adult population aged 15 to 24 is a good first indicator of how the stock of knowledge in society is changing.

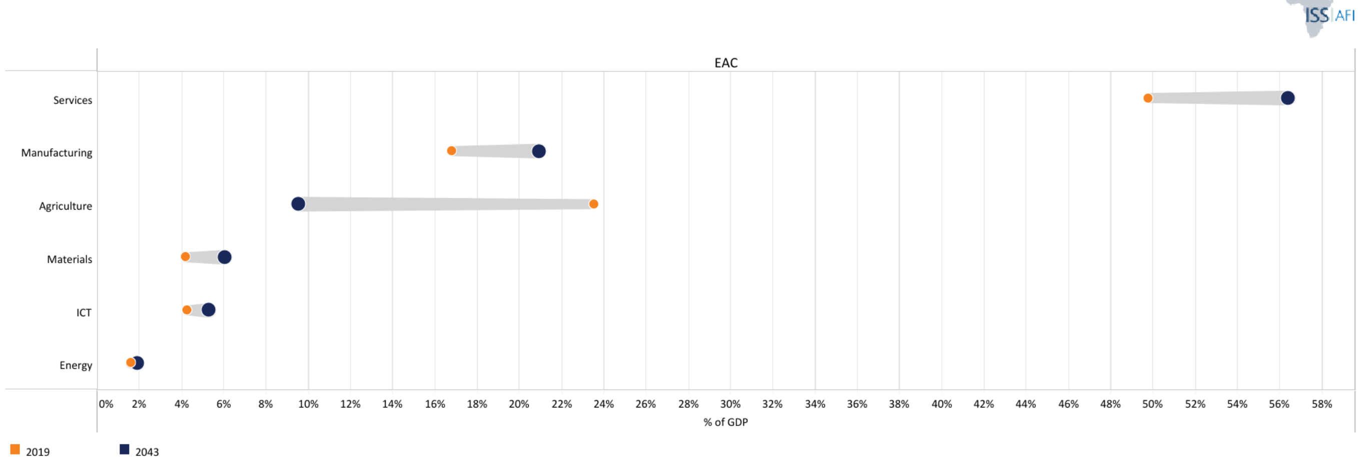
As discussed in chart 16, the EAC faces a number of challenges surrounding education, with large variance in performance between countries. While Kenya performs well by enrolling a high number of children, and ensuring they complete their education, others such as South Sudan and Somalia lag behind.

At the REC level, in 2023 the adult population between age 15 and 24 had an average education of 7 years, which is set to increase to 8.1 years in 2043 on the Current Path. In the Education scenario, the mean years of education of the EAC would increase to 8.5 years, 0.7 years higher than Current Path average for Africa. The gap between male and female educational attainment stood at 1.3 years in 2023, a gap which will close to 1 year by 2043 in Current Path. In the Education scenario, the gap will remain at 1 year, but the both will see their mean years of education rise by 0.4 years compared to the Current Path.

Kenya had the highest mean years of education in 2023 at 8.7 years, while South Sudan only had 3.1. The country which will improve the most over the forecast period is Somalia, which will see its level rise from 4.1 to 5.9 years, an increase of 1.8 years. The Education scenario will have the largest effect in DR Congo and Burundi with increases of 0.8 and 0.6 years in 2043 respectively.

Manufacturing scenario

Chart 18: Value-add by sector as % of GDP in the Current Path, 2019-2043



Source: IFs 8.22 initialising from IMF World Economic Outlook data

Chart 18 presents manufacturing as a share of GDP in the Current Path compared to the Africa income group, from 2019 to 2043.

In the Manufacturing scenario, reasonable but ambitious growth in manufacturing is envisaged through increased investment in the sector, research and development (R&D), and improved government regulation of businesses. This aims to enhance total labour participation rates, particularly among females where appropriate and is accompanied by increased welfare transfers to unskilled workers to mitigate the initial rises in inequality typically associated with a low-end manufacturing transition.

Visit the theme on Manufacturing for our conceptualisation and details on the scenario structure and interventions.

The EAC views the manufacturing and industrial sector as a key driver for sustainable growth in the region, aiming to grow the sector significantly between now and 2032, the end of its current Industrialisation Strategy. The main goal is to grow the share of manufacturing in the economy to 25% of GDP by 2032 through the achievement of a set of specific targets:

- Ensure local value-added content makes up 40% of all of resource-based exports
- Improving institutional frameworks to increase the effectiveness of industrial policies
- Invest in R&D to structurally transform the manufacturing sector
- Expand manufacturing trade:
  - intra-regional manufacturing exports amounts to 25% of all manufactured imports into the region
  - manufactured exports accounts for 60% of total merchandise exports
- Transform SMME's into competitive businesses capable of contributing 50% of GDP generated by manufacturing.

A sectoral evaluation in 2023 by the EAC highlighted the following challenges however:

1. Limited financing and resources available for development

2. Difficulties in building quality infrastructure such as industrial parks and electricity supply
3. Shortage of industrial skills due to subpar human capital development
4. Slow decision making at a regional level on industrial policies
5. Lack of R&D and Technological innovation.

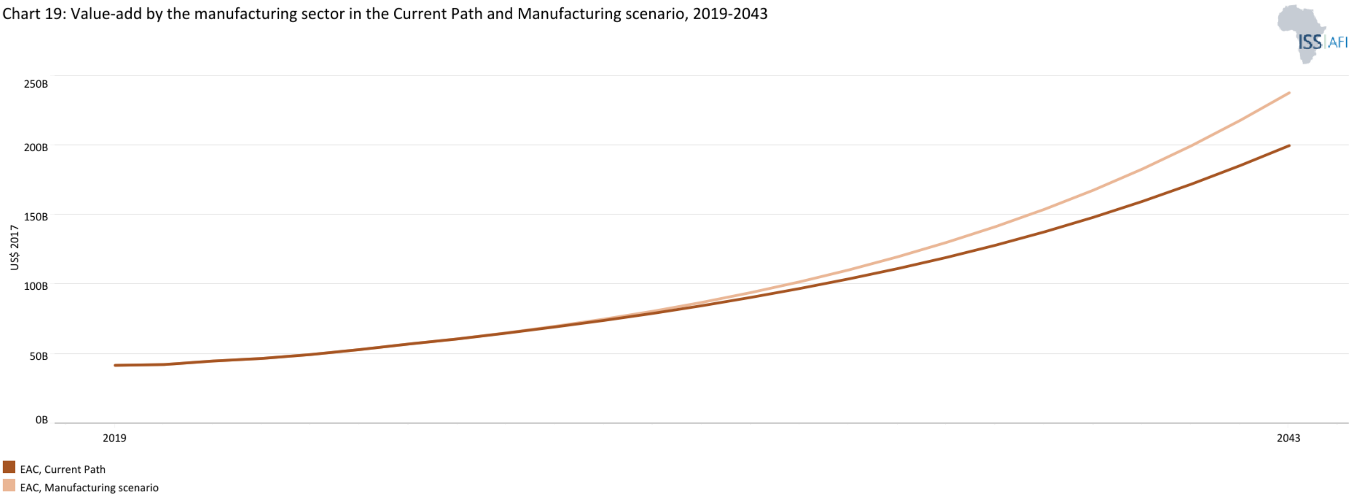
To counter these challenges, member states must work to align their industrial policies through the EAC, with increased harmonisation potentially leading to a more robust regional market for manufacturing firms to exploit. Additionally, the region should play to its strengths and focus, in the short-term, on agro processing industries, before diversifying into higher value products in the medium to long term. The cotton apparel and leather products value chains are particularly suited to the competitive advantages of the region. Production of cotton and leather related products is already underway, with wood-based products also an important part of the manufacturing output in the region. The overall trend is for countries to either focus on the conversion of their abundant agricultural output into low-value added products, such as food and beverages, tobacco, textiles and clothing. A small number of industries are connected to international value chains which produce vehicles, electronic equipment and machinery, and growth in this sector is needed to spur on greater industrialisation in the region. An increased focus on labour market specific training and education is also needed, through tailored university programmes and TVET institutions.

The EAC has stalled in this pursuit of manufacturing sector growth over the last two decades. According to the World Bank's World Development Indicator database, the average size of the sector, as a % of GDP, has only increased by 1.2 percentage points between 2004 and 2022, from 10.6 to 11.8%. Uganda is the only bright spot over this period, with the manufacturing sector growing from 6.4 to 16.4% as a % of GDP. Rwanda had a period of growth from 2016 to 2022, as the size of the sector grew from 6.7% to 9.9%.

The International Futures model forecast for the manufacturing sector initializes from the same data, but due to the model needing its six-sector model to sum to 100% of GDP, an artificial jump in the forecast occurs in 2023. Thus, forecast for the EAC is likely overly optimistic: by 2043, manufacturing is forecast to contribute 21% of GDP, a significant rise from 11% in 2022. Still, the REC will not meet its goal of 25% by 2032, and considerable work remains for member states to better its industrial base.

The performance of individual member states diverge considerably. Considering the data for 2022, DR Congo and Uganda's manufacturing stood at 17 and 16% of GDP respectively, followed by Burundi at 11%. The two weakest performers were South Sudan and Somalia, at 7.5% and 6.5% in 2022. Due to the same reason discussed above, values diverge considerably from 2023 onwards. By 2043, Uganda's manufacturing sector would equate to 29% of GDP, a 13 percentage point increase. South Sudan will also see significant growth, adding 19.5 percentage points to reach 27% of GDP, climbing from 7th to 2nd place amongst EAC members. The South Sudanese economy will undergo a shift away from services and energy towards manufacturing, as services' share dips to 28% from 57% in 2015. Energy's share will also drop from 41% in 2023 to 27% by 2043. These drastic changes in the forecasts must be considered carefully and cautiously due to the data limitations for South Sudan. Futhermore, the country has historically struggled to create a robust manufacturing sector, due to a lack of raw materials and basic infrastructure. The country relies heavily on oil as a source of income, which is exported in an unrefined state as South Sudan has no oil refineries of its own. Overcoming these challenges and dependence on oil is possible, and investors see the country as a potentially profitable destination, if issues related to poor governance, corruption and instablity are addressed, and the nascent agricultural section is suitably developed.

Chart 19: Value-add by the manufacturing sector in the Current Path and Manufacturing scenario, 2019-2043



Source: IFs 8.22 initialising from IMF World Economic Outlook data

Chart 19 presents manufacturing as a share of GDP in the Current Path compared to the Manufacturing scenario, from 2023 to 2043.

The EAC will see steady but unspectacular growth in the Manufacturing scenario, as the manufacturing sector will be 2.8 percentage points larger by 2043 compared to the Current Path. As discussed in chart 19, the sector faces a number of challenges to overcome, chief of which is a lack of infrastructure, human capital and adequate financing. The sector will amount to 23% of the REC's GDP by 2043 in the Manufacturing scenario, still under the 25% by 2032 target set out in the EAC's industrialization strategy document. Another key constraint to progress is the speed at which regional decisions are taken through the EAC by the member states, a problem potentially solved through improved communication between governments and ministerial bodies. Slow decisionmaking leads to delayed implementation of strategies which could spur on growth if they are prioritised appropriately.

South Sudan is forecasted to see very significant growth in the sector, with manufacturing accounting for 30% of GDP by 2043, an increase of 23.6 percentage points in the Manufacturing scenario from 2023. Uganda, Burundi and Somalia will all see increases over 6 percentage points between 2023 and 2043, while Kenya will see the smallest increase at just over 5 percentage points. The improvement from the Manufacturing scenario over the Current Path value in 2043 ranges from 3.4 percentage points in South Sudan to 0.8 percentage points in Burundi. Uganda, South Sudan and DR Congo will have the three largest manufacturing sectors by 2043, while Somalia will have the smallest at 13% of GDP.

AfCFTA scenario

Chart 20: Export and imports as % of GDP in the Current Path, 2000-2043

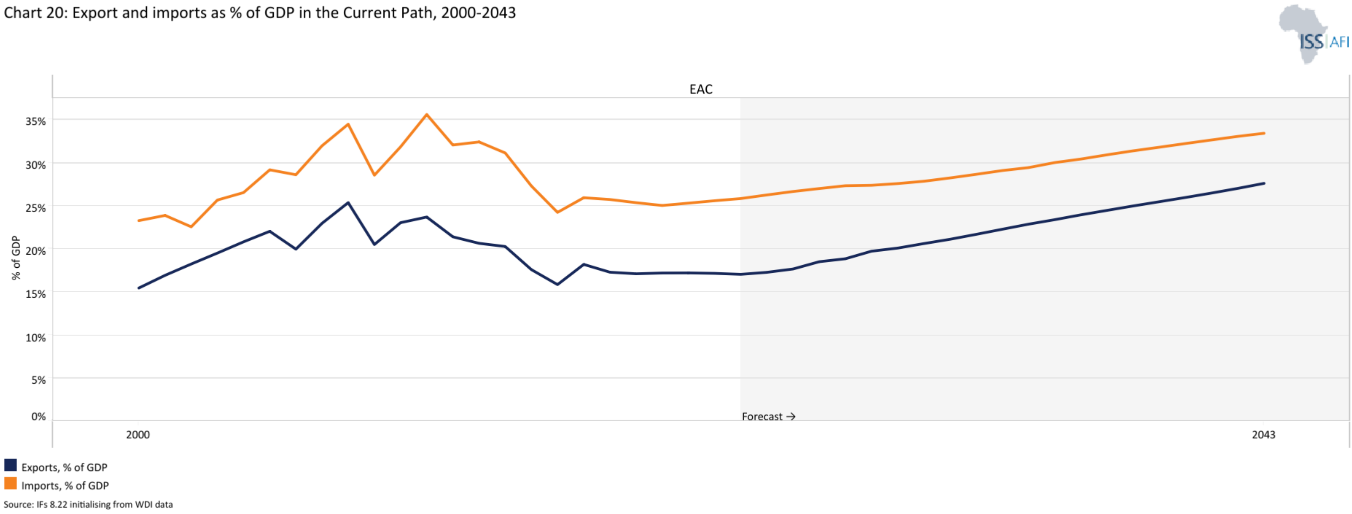


Chart 20 shows exports and imports as per cent of GDP from 1990 to 2043.

The AfCFTA scenario represents the impact of fully implementing the African Continental Free Trade Agreement by 2034. The scenario increases exports in manufacturing, agriculture, services, ICT, materials and energy exports. It also includes improved multifactor productivity growth from trade and reduced tariffs for all sectors.

Visit the theme on AfCFTA for our conceptualisation and details on the scenario structure and interventions.

Trade openness[2] has several benefits to an economy. The more an economy is open to trade, the larger the influence of trade transactions on economic activity and the better placed an economy is to benefit from the economic and non-economic benefits trade brings. Not only can businesses trade with a wider selection of international or regional firms, but they are also exposed to new and innovative ideas, are forced to increase their competitiveness , thereby increasing their overall productivity. In the long term, trade openness will reduce poverty after initially increasing it due to the redistributive effects of trade.

Intra-regional trade is seen as a crucial driver of growth for the EAC, and the REC has endeavoured to create a single market between its member states through the harmonisation of trade policies, product standards and investment incentives. The REC adopted a Common Market Protocol in 2010 to facilitate the free movement of goods, services and people, and has emphasised the need to tackle both tariff and non-tariff barriers to trade if countries want to grow.

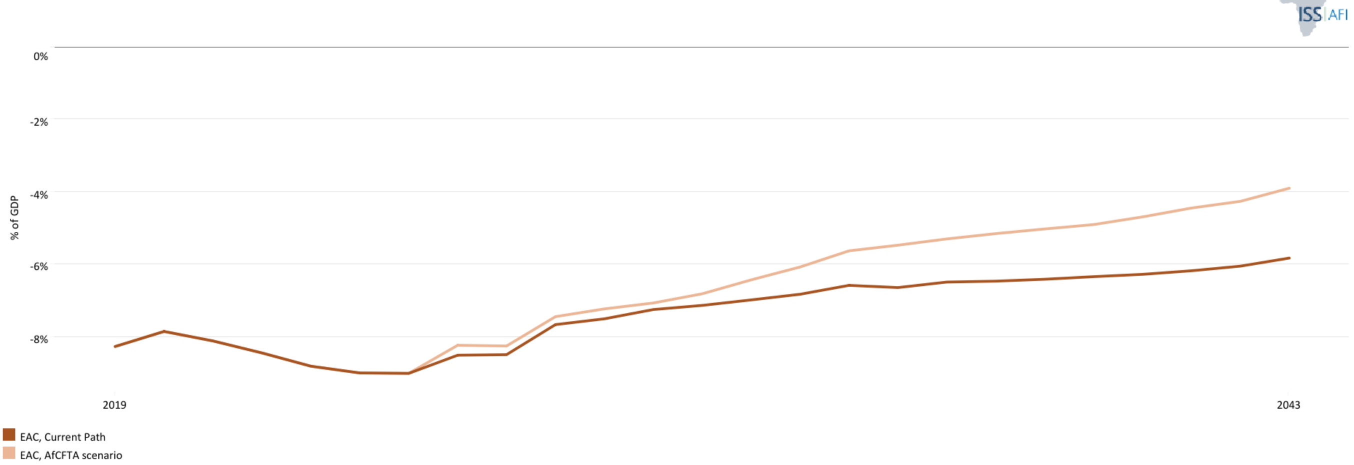
Implementing frameworks that increase trade facilitation, strengthen competition policy and law, and counteract dumping of goods will foster regional trade openness in the REC.

The EAC like most African countries export primary commodities and low-tech manufacturing products, and therefore a continental free trade agreement (AfCFTA) that reduces tariffs and non-tariff barriers across Africa will increase competition among countries in primary commodities and low-tech manufacturing exports. The EAC member states primarily export primary commodities such as coffee, cut flowers, gold, copper and various other metals, while importing refined and manufactured goods, mainly from other partners such as China, the UAE and India rather than its regional neighbours. As discussed in Chart 18, the EAC also has a small manufacturing sector, which faces challenges related to investment, human capital and infrastructure. These factors means that countries with inefficient, high-cost manufacturing sectors might be displaced as the AfCFTA is implemented, thereby pushing up poverty rates. Decreased trading costs and easier access to larger markets will also benefit others who have a comparative advantage in the production of raw materials and primary commodities. In the long term, as the economy adjusts and produces and exports its comparatively advantaged (lower relative cost) goods and services, poverty rates will decline.

The EAC has historically been more open to trade compared to the average for Sub-Saharan Africa, but since 1997 the REC has seen its trade openness be below both Sub-Saharan Africa and North Africa's average. In 2023, the EAC's trade openness equated to 43%, trailing Sub-Saharan Africa by 1.6 percentage points and North Africa by 9.7 percentage points respectively. The region is expected to see a steady and sustained increase in trade openness, reaching 63% by 2043, overtaking both North Africa and Sub-Saharan Africa by 5 percentage points.

The rise in trade openness will be driven by all countries, except South Sudan, with the region increasing their trade volumes, both for imports and exports. Somalia's economy will see the largest increase, rising by 35 percentage points from 85% in 2023 to 120% by 2043. Burundi will see the smallest positive change at 7.6 percentage points, while South Sudan will see a drop of 60 percentage points, albeit from a very high base of 207% in 2023. The lack of productive capacity in South Sudan means relying heavily on imports to satisfy domestic demand for basic goods, while the exporting of oil is their main source of income. In 2023, imports amounted to 98% of GDP, a figure which will drop to 78% by 2043. Somalia's rising level of trade openness will be largely driven by increasing levels of imports, rising from 59% in 2023 to 75% by 2043, a large part of which is foodstuffs and vegetable products to compensate for decreased production as a result of prolonged droughts and instability. Exports will also increase as a % of GDP, to 45% by 2043, but the country is dependent on a small selection of goods, namely live animals, gold and insect resins.

Chart 21: Trade balance in the Current Path and AfCFTA scenario, 2019-2043



Source: IFs 8.22 initialising from WDI data

Chart 21 shows the trade balance as a share of GDP in the Current Path compared to the AfCFTA scenario, from 2023 to 2043.

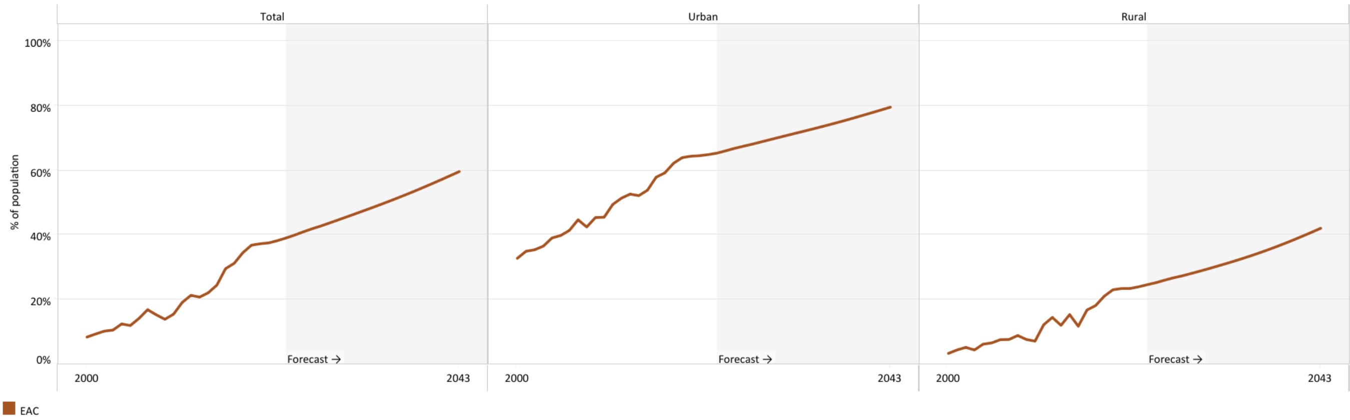
The trade balance is the difference between the value of a country's exports and its imports. A country that imports more goods and services than it exports in terms of value has a trade deficit, while a country that exports more goods and services than it imports has a trade surplus.

In 2023, the EAC had a trade deficit of 8.7% of GDP, which is expected to improve to 5.8% by 2043. The REC is more dependent on imports than the rest of Africa, as the continent's average will marginally improve from 4.8% to 4.11% over the forecast period. In the AfCFTA scenario, the REC will improve its position relative to the continental average, reaching a trade deficit of 3.9% by 2043, an improvement of almost 2 percentage points.

Thus, the full implementation of the AfCFTA will invigorate trade in EAC members, some of whom will benefit more than others. DR Congo will see the largest improvement in its trade balance, as the trade deficit improve by 3.2 percentage points by 2043. Somalia and Burundi are the only countries who will see their trade balances worsen, by 0.2 and 0.7 percentage points respectively. EAC members will also experience growth in different sectors: in the services sectors, Kenya, Rwanda, Tanzania and Uganda, will see their trade surpluses grow, as their competitive advantages are maximised under the AfCFTA.

Large Infrastructure and Leapfrogging scenario

Chart 22: Electricity access: urban, rural and total in the Current Path, 2000-2043



Source: IFs 8.22 initialising from WDI data

Chart 22 presents the access to electricity for urban, rural and total population from 1990 to 2043.

The Large Infrastructure and Leapfrogging scenario involves ambitious investments in road and renewable energy infrastructure, improved electricity access and accelerated broadband connectivity. It emphasises adopting modern technologies to enhance government efficiency and the rapid formalisation of the informal sector, incorporating significant investments in major infrastructure projects like rail, ports, and airports while highlighting the positive impacts of renewables and ICT.

Visit the themes on Large Infrastructure and Leapfrogging for our conceptualisation and details on the scenario structure and interventions.

Improvement of infrastructure systems, including roads, railways, aviation, communications, and inland waterways, is an important arm of the EAC regional integration project. Crucial to improving regional infrastructure systems requires the harmonisation of regulatory laws, construction and maintenance and the review and redesign of intermodal transport systems. A concrete step towards this goals was the adoption of the Tripartite Transport and Transit Facilitation Programme Eastern and Southern Africa (TTTFP), which aims to "facilitate the development of a more competitive, integrated and liberalised regional road transport market in the East and Southern African region".

The need for improved road network is clear: in 2023, only 12% of the EAC's roads were paved, compared to 24% in Sub-Saharan Africa and 83% in North Africa. By 2043, the EAC's rate will rise to 40%, 9 percentage points below Sub-Saharan Africa, and 46 percentage points below North Africa. A number of cross-border road corridors have been built in the region to improve this situation: the Northern Corridor, which stretches from Kenya to Rwanda and DR Congo, through Kampala in Uganda; the Nairobi-Lusaka corridor, which runs through Tanzania and connects Lusaka with the Mombasa port in Kenya; and the North-South corridor, which connects the North of Rwanda with the Tanzanian border, running through Burundi along the way. These roads have increased commercial activity and decreased travel times, while serving as vital lifelines for landlocked countries such as Burundi, Rwanda, Uganda, and DR Congo (semi-landlocked).

The benefits of these major roads are numerous, but in countries where the majority of the population live in rural areas, other parts of the road network, such as minor and dirt roads, take on greater significance. High quality rural roads, which are durable in all weather types, play an important role in rural-urban connectivity. Indicator 9.1.1 in the UN's Sustainable Development Goals refers to the proportion of the rural population who live within 2 km of an all-season road and is captured in the Rural Access Index. EAC member states had a wide range of scores in 2019: Rwanda and Burundi has score of 80 and 92% respectively, Uganda, Kenya, Tanzania and DR Congo scored between 72 and 47%, while South Sudan and Somalia lagged behind at 20% and below. Increasing rural-urban connectivity by building durable, all-season roads is an important enabling factor for the agriculture sector[3], as better connectivity enables farmers to get their produce to market quicker and realise better profits. Other benefits include improved exposure to education and healthcare.

Kenya, Tanzania and Rwanda have all undertaken mega infrastructure projects in other forms of transport, all aimed at increasing interconnectedness in the East African region. Kenya is still working on the Standard Gauge Railway (SGR) between Mombasa to Malaba, Tanzania is planning to build the largest port in Africa and Rwanda is constructing a mega-scale airport to replace the existing Kigali International Airport. A joint project between Burundi-DR Congo-Tanzania to construct an SGR is also underway, with the second phase kicking off in 2024.

Another aspect of infrastructure development is energy, particularly the provision of electricity for the population of the EAC. As part of the East African Power Master Plan, which aims to employ a “least cost generation and transmission plan” to meet East Africa’s increasing demand for power, the Eastern Africa Power Pool (EAPP) was established as a regional institution to coordinate cross-border power trade. The EAPP has 13 members in East and North Africa, and aims to improve electricity access in the region through better coordination on power exchange, electricity production and transmission. Furthermore, the initiative aims to optimise the energy resources available in the region and in the long create a single Electricity Market in East Africa. A number of key issues identified to accomplish this task are:

- low access to electricity services (except for Egypt and Libya)
- insufficient installed generation capacity
- a high cost of supply
- limited electricity interconnections
- comparatively high electricity distribution losses

As of 2023, total electricity access in the EAC stood at 39%, compared to 100% in North Africa and 50% in Sub-Saharan Africa. By 2043, the access rate will have increased to 60%, while Sub-Saharan Africa’s will reach 68%, thus reducing the gap to 8 percentage points. The disparity between rural and urban areas in the EAC is large: in 2023, 65% of the region’s urban population had access to electricity compared to 25% of its rural population. Access will improve in both areas over the forecast period so that by 2043 urban access will equate to 80% and rural access will reach 42%; the gap between the two will however remain largely the same.

Access rates across the individual states differ substantially. Kenya had the highest level of total access at 73%, while four countries, Rwanda, Somalia, Tanzania and Uganda, had rates between 51 and 41%. DR Congo had a rate of 21% in 2023, while Burundi and South Sudan lagged further behind with rates of 11 and 7% respectively. Over the forecast period, Rwanda and Tanzania will see the largest increases, at 27 percentage points, followed by Uganda and DR Congo at 25 and 22 percentage points respectively. Burundi will only see an increase of 14 percentage points to have an access rate of 25% by 2043, while South Sudan’s access will improve by 10 percentage points, leaving the country with a total access rate of only 17%.

Every country has lower rural access rates compared to urban areas, but four countries, Burundi, DR Congo, Somalia and South Sudan will see this gap grow over the forecast period. South Sudan will see the largest increase: in 2023, the gap between rural and urban electricity access was 9 percentage points. By 2043, the gap will grow to 31 percentage points, due to urban access rates increasing from 14 to 43%. Burundi will continue to have the largest gap, which will rise from 59 to 68 percentage points by 2043, as only 11% of the country's rural population will have access to electricity. Kenya will have the smallest gap by 2043, at 11 percentage points.

Chart 23: Cookstove usage in the Current Path and Large Infra/Leapfrogging scenario, 2019-2043

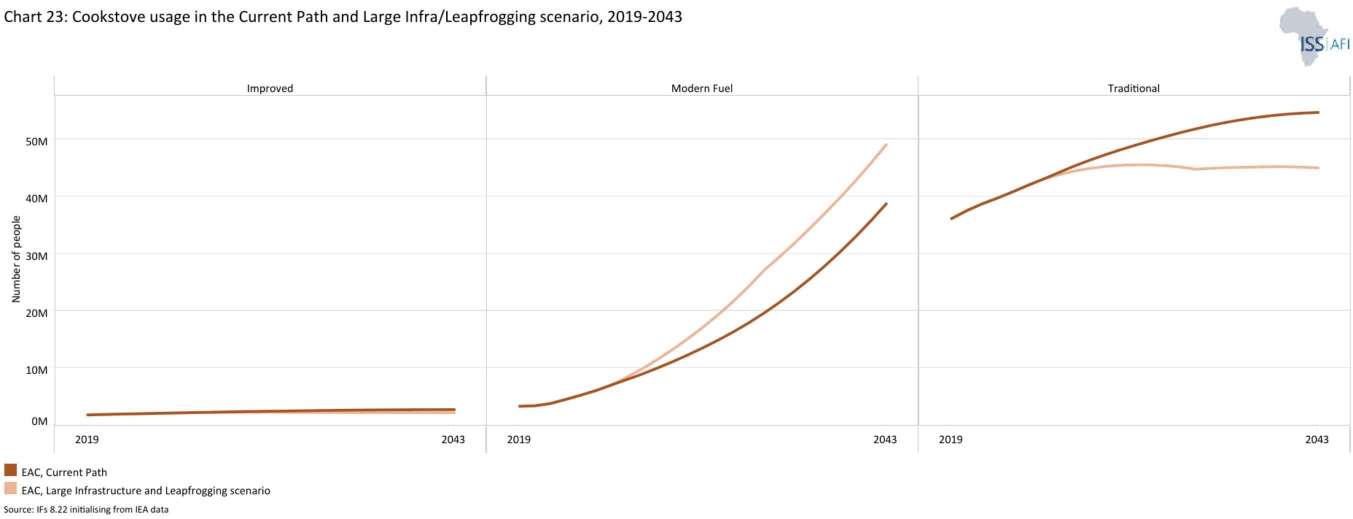


Chart 23 shows the number of people using cookstoves in the Current Path versus the Large Infrastructure and Leapfrogging scenario from 2019 to 2043.

The majority of people in the EAC, 85% in 2023, still rely on traditional cookstoves for their cooking needs. This is a much higher rate than in the rest of Africa, where 61% of the continent's population uses cookstoves that burn fuels such as charcoal, firewood, coal and kerosene. These figures are to be expected when considering the discussion in Chart 22 on the low levels of rural electricity access in the EAC, where the majority of the REC's population resides. Although the use of these stoves requires little upfront costs and the types of fuel used are readily available, the negative effects they have on users' health and the environment mean increased usage of modern fuel stoves is a development priority. Furthermore, the use of clean cooking methods has the potential to create jobs in areas such as stove production, sales and fuel delivery, but care must be taken to accommodate those already employed in the charcoal and firewood industry, with upskilling required to mitigate potential job losses.

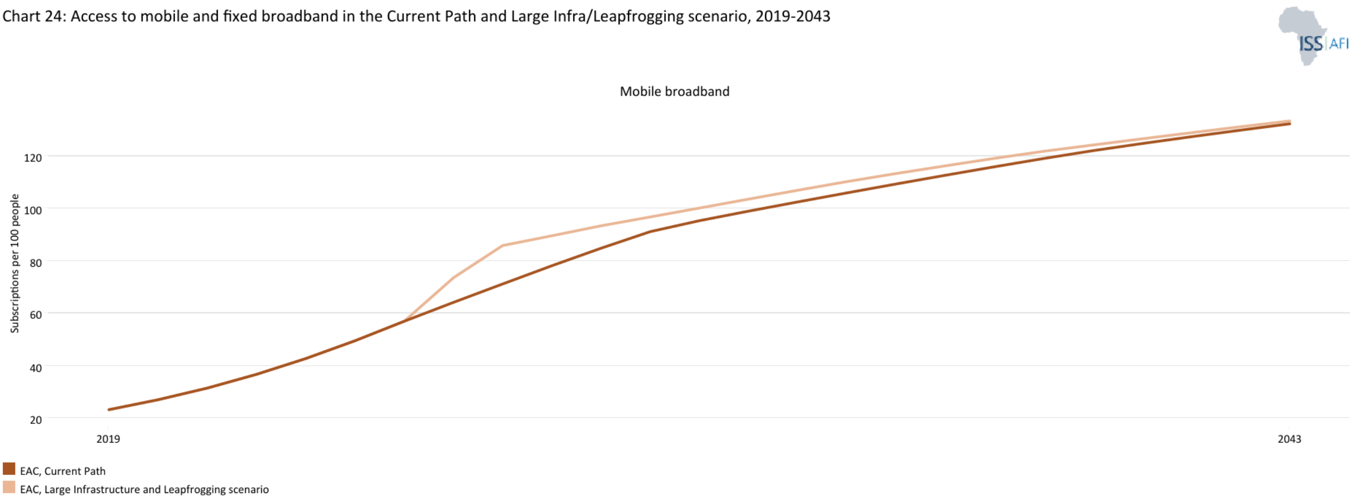
A decrease in deforestation, lower emissions, better health outcomes and improved educational attainment are all benefits of adopting clean cooking methods but require investments in alternative fuel sources such as liquified petroleum gas (LPG) and electricity, for which infrastructure remains a constraint. The advantages far outway the initial costs, as clean cooking tackles gender inequality by freeing up women's time for money earning activities due to the reduction in time spent cooking and gathering fuel.

The EAC will stand to benefit from this transition to clean cooking over the forecast horison, as modern fuel cookstoves will be used by 40% of households by 2043, compared to 57% for traditional cookstoves. The Large Infrastructure and Leapfrogging scenario increases the speed of this transition and by 2043 the use of modern fuel cookstoves will reach 51%, 11 percentage points higher than in the Current Path. This increase will also lead to a 7% reduction in deaths from respiratory diseases for women and a 4.5% reduction for men by 2043.

The uptake of modern fuel cookstoves amongst EAC members has historically been low, except in Kenya, where 26% of households used this type of stove in 2023. The other 7 members all had a level of uptake below 10% in 2023, and for Burundi and South Sudan, this will still be the case by 2043 in the Current Path. The Large Infrastructure and Leapfrogging scenario will accelerate the already rapid progress in the Current Path for four countries in particular: Kenya, Rwanda, Tanzania and Uganda. All four countries will see the uptake of modern fuel cookstoves increase by over 30 percentages points over the forecast period in the Current Path. The scenario adds to this momentum, with 4.2 million Rwandans having access to modern fuel cookstoves in 2043 compared to the Current Path value of 2.9 million. The growth rate is steep: in 2023, only 0.1 million people had access to modern fuel cookstoves in Rwanda.

Somalia and DR Congo will see slightly more modest improvements in the Current Path, 16 and 17 percentage points respectively, but the scenario has a large impact in Somalia, where the uptake rate will be 18 percentage points higher by 2043 compared to the Current Path. Burundi and South Sudan will see slow growth and uptake rates will increase by less than 10 percentage points over the forecast horison in the scenario, coming from an already low base.

Chart 24: Access to mobile and fixed broadband in the Current Path and Large Infra/Leapfrogging scenario, 2019-2043



Source: IFs 8.22 initialising from ITU data

Chart 24 presents the percentage of the population and number of people with access to mobile and fixed broadband in the Current Path compared to the Large Infrastructure and Leapfrogging scenario, from 2019 to 2043. The user can toggle between mobile and fixed broadband.

Increasing internet access has multiple benefits for a country and leads to a number of positive spillover effects. Not only does higher levels of internet access inclusively increase productivity, it also creates jobs, improves general welfare and leads to indirect impacts on entrepreneurship, innovation and FDI. The more users have access to the internet, the larger the impact digital technologies can have on poverty reduction and increased income generation. Broadly, the internet can be accessed in two ways: mobile or fixed broadband. The former entails access through cellular towers or satellites, while the latter requires more costly infrastructure such as fibre-optic cables. Mobile broadband coverage in Africa is the lowest globally and the EAC lags behind its continental peers in access to 2G, 3G, 4G and 5G networks. The REC also has higher costs for mobile data and handsets, while users also face steeper taxes. Fixed broadband has even lower levels of penetration in the region, with fibre optic cable installations lacking, particularly in DR Congo, Somalia and South Sudan. The spread of fixed line connections is also lower in rural areas, although this is slowly improving, an issue which is worsened further by the large disparities in electricity access between rural and urban areas.

As a result, the EAC has much higher levels of access to mobile broadband, a trend reflected across Sub-Saharan Africa. In 2023, the EAC had 43 mobile broadband subscriptions per 100 people, compared to 52 for Sub-Saharan Africa. Conversely, fixed broadband subscriptions per 100 people stood at 2.3 for both in 2023, and will only improve to 19.5 by 2043. The scenario significantly improves on this performance, raising fixed broadband subscriptions to 28.8 by 2034, an increase of 9.3 subscriptions. Growth in mobile broadband access will however triple over the forecast horison, reaching 132.3 subscriptions per 100 people by 2043 in the Current Path. Due to this high rate of growth, the scenario has little impact, increasing subscriptions by 1.1 in 2043 compared to the Current Path.

Every EAC member will see rapid growth in the uptake of mobile broadband subscriptions over the forecast horison, although some countries, such as Somalia and South Sudan, will come from very low bases in 2023. Rwanda and Kenya both had high scores in 2023, at 71 and 70 subscriptions per 100 people, while Somalia and South Sudan achieved rates of 12 and 8 respectively. In the Current Path, all EAC members will have more than 120 subscriptions per 100 people, with the highest rate in Kenya at 173 by 2043 in the Current Path. The scenario only adds to this momentum, and will increase subscriptions between 9 and 13 subscriptions per 100 people across the REC's members in 2043.

Financial Flows scenario

Chart 25: FDI, foreign aid and remittances as % of GDP in the Current Path, 1990-2043

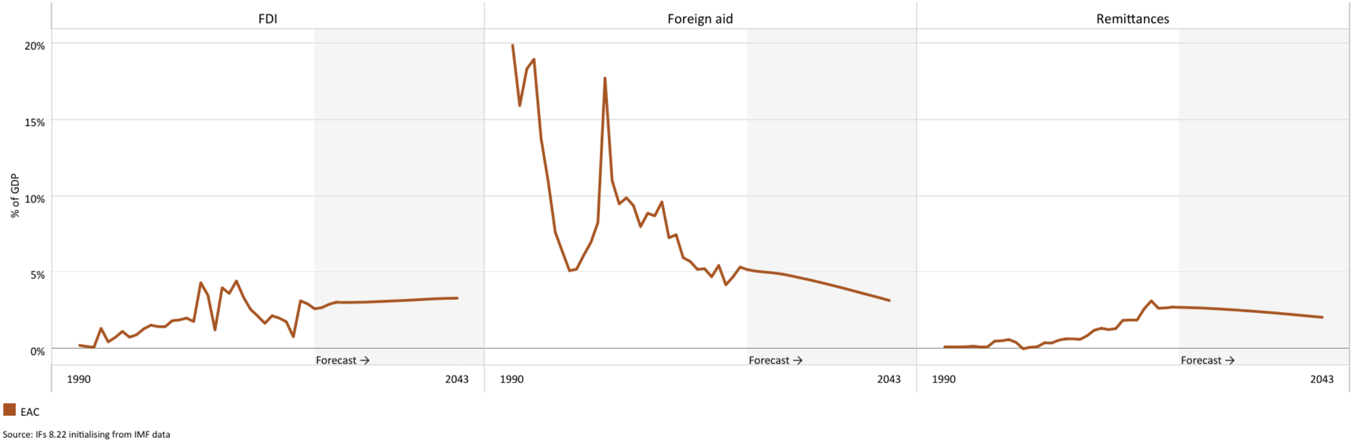


Chart 25 depicts the trends in Foreign Direct Investment, aid and remittances as a percentage of GDP, from 1990 to 2043.

The Financial Flows scenario represents a reasonable but ambitious increase in inward flows of worker remittances, aid to poor countries and an increase in the stock of foreign direct investment (FDI) and additional portfolio investment inflows. We reduce outward financial flows to emulate a reduction in illicit financial outflows.

Visit the theme on Financial Flows for our conceptualisation and details on the scenario structure and interventions.

Financial flows from outside the EAC region is crucial for development, as it allows governments to mobilise resources needs to grow economies, through FDI, foreign aid and remittances. Africa a whole has the lowest level of tax-to-GDP globally, and thus government require other revenue schemes to compensate for the shortfall. Recent shocks such as the Covid-19 pandemic and the war in Ukraine have complicated the investment and foreign aid space, making it more difficult for African states to access these funds. In addition, already high levels of debt coupled with rising debt servicing costs has made borrowing difficult for many states.

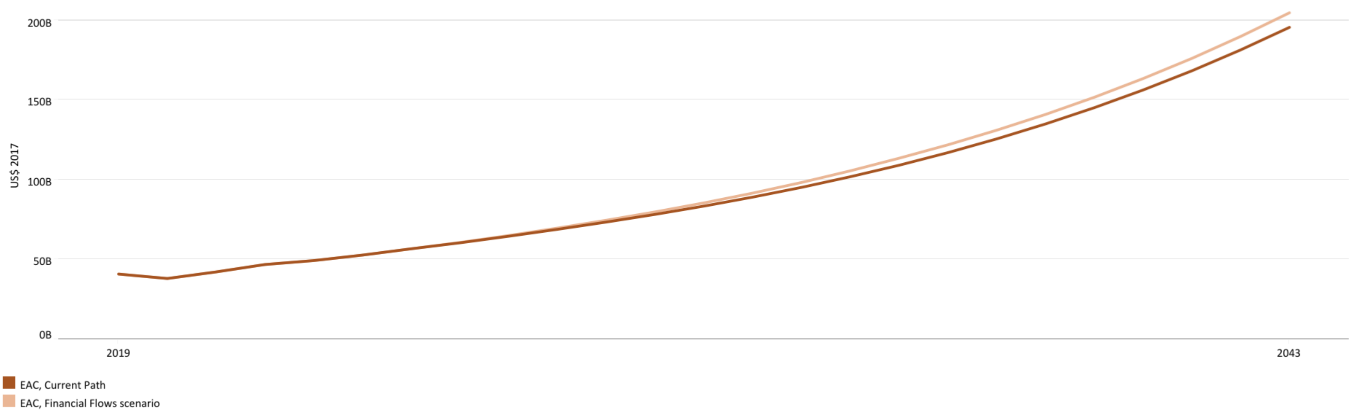
The EAC has identified foreign investment as a crucial tool to combat this situation and aims to attract funds for targeted investments in infrastructure, industrial development, and oil production. Also, renewable energy investments serve to lower a high import bill for energy and reduce the region's dependence on fossil fuels. As such, the REC is emphasizing the need for increased levels of intra-EAC investments and have encouraged members to implement certain reforms such as improved tax collecting and stricter controls over illicit financial flows as means to promote member-to-member investment.

In 2023, FDI inflows stood at 2.6% of GDP for the EAC, slightly lower than 2.7% for Africa. Foreign investment has recovered since reaching a low of 1.7% in 2016, but remains lower than the peak period between 2007 and 2013, when the REC averaged FDI inflows of 3.5% of GDP. The growth in FDI was mainly fueled by DR Congo, where FDI as a % of GDP peaked at 12.7% in 2010 and averaged 7.5% over that period. Increasing demand for cobalt, used in smartphones and electric car batteries, fueled this strong performance, as DR Congo produces the majority of global cobalt output. South Sudan and Burundi lag behind the rest of the EAC, with FDI inflows below 1% for most of the last decade. In the Current Path, the average FDI inflows for the EAC will remain steady and reach 3.3% by 2043, representing strong growth in absolute terms as the REC's economy will be three times larger at that point. DR Congo will remain the most attractive destination for FDI in the REC, reaching 4.7% by 2043, followed by Uganda and Tanzania. The continued interest in DR Congo by international investors will likely be driven by a continued interest in the country’s large untapped natural resources, while renewable hydro and large infrastructure projects provide additional avenues for lucrative returns on FDI.

The EAC has seen foreign aid steadily decrease since 2003, when the REC received aid equivalent to 18% of GDP. In 2023, the amount had shrunk to 5.2% and in the Current Path the REC will only receive 3.2% by 2043. The regional average masks large differences between countries. Generally consistent with global development trends, poor and smaller countries in the region have relied heavily on aid. Somalia received aid equal to 28% of GDP in 2023, followed by Burundi at 19% and Rwanda at 11%. The rest of the EAC all received under 7% in 2023. In the Current Path, Burundi and Somalia’s dependence on foreign will only decline marginally, reaching 15 and 23% respectively by 2043. Somalia and South Sudan continue to face large humanitarian challenges which require large amounts of external aid to counteract the negative affects of climatic shocks and instability. In 2023, South Sudan required US$1.7 billion in aid, of only 52% was funded, while Somalia needed US$2.6 billion in 2023, of which only 44% was covered, mostly by the USA, EU and Germany. The massive flows in aid were aimed at providing cash transfers, safe water, food assistance and protection services. Burundi required a much smaller amout, US$ 237 million, in 2023, but by June of that year, only 26% of funds had been provided. The sectors which needed assistance ranged from education, health and nutrition, to repatriation and protection services. The country is in a fragile situation, and will be exposed to increasing levels of returnees from neighbouring countries and heavy rainfall in the coming years, which will both strain the social cohesion and service delivery of the country.

Finally, remittances to the EAC remains an important source of funds for citizens to alleviate their most pressing needs and survive. Although these funds can serve to help families buy necessities, they are often not used in a way to spur on long-term growth and serve as a buffer rather than seed money for a business. Nevertheless, countries such as Kenya, Rwanda, South Sudan and Somalia all receive substantial amounts of these transfers yearly, driven by large diaspora communities. Somalia’s remittances equated to 15% of GDP in 2023, followed by Kenya and Rwanda at 4%. South Sudan’s last data point came in 2015, and reached 9.5% of GDP. By 2043, remittances will still amount to 6% of Somalia’s GDP, while Kenya and Uganda will see their level of inflows remain constant, at around 3.1 and 2.7% respectively.

Chart 26: Government revenue in the Current Path and Financial Flows scenario, 2019-2043



Source: IFs 8.22 initialsing from IMF data

Chart 26 shows government revenue in the Current Path compared to the Financial Flows scenario from 2019 to 2043. The data is in US$ 2017 and % of GDP.

Wagner's law, or the law of increasing state activity, is the observation that public expenditure increases as national income rises. It is reasonable to expect that government revenues will increase as a per cent of GDP in the Financial Flows scenario compared to the Current Path.

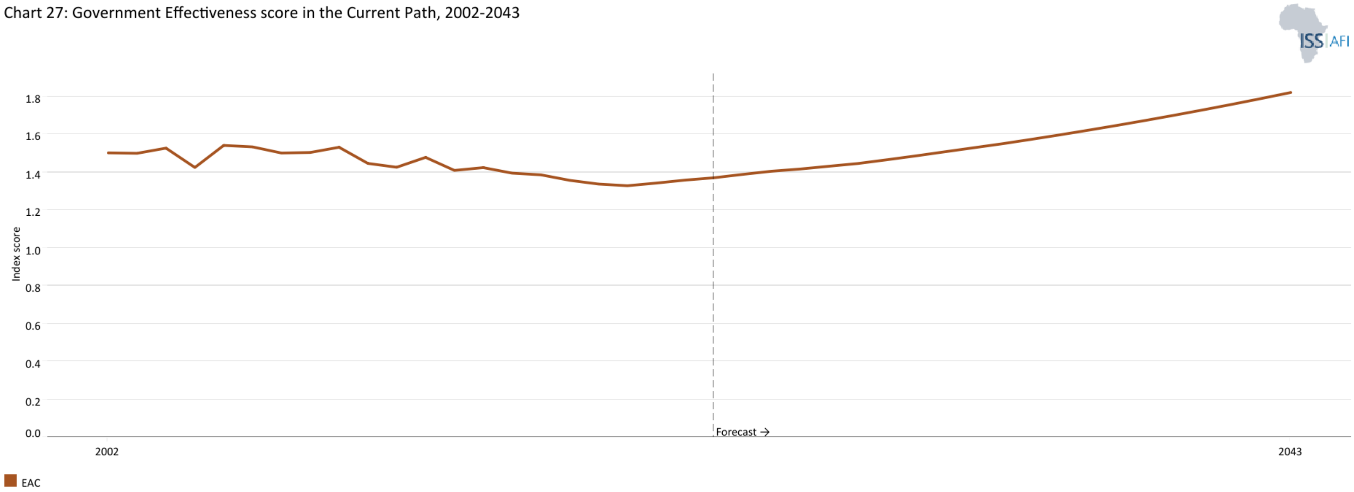
The most important source of government revenue is taxation, which requires a well financed and capable central government to efficiently manage a working tax collection system. Furthermore, the government's capacity is strongly correlated to better tax generation, which is a crucial source of funds for governments to provide critical services such as healthcare, education and access to food. The goal for low-income and lower-middle-income countries is to increase the size of their tax base and widen the tax net by limiting tax evasion strategies, such as base erosion and profit shifting.

The data for government revenue is not readily available, making the picture at the individual country level clouded. The World Bank's WDI database provides reasonably up to date data for seven countries, with South Sudan not included. Somalia is a distinct outlier, with the latest data showing the country collecting no revenue. The other six countries are clustered together, with the minimum value of 11.4% for DR Congo and the maximum value of 15.6% for Burundi. Due to lack of accurate data, forecasts in the International Futures model may not be reliable.

The EAC is relatively poor at collecting tax and generating revenue compared to North Africa, while it performs similarly to Sub-Saharan Africa: in 2023, the REC generated revenue equal to 17% of GDP, compared to 17.6% for Sub-Saharan Africa and 27.3% in North Africa. Although collection improves over the forecast period, the EAC will continue to lag behind, reaching 20.5% by 2043. North Africa will see government revenue equal to 30% by 2043. The Financial Flows scenario makes a marginal difference, increasing the rate to 20.9% for the EAC by 2043, equating to a rise of US$9.1 billion.

Governance scenario

Chart 27: Government Effectiveness score in the Current Path, 2002-2043



Source: IFs 8.22 initialising from WGI data

Chart 27 presents the Current Path of government effectiveness from 1990 to 2043.

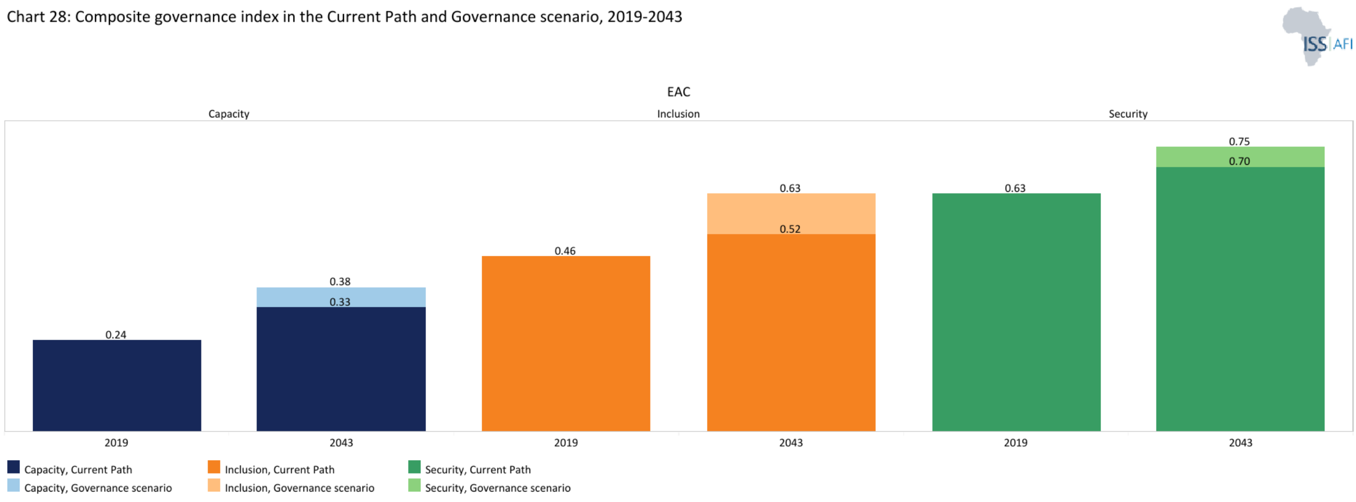
The Government Effectiveness score, developed by the World Bank, measures "perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies". Higher scores in this index indicate a capable state, who creates effective policies and has the ability to implement them too. The EAC included 'strengthened governance' as one of the eight strategic focus areas of the REC's sixth development strategy, in order to provide a more stable business environment. To this end, the strategy has as key targets the promotion of a regional framework of Good Governance and the implementation of cooperation arrangements centring around governance, rule of law and access to justice.

Improving good governance at a country level will have a wider effect regionally, as increased service delivery and decreased instability will improve regional performance. As populations move across borders in search of safety or opportunity, host countries are placed under additional strain to accommodate them and provide the needed services.

On average, the EAC performs poorly compared to the Sub-Saharan and North African averages. In 2023, the REC scored 1.4, compared to 1.7 for Sub-Saharan Africa and 1.9 for North Africa. The REC's score represents a partial recovery from a downward trend it experienced from 2006 to 2020. Over the forecast period, the EAC will see gradual progress to reach 1.8 by 2043, keeping the gap to Sub-Saharan Africa at 0.3 index points.

Performance of member countries on government effectiveness can be categorised into three groups : the bottom group consists of Somalia and South Sudan; the next group contains DR Congo and Burundi; and the third group has the highest performers of Rwanda, Kenya, Uganda and Tanzania. South Sudan's score has dropped dramatically from 0.92 in 2012 to 0 by 2023. The country has struggled to recover from its civil war, and the government is struggling to implement development policies as it continuously deals with crises brought on by political instability and climate shocks. Somalia, on the other hand, has slowly recovered from its lowest score of 0.05 in 2014 to reach a score of 0.35 by 2023. The peaceful transition of power in 2022 has helped, but slow progress in reviewing the constitution has hampered real change. Deficits in implementation and policy formulation capabilities also remain. Burundi and DR Congo have experienced tumultuous periods politically in recent years, and this has affected their scores, although government effectiveness is recovering from highs in the previous decade. In 2023, Burundi scored 1.2 and DR Congo reached 0.9. The top performer in the EAC was Rwanda, with a score of 2.7 in 2023. The country has made significant progress since 1996, when it had a score of 1.4. All 8 countries will make steady progress over the forecast horison, with South Sudan catching up to Somalia by 2043. Worryingly, only Kenya and Rwanda will surpass the 2.5 mark, which represents a score of 50% in the index.

Chart 28: Composite governance index in the Current Path and Governance scenario, 2019-2043



Source: IFs 8.22 initialising from WGI and TI data

Chart 28 shows the composite governance index in the Current Path compared to the Governance scenario from 2023 to 2043.

This scenario assumes better governance: stability, capacity, and inclusion. It measures a state's progress using the average of these three indices. To this end, it includes an index (0 to 1) for each dimension, with higher scores indicating improved outcomes.

Visit the theme on Governance for a full conceptualisation and details on the scenario structure and interventions.

In 2023, the EAC's security index score was below that of Sub-Saharan Africa and North Africa: the REC scored 0.64, while Sub-Saharan Africa's score reached 0.66, and North Africa performed the best at 0.77. In the Current Path, the EAC will continue to lag behind the performance of Sub-Saharan Africa and North Africa than, but the scenario increases security considerably, so much so that the EAC's score of 0.75 surpasses Sub-Saharan Africa's of 0.72 by 2043.

The East African region is marked by continuous periods of instability and conflict, particularly in DR Congo's eastern regions, South Sudan and Somalia. The conflict in DR Congo has been ongoing for a number of decades, and Rwanda, Burundi and Uganda have all been involved in some capacity. The fighting has generated a large amount of refugees which has strained neighbouring countries' budgets, infrastructure and food supply. The EAC did deploy troops to the area, but they withdrew in December 2023 due to disagreement between the DR Congo government and the REC on what the force's mandate entailed. President Tshisekedi repeatedly criticised the EAC force as ineffective and hesitant to engage with rebel forces, while the REC maintained its troops role was "to oversee the withdrawal of armed groups from captured areas." However, troops from SADC and the UN Organizaiton Stabilization Mission in the DRC (MONUSCO) are still actively involved in the region.

In South Sudan, inter-communal violence is rising as refugees fleeing from the civil war in Sudan make it increasingly harder for the government and aid organizations to meet humanitarian needs. Although the peace deal brokered in 2018 still holds, there is a growing fear that violence could once again erupt closer to the December 2024 elections. Lastly, Somalia continues to grapple with the al-Shabaab insurgency, which has continued to resist governmental and UN attempts to displace the terrorist organisation from its bases in the South. A renewed effort launched in August 2023 has had a limited effect, with casualties continuing to rise even as droughts and widespread flooding displace millions of

Somalis. The insurgency has also affected neighbouring countries such as Kenya, where al-Shabaab has successfully launched terrorist attacks in the past.

EAC members have struggled with governance effectiveness and tax collection, as discussed in Chart 27, and these feed into the REC's poor performance for government capacity. The IFs model compiles its own capacity index to measure issues such as government revenue collection and corruption, scoring states out of 1. The EAC's score is set to increase steadily in the Current Path, from 0.25 in 2023 to 0.33 by 2043. The Governance scenario will see the REC surpass the average for Sub-Saharan Africa by 2031 and reach a score of 0.38 by 2043, 0.03 above Sub-Saharan Africa's average.

Somalia will benefit the most from the scenario, seeing their score rise by 0.08 in 2043 compared to the Current Path. Kenya will see a small increase of 0.04, coming from a higher base, while Burundi and DR Congo will continue to experience capacity constraints will small increases coming from a low base.

The recurring problem of corruption helps explain the REC's performance in the capacity index. The EAC's own Organs and Institutions have been weakened by corrupt actions related to procurement processes, necessitating the adoption of the East African Community Integrity and Anti-Corruption Bill 2019. To counteract the negative effects of corruption in the REC, the bill clearly spells out what constitutes corrupt actions, proposes the creation of a mechanism which increases cooperation between National Anit-Corruption Agencies, and promotes the harmonisation and standardisation of codes of conduct for all the EAC's Organs and Institutions.

The EAC's members have themselves also struggled with corrupt practices for a number of years. Transparency International's Corruption Perceptions Index is a widely used measure of the level of corruption present in a country. Only Rwanda scored above the global average of 42 out of 100 in 2023, with Somalia ranking last and South Sudan second from bottom globally. Somalia, Tanzania and Kenya are the only countries whose scores have improved since 2013, while Uganda and Rwanda have stayed the same. The largest decrease over that time occurred in DR Congo, whose score dropped by 9%, from 22 in 2013 to 20 in 2023. In the Current Path, Uganda will see its score rise to 36 by 2043 and be ranked third in the REC behind Rwanda and Tanzania, while South Sudan will see an improvement of 5 points to reach a score of 18.

The third pillar of the governance triangle is inclusion, which touches on the degree to which a population can participate in the political and economic processes of a country. The index scores a country out of 1, with lower scores reflecting greater gender equality. The EAC has outperformed Sub-Saharan Africa's average since 2000, with the REC's score decreasing steadily from 0.64 to 0.54 by 2022. The IFs inclusion index shows the EAC trailing Sub-Saharan Africa's average in 2023, with a score 7.4% below the regional average, which slowly decreases to 6.2% by 2043 in the Current Path. In the scenario, the trend is reversed, and the REC will see its score be 13% higher than Sub-Saharan Africa's by 2043 at 0.63. The increase over the Current Path will amount to 0.13 points, or 21%.

DR Congo and Rwanda had the lowest scores in 2023, at 0.28 and 0.34 respectively, reflecting struggles in gender equality measures for the former and a lack of meaningful democratic representation in the latter. Kenya, Tanzania and Uganda rank as the top three performers in 2023, with Uganda expected to see the largest increase over the forecast horison as its score increases to 0.68 by 2043, a rise of 26%. The biggest winner in the scenario will be Somalia, whose score will be 29% by 2043 compared to the Current Path. Kenya sees the lowest increase, as it comes from a high base in 2023. DR Congo and Rwanda will still be the lowest ranked countries by 2043.

Two areas are particularly salient when considering inclusion in the EAC and helps explain the REC and its members' performance: gender equality and the level of democracy. The UN's Gender Inequality Index (GII) is a composite measure which combines data on political representation, education, health and labour force participation to gauge a country's progress in achieving gender equality.

Another useful index is the OECD's Social Institutions and Gender Index (SIGI), which looks at four areas relating to gender norms, attitudes and laws on the continent: access to productive and financial assets, discrimination in the family, restricted civil liberties and restricted physical integrity. Together they form the overall index score, with lower scores showing higher levels of gender equality. Rwanda is the leader in the REC across the four areas, scoring 21 points below the African average in 2023. Uganda, Kenya and South Sudan also perform better than their continental peers, while Burundi, Somalia, Tanzania and DR Congo score below the average. The REC's members perform well in the area of access to productive and financial assets, with 6 countries outperforming the African average. However, only two score members score better than Africa in the area of restricted physical integrity, indicating an urgent need to address the norms, attitudes and laws which perpetuate violence against women in the region.

Turning to democracy, the Varieties of Democracy (V-dem) project constructs an index to measure the degree of democracy in a country termed polyarchy, defined as encompassing the electoral principle of democracy where those in power are responsive to their citizens through electoral competition. The indicator serves as the key element in any form of democracy, as conceptualised by V-dem and represents a 'thinner' version of democracy compared to a full, liberal democracy.

The EAC has performed below the global and African averages since 1990, but has gained ground since 2018, as democratic levels on the continent and globally continue to decline. The best performers in the REC has been Kenya, Tanzania and DR Congo, while South Sudan, Somlia and Burundi scored the lowest in 2023. Kenya and Tanzania have seen their scores increase rapidly in recent years: since President Samia Suluhu Hassan came into power in Tanzania in 2021, a series of reforms improving freedom of expression and association has significantly improved the state of democracy in the country. On the other hand, Rwanda has seen its score decline since 1990 by 3.2%. Despite strong gains economically, the government continues to quell dissent by civil society and international organisations, often citing opposing views as 'genocide ideology', while legitimate alternatives to the current governing party are non-existant.

Endnotes

1. The OECD defines child marriage as: "Percentage of girls aged 15-19 years who have been or are still married, divorced, widowed or in an informal union"
2. Trade openness is measured as the sum of export and imports over total GDP
3. We model the impact of improving rural connectivity through greater access to rural roads on the agriculture sector in our Agriculture theme and in the Agriculture scenario above.

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