



Sub-Saharan Africa

Sectoral Scenarios for Sub-Saharan Africa

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Sectoral Scenarios for Sub-Saharan Africa

- Stability scenario
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- Governance scenario
- Impact of scenarios on carbon emissions



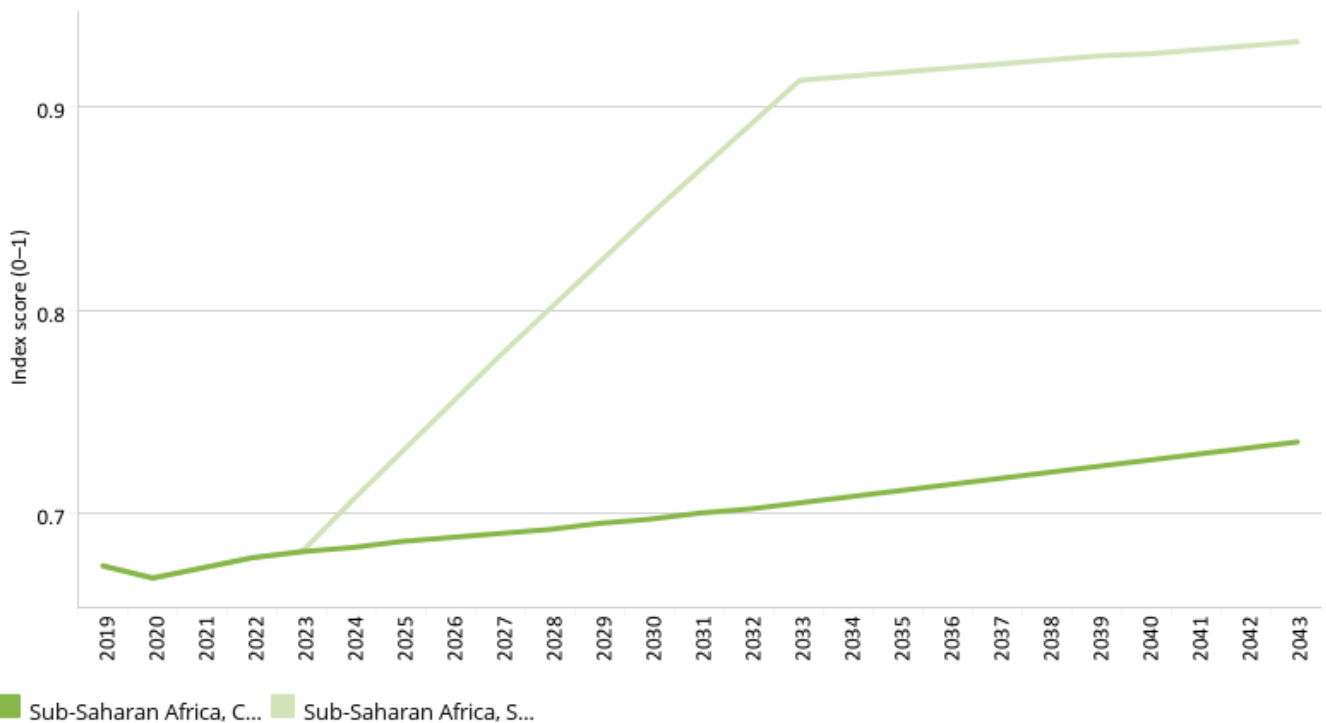
Stability scenario

Chart 2 Chart 3 Chart 5 Chart 6 Chart 7 Chart 8 Chart 9 Chart 10 Chart 11 Chart 12 Chart 13 >

Chart 13: Governance security in CP and Stability scenario, 2019–2043
IFs index 0–1



Sub-Saharan Africa ▾



Source: IFs 7.63 governance security index using internal war and government risk

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The Stability scenario represents reasonable but ambitious reductions in risk of regime instability and lower levels of

internal conflict. Stability is generally a prerequisite for other aspects of development and this would encourage inflows of foreign direct investment (FDI) and improve business confidence. Better governance through the accountability that follows substantive democracy is modelled separately. The intervention is explained [here](#) in the thematic part of the website.

In 2019, the sub-Saharan African countries with the highest score on the governance security index were Mauritius, Seychelles and Cape Verde, while the countries that had the lowest score were Central African Republic (CAR), South Sudan, the DR Congo and Somalia, each with a score below 0.6. In the Current Path forecast, sub-Saharan Africa will improve its average score on the index from 0.67 in 2019 to 0.74 in 2043. The government security index in South Sudan, Sudan and CAR was below 0.6 in 2019.

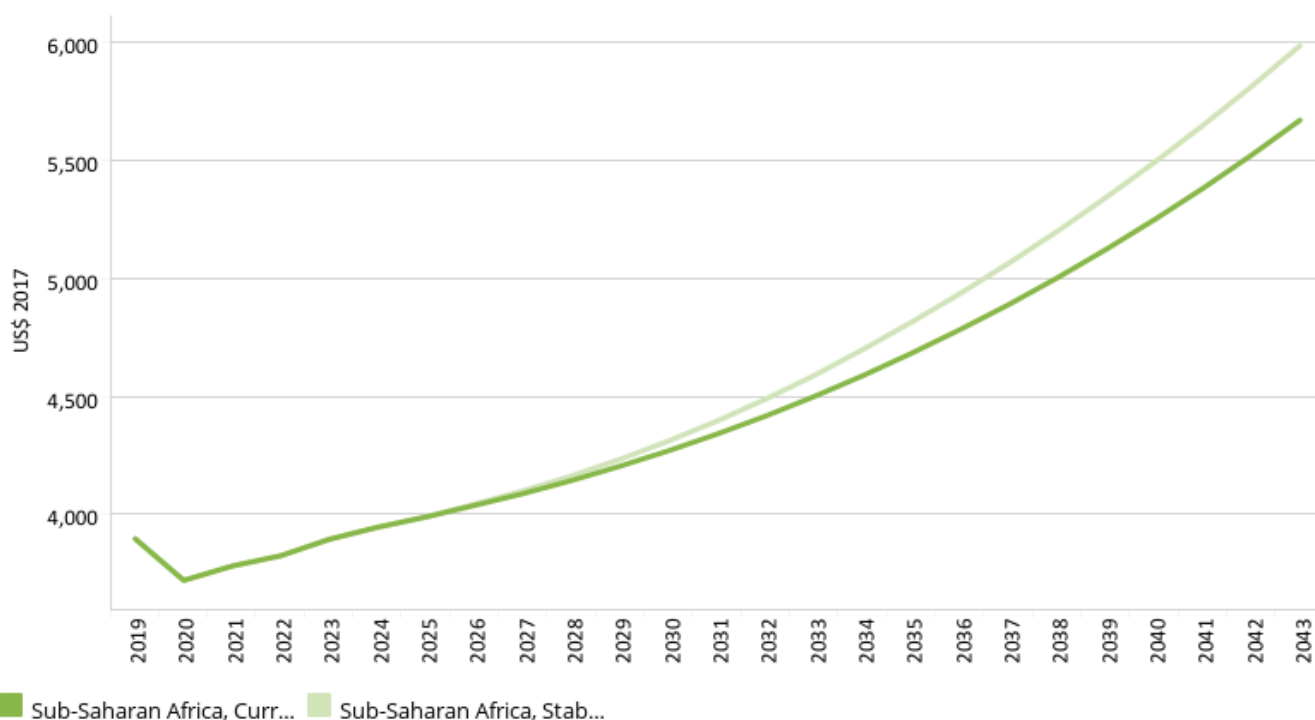
In the Stability scenario, where interstate and internal conflicts in sub-Saharan Africa are reduced, the average governance security index will improve by 14% to 0.93 in 2043. The five countries that gain the most are CAR, South Sudan, Sudan, the DR Congo and Somalia. Seychelles, already very stable, gains the least.

▼ < Chart 9 Chart 10 Chart 11 Chart 12 Chart 13 Chart 14 Chart 15 Chart 16 Chart 17 Chart 18 Chart 1 >

Chart 14: GDP per capita in CP and Stability scenario, 2019–2043
Purchasing power parity



Sub-Saharan Africa ▼



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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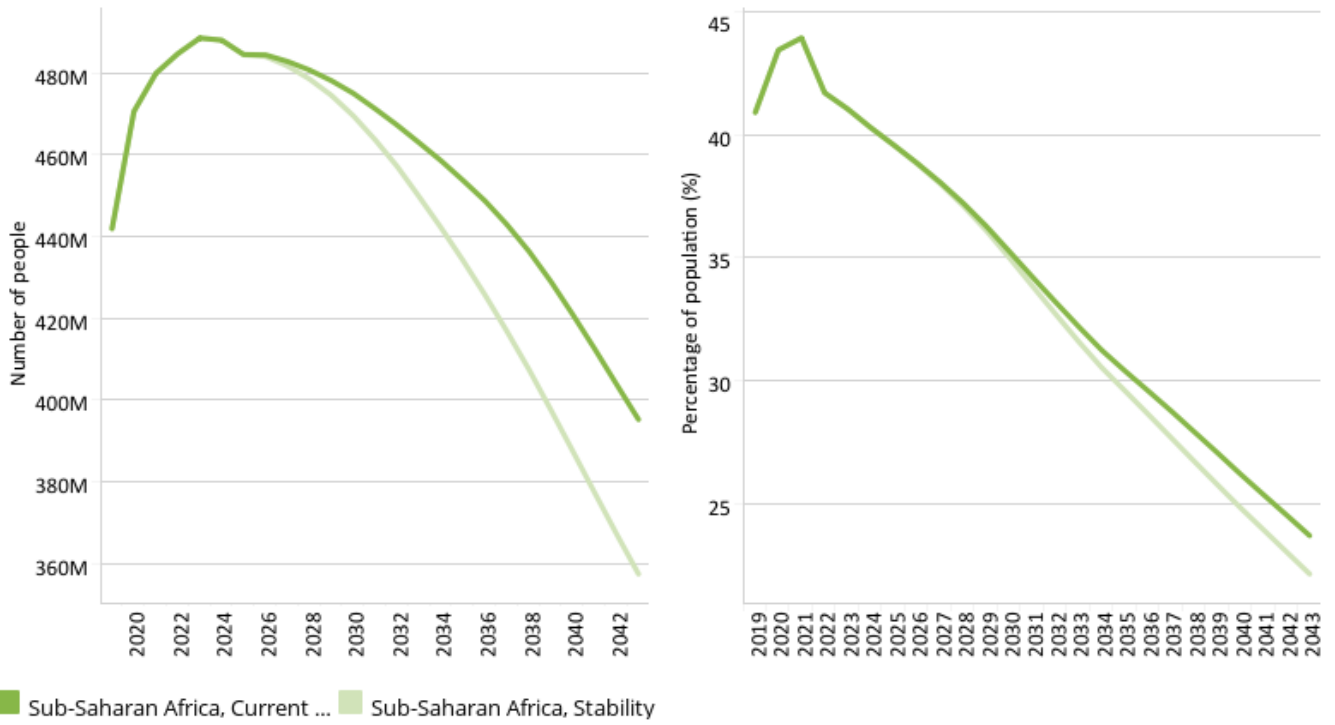
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The average GDP per capita will increase from US\$3 900 in 2019 to US\$5 671 in 2043 in the Current Path forecast as a result of productivity growth and more natural resources. Compared to the Current Path forecast for Africa in 2043, sub-Saharan Africa’s average GDP per capita in the Stability scenario will be US\$5 987. South Sudan will increase its GDP per capita most (by 10%), while Seychelles only gains a 1% increase in GDP per capita.

Chart 15: Poverty in CP and Stability scenario, 2019–2043
Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNet World Bank data

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In the Current Path forecast, the number of poor people will increase from 441.9 million in 2019 to 395.2 million in 2043, representing a 17.2 percentage points reduction in poverty rate between 2019 and 2043. In the Stability scenario, the number of poor people will reduce by 37.8 million more compared to the Current Path forecast in 2043, while the poverty rate will decline by 1.6 percentage points more. In 2019, the poverty rate in sub-Saharan Africa is 6.1% lower than in Africa. In the Stability scenario, this will decline 2.8% in 2043.



Demographic scenario

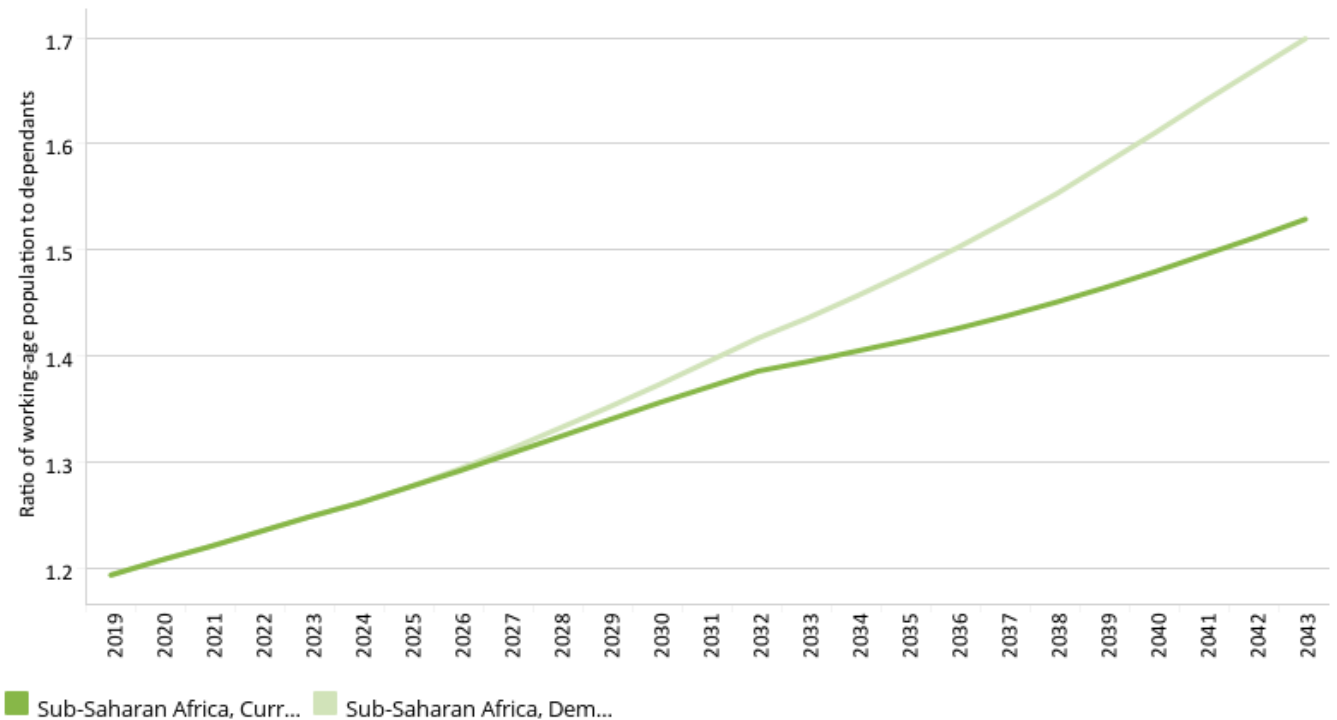
Chart 11 Chart 12 Chart 13 Chart 14 Chart 15 Chart 16 Chart 17 Chart 18 Chart 19 Chart 20 Chart 21

Chart 16: Demographic dividend in CP and Demog scenario, 2019–2043

Ratio of working-age population to dependants



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division Population Prospects

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This section presents the impact of a Demographic scenario that aims to hasten and increase the demographic dividend through reasonable but ambitious reductions in the communicable-disease burden for children under five, the maternal mortality ratio and increased access to modern contraception.

The intervention is explained [here](#) in the thematic part of the website.

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 dependants is equal to or surpasses 1.7.

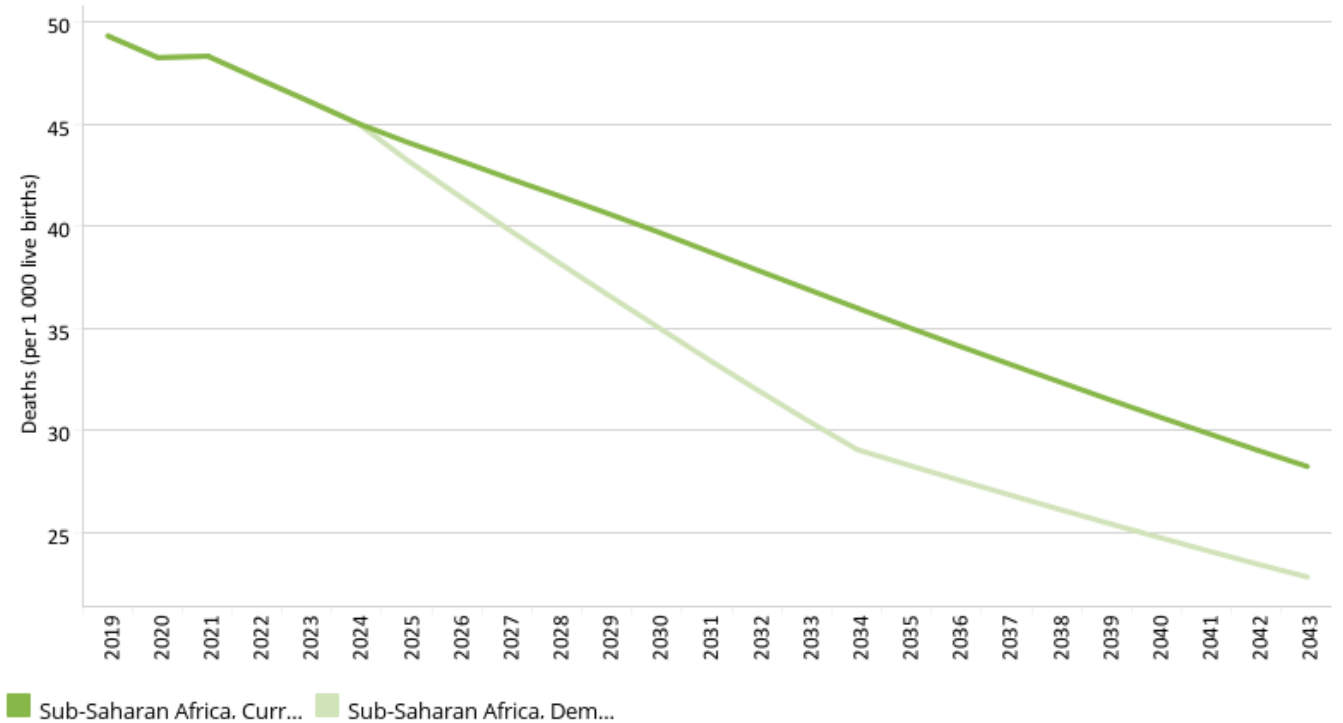
In 2019, the ratio of working-age persons to dependants for sub-Saharan Africa was only 1.2. In the Current Path forecast, the region only enters the demographic dividend in 2051, given the population momentum and its high fertility rates. In the Demographic scenario, sub-Saharan Africa gets to a ratio of 1.7 working-age persons to every dependant by 2043. Only eight countries in sub-Saharan Africa had entered a potential demographic dividend in 2019, namely Mauritius, Seychelles, Tunisia, Libya, Cabo Verde, Djibouti, Morocco and South Africa; this number increases to 13 countries in 2043. In the Demographic scenario, however, the number increases to 33 countries in 2043.

Chart 17: Infant mortality in CP and Demog scenario, 2019–2043

Deaths per 1 000 live births



Sub-Saharan Africa



Source: IFs 7.63 initialising from Institute for Health Metrics and Evaluation Mortality Visualization Tool data

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The infant mortality rate is 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.

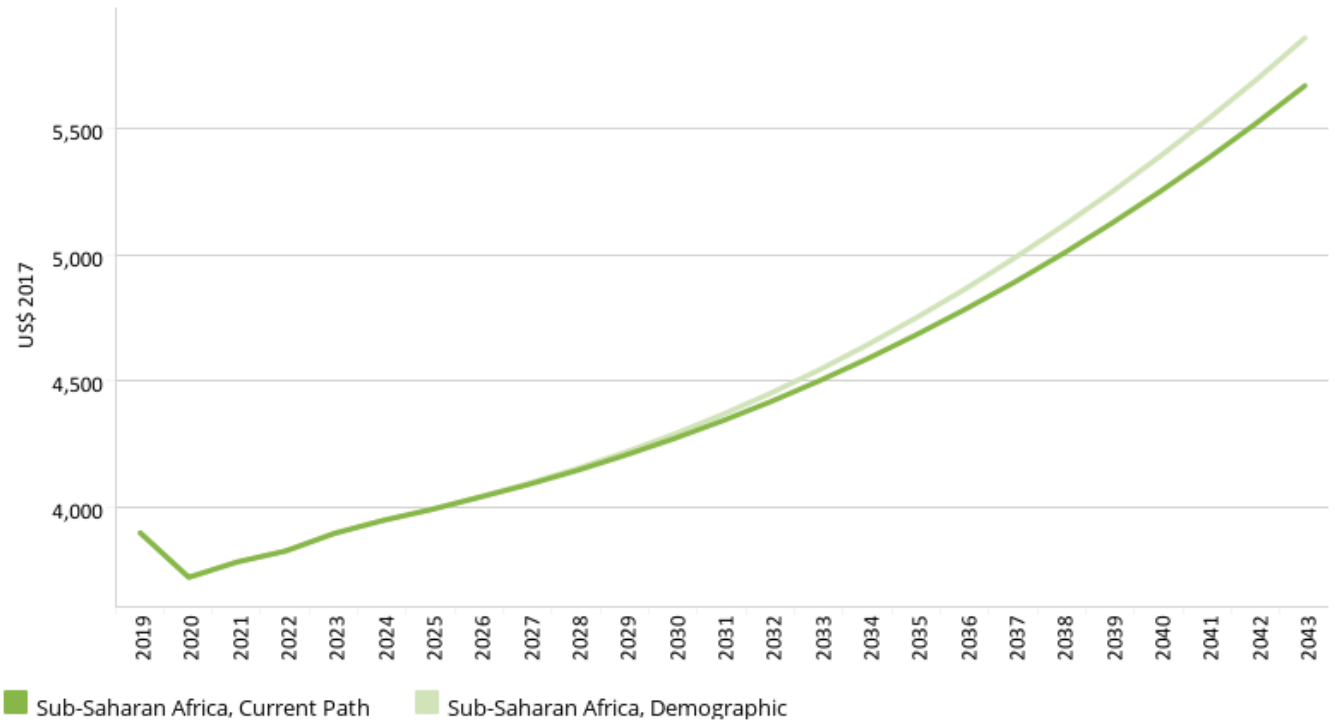
The average rate of infant mortality for sub-Saharan Africa in 2019 was 49.3 deaths per 1 000 live births, ranging from 81 deaths in CAR to 9.8 in Seychelles. CAR, South Sudan and Chad all had rates above 70 deaths per 1 000 live births in 2019. In the Current Path forecast, rates decline to 28.3 deaths per 1 000 live births by 2043, ranging from 44.5 in Chad and 41.1 in Nigeria to 8.7 in Mauritius and 5.4 in Seychelles. In the Demographic scenario, the sub-Saharan Africa rate declines to 22.8 in 2043. In the Demographic scenario, countries with the highest infant mortality rates will be Chad (at 35.7), Nigeria (at 32.6) and South Sudan (at 30.6).

Chart 18: GDP per capita in CP and Demog scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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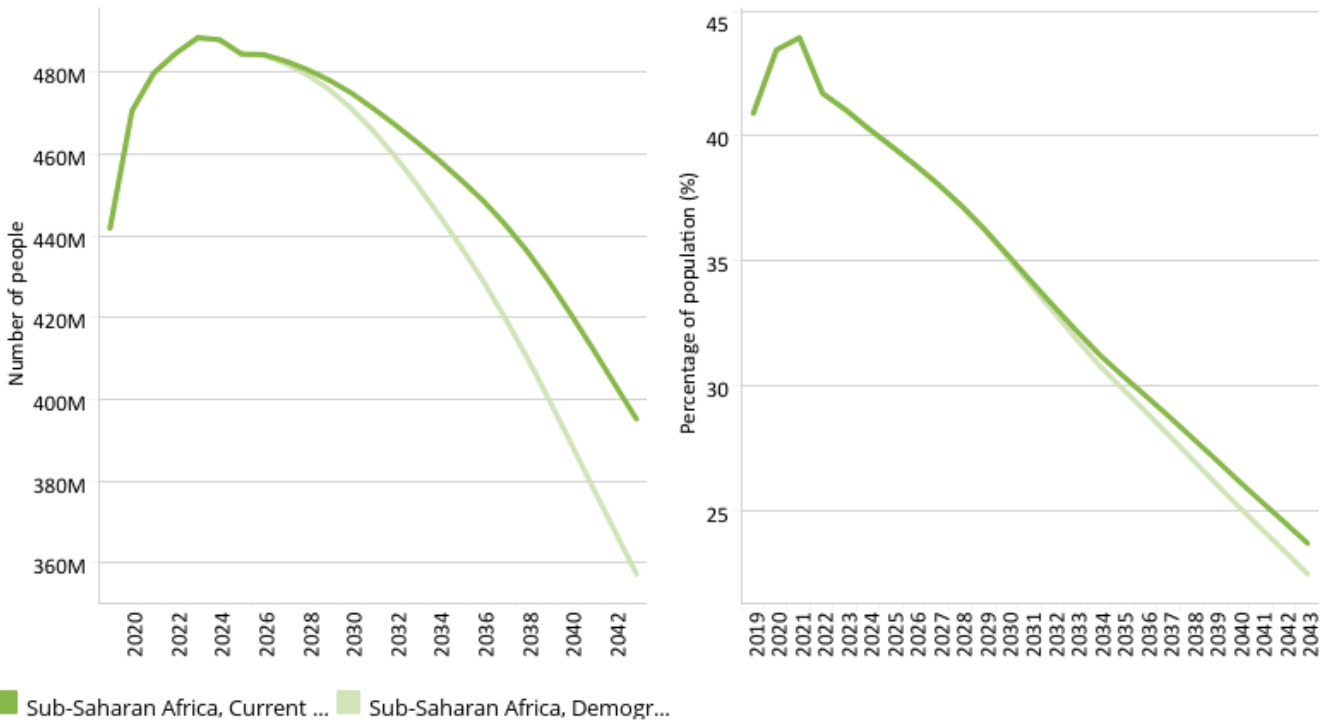
By 2043, the Demographic scenario will increase average GDP per capita by US\$190 compared to the Current Path forecast. The countries that gain the most percentage increase in GDP per capita by 2043 in the Demographic scenario are Malawi, Zimbabwe and Madagascar, while countries such as Botswana, Mauritius and Seychelles gain little since they are already in positive dividend territory.

Chart 19: Poverty in CP and Demog scenario, 2019–2043

Millions of people and % of total population



Sub-Saharan Africa \$1.90



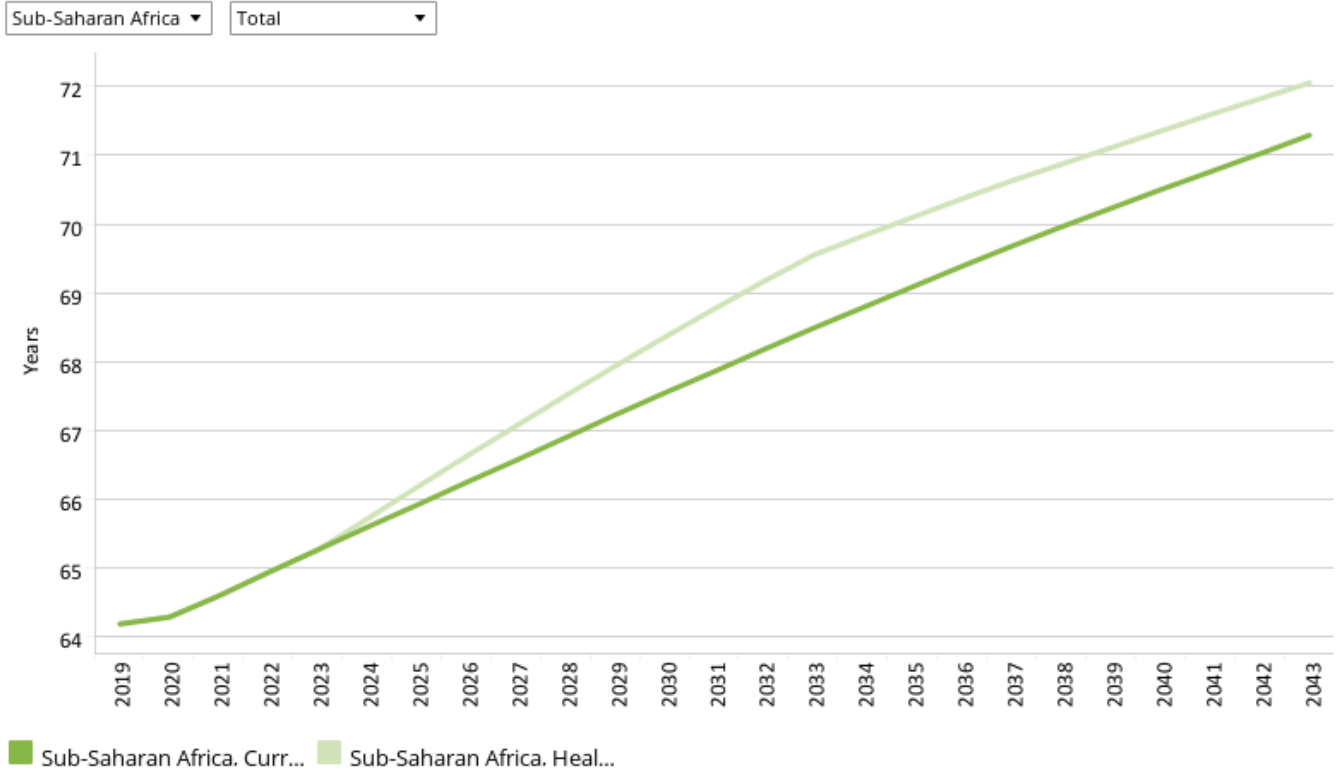
Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNet World Bank data

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Compared to the Current Path forecast, the Demographic scenario will reduce extreme poverty in the sub-Saharan Africa by 37,9 million people in 2043. Using the US\$1.90 poverty line, the Demographic scenario will reduce extreme poverty in the subcontinent by 15 percentage points in 2043 compared to the Current Path forecast for that year, resulting in a poverty rate of 19.79%. Madagascar (4.5 million), Nigeria (5.9 million) and the DR Congo (8.2 million) will experience the largest decline in numbers of extremely poor people by 2043.



Chart 20: Life expectancy in CP and Health/WaSH scenario, 2019–2043



Source: IFs 7.63 initialising from Institute for Health Metrics Evaluation GBD Foresight Tool data

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This section presents reasonable but ambitious improvements in the Health/WaSH scenario, which include reductions in the mortality rate associated with both communicable diseases (e.g. AIDS, diarrhoea, malaria and respiratory infections) and non-communicable diseases (NCDs) (e.g. diabetes), as well as improvements in access to safe water and better sanitation. The acronym WaSH stands for water, sanitation and hygiene.

The intervention is explained [here](#) in the thematic part of the website.

In the Current Path forecast, life expectancy in sub-Saharan Africa will rise from 64.2 years in 2019 to 71.3 years in 2043, with some variations between countries. In 2019, life expectancy was highest in Mauritius (75.2 years), Seychelles (74.6 years), Cape Verde (74.2 years), and São Tomé and Príncipe (71.2 years); and lowest in Somalia (58.5 years) and CAR and Lesotho (51years). The world average in 2019 was 73.2 years, which will increase to 76.6 in 2043, implying that sub-Saharan Africa is slowly catching up. Whereas the gap between the global average and the average for sub-Saharan Africa was 9 years in 2019, by 2043 it will decline to 5.3 years.

Women tend to live longer than men. Whereas the average life expectancy for women globally was around 5 years longer than men in 2019, the difference in sub-Saharan Africa was only 3.4 years in 2019, slowly increasing to 4.1 years in 2043.

In the Health/WaSH scenario, sub-Saharan Africa will, on average, record an increase of less than a year (0.77) compared

to the Current Path forecast in 2043, but with large country to country variations. Because of the rapid decline in deaths from AIDS, Lesotho will, by 2043, experience an increase of 2.2 years in life expectancy, followed by South Africa (1.8 years) and Nigeria (1.4 years). Senegal, Comoros and The Gambia will, on the other hand, experience the least improvement.

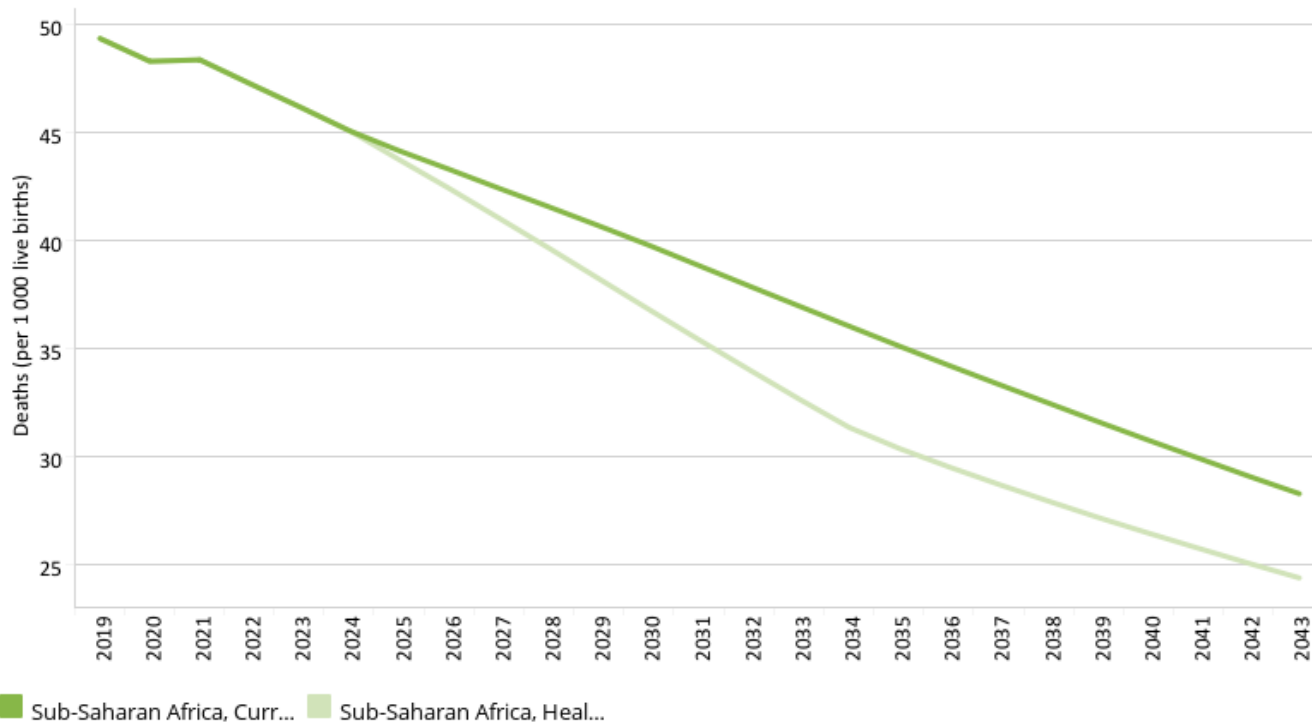
Chart 16 Chart 17 Chart 18 Chart 19 Chart 20 Chart 21 Chart 22 Chart 23 Chart 24 Chart 25 Chart

Chart 21: Infant mortality in CP and Health/WaSH scenario, 2019–2043

Deaths per 1 000 live births



Sub-Saharan Africa



Source: IFs 7.63 initialising from Institute for Health Metrics and Evaluation Mortality Visualization Tool data

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Agriculture scenario

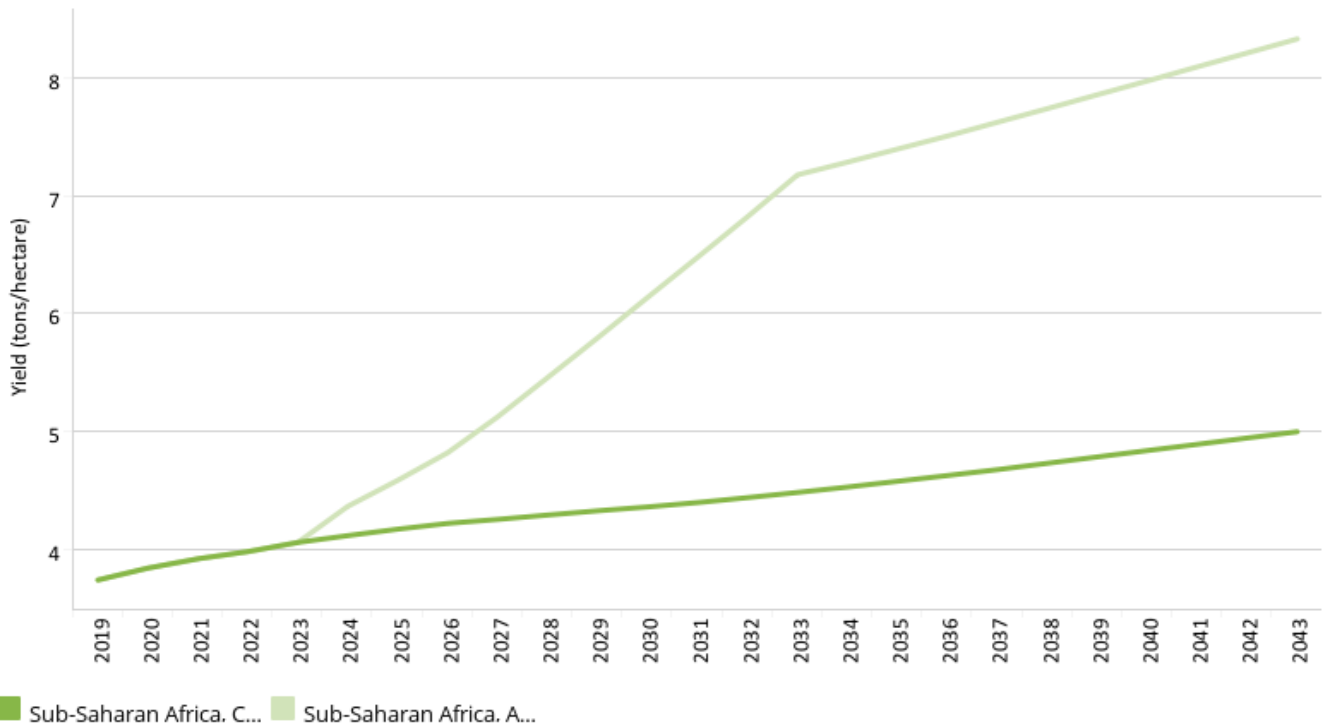
Chart 17 Chart 18 Chart 19 Chart 20 Chart 21 Chart 22 Chart 23 Chart 24 Chart 25 Chart 26 Chart 27

Chart 22: Yield/hectare in CP and Agric scenario, 2019–2043

Pre-loss levels



Sub-Saharan Africa



Source: IFs 7.63 initialising from FAOSTAT on-line statistical service data

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The Agriculture scenario represents reasonable but ambitious increases in yields per hectare (reflecting better management and seed and fertiliser technology), increased land under irrigation and reduced loss and waste. Where appropriate, it includes an increase in calorie consumption, reflecting the prioritisation of food self-sufficiency above food exports as a desirable policy objective.

The intervention is explained [here](#) in the thematic part of the website.

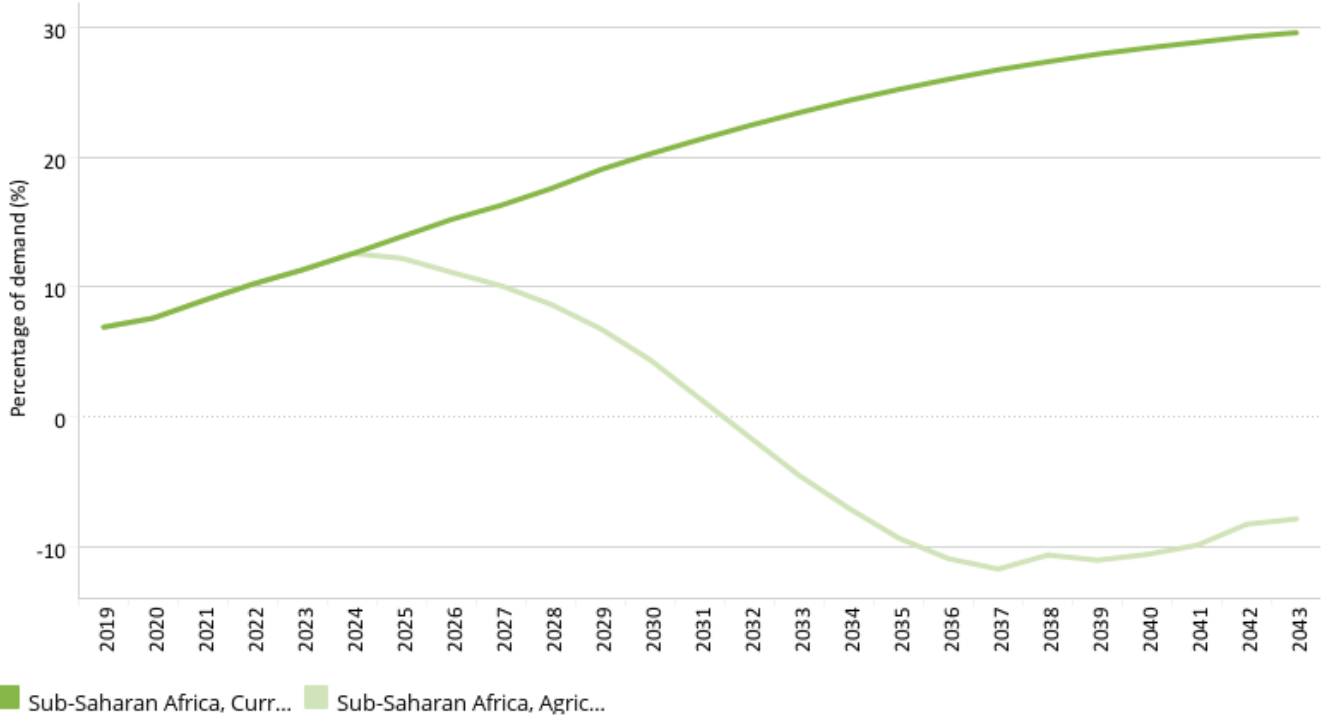
The data on yield per hectare (in metric tons) is for crops but does not distinguish between different categories of crops.

In 2019, the average crop yield in sub-Saharan Africa was 3.7 metric tons, slightly below the average for Africa which was 3.9 tons per hectare. In the Current Path forecast, the yield for sub-Saharan Africa improves to 5.0 tons by 2043 and to 8.3 tons in the Agriculture scenario — a difference of almost 66%. In 2043, yield per hectare is forecast to be largest for Mauritius (57.79), Swaziland (44.64) and Rwanda (10.59) in the Current Path. Due to low rainfall, poor agri-tech adoption rate and poor soil conditions, Niger (1.033 million tons), Mauritania (1.273 million tons) and The Gambia (1.579 million tons) have the least yield in the Current Path forecast for 2043.

Chart 23: Agriculture imports in CP and Agric scenario, 2019–2043
 Net imports for meat, crops and fish, % of demand



Sub-Saharan Africa



Source: IFs 7.63 initialising from Food and Agriculture Organization Food Balance Sheets data

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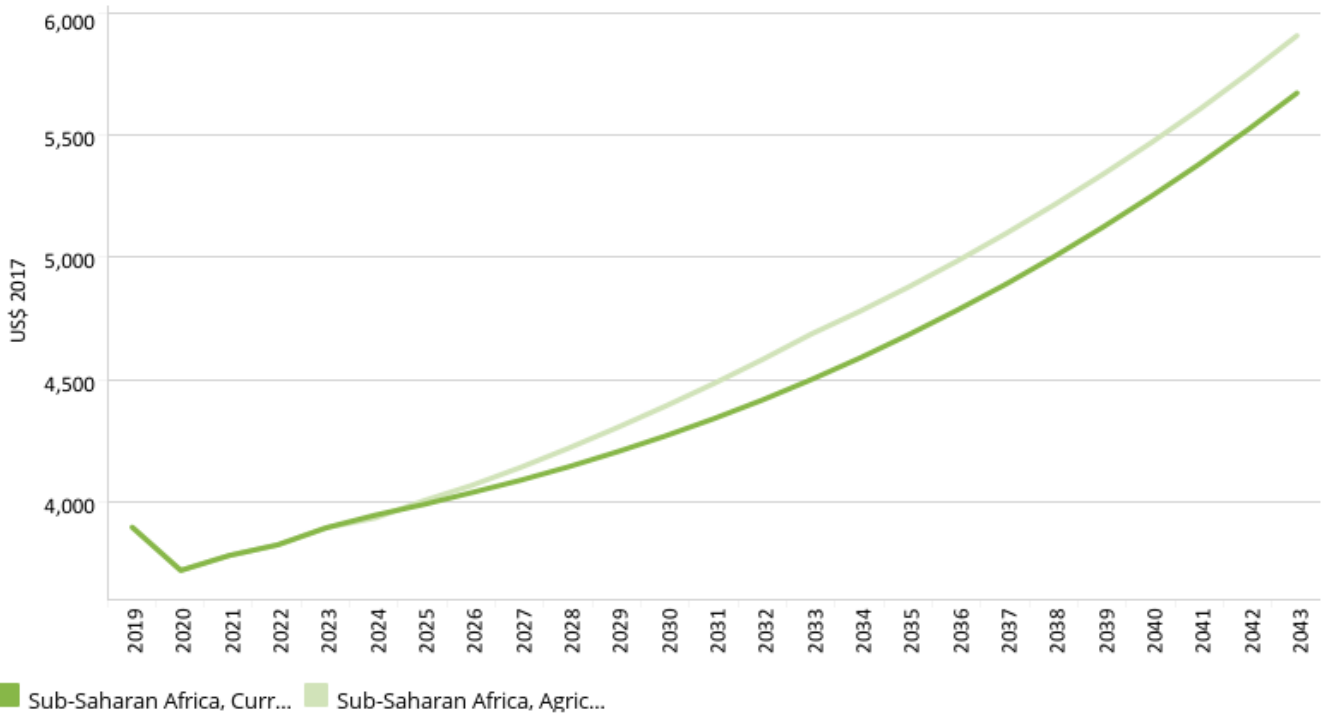
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In the Current Path forecast, the contribution of agriculture to the GDP of sub-Saharan Africa declines from 14.5% in 2019 to 6.3% in 2043. In the Agriculture scenario, agriculture would still contribute almost 10.1% to GDP by 2043, and the sub-Saharan Africa region will produce 665.9 million metric tons more crops by 2043 compared to the Current Path forecast. The import dependence of sub-Saharan Africa is set to be reduced to 4.83% of demand by 2043 instead of the Current Path forecast of 34.58%. The subcontinent would therefore import US\$401.9 billion less agricultural produce in 2043 than on the Current Path forecast.

Chart 24: GDP per capita in the CP and Agric scenario, 2019–2043
Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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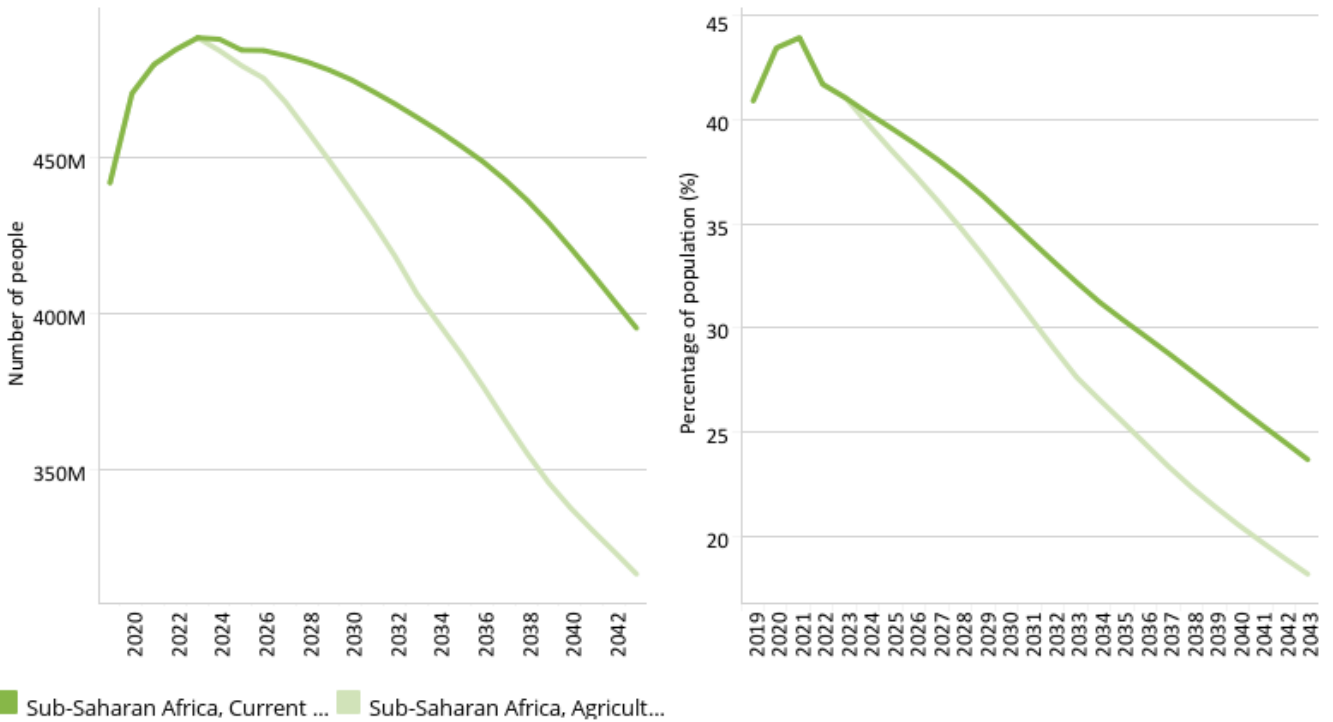
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Agriculture is a key sector in African economies. GDP per capita is forecasted to increase more rapidly in the Agriculture scenario than in the Current Path forecast; and in 2043, the region’s average GDP per capita is projected to increase by US\$ 235 in the Agriculture scenario compared to the Current Path. However, in the Agriculture scenario, sub-Saharan Africa’s GDP per capita will fall short of the average world GDP per capita by almost US\$16 559.

Chart 25: Poverty in CP and Agric scenario, 2019–2043
Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNat World Bank data

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In the Current Path forecast, the number of poor people will decrease from 441.9 million people in 2019 to 395.2 million in 2043. In the Agriculture scenario, the number of poor people is forecasted to reduce to 316.2 million people in 2043, lifting 79 million people out of extreme poverty in 2043.

In the Current Path forecast, the proportion of the population in poverty is forecast to decline between 2019 and 2043, but at a slower rate than in the Agriculture scenario, where sub-Saharan Africa will reduce its poverty rate by 5.48 percentage points in 2043 compared to the Current Path forecast.



Education scenario

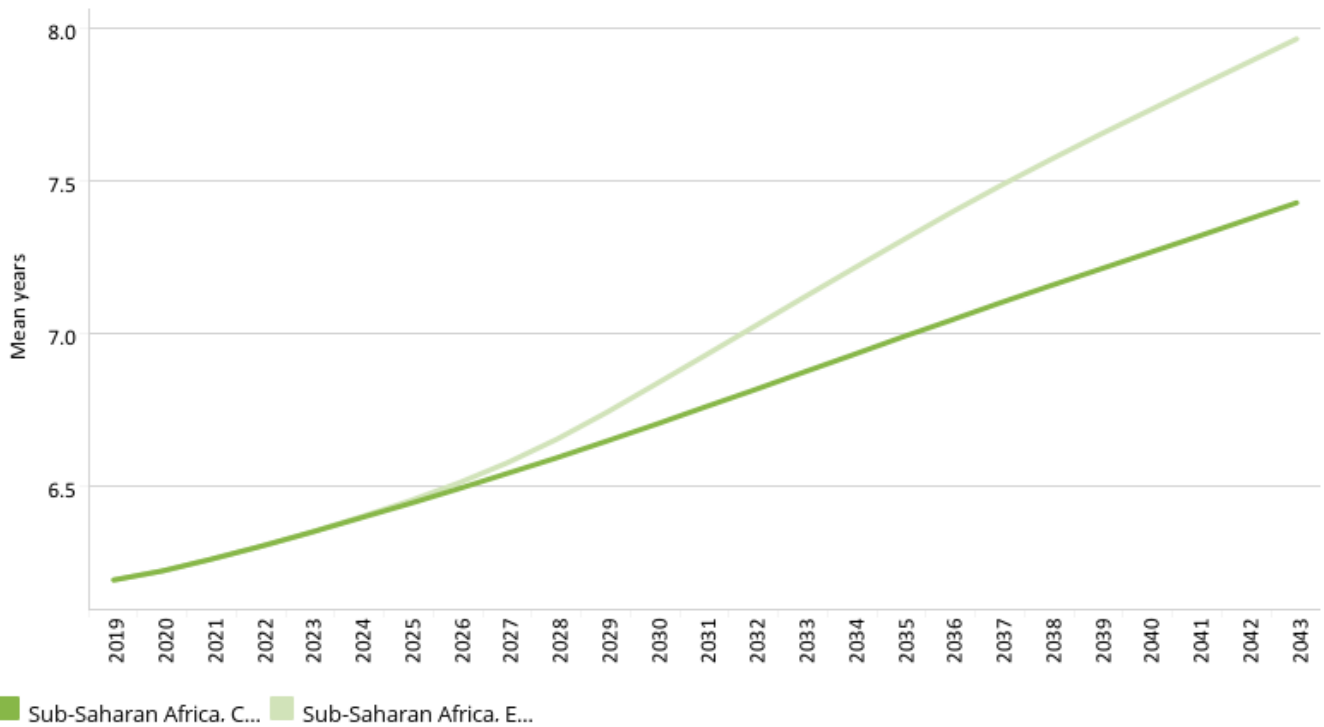
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Chart 26: Mean years of education in CP and Educ scenario, 2019–2043

Mean years of adult (+15) education



Sub-Saharan Africa ▼ Total ▼



Source: IFs 7.63 initialising from Barro-Lee data

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

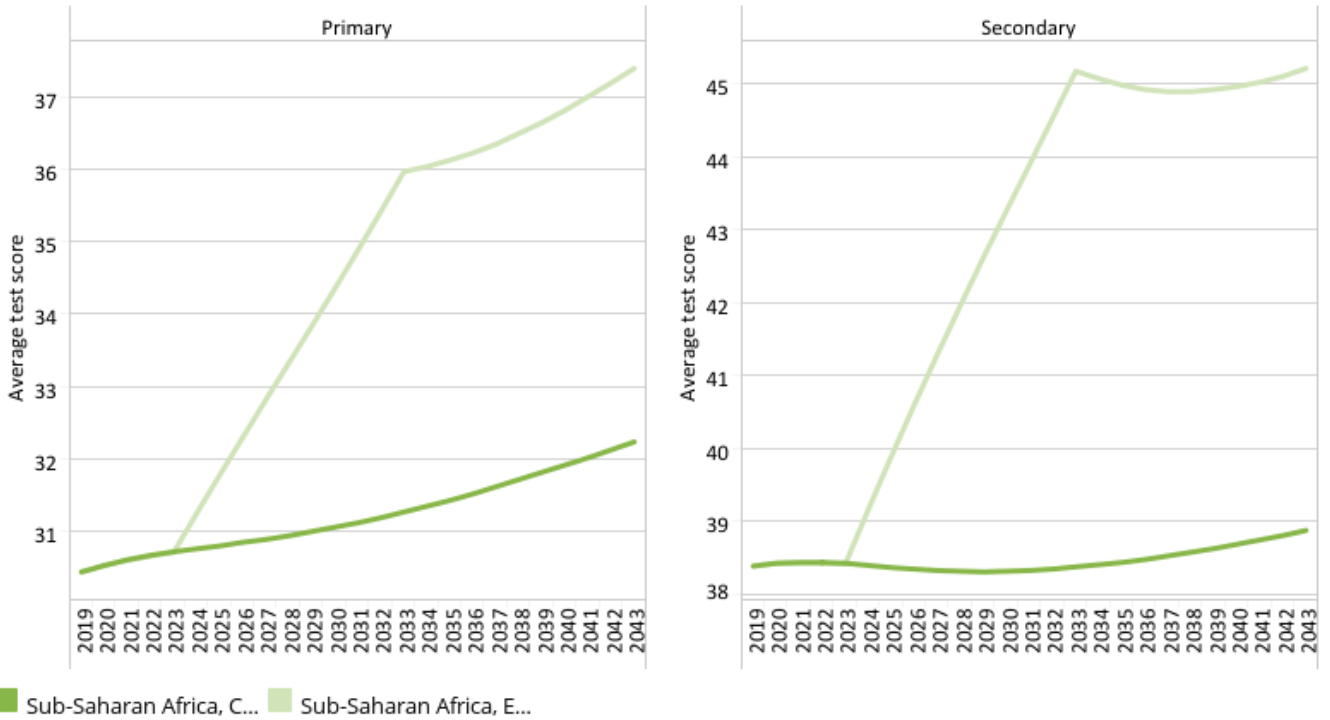
The intervention is explained [here](#) in the thematic part of the website.

The mean years of adult education will increase from 6.2 in 2019 to 7.4 years in 2043 in the Current Path for sub-Saharan Africa. The increase in mean years of education is more rapid in the Education scenario, leading to an extra 7.2 months of adult education in the Education scenario compared to the Current Path in 2043. There is gender education inequality in sub-Saharan Africa in favour of male adults, who attain 8.4 months more education compared to the average female adult in the Current Path in 2043.

Chart 27: Education quality in CP and Educ scenario, 2019–2043
Average test scores for primary and secondary learners



Sub-Saharan Africa



Source: IFs 7.63 initialising from World Bank EDSTATS

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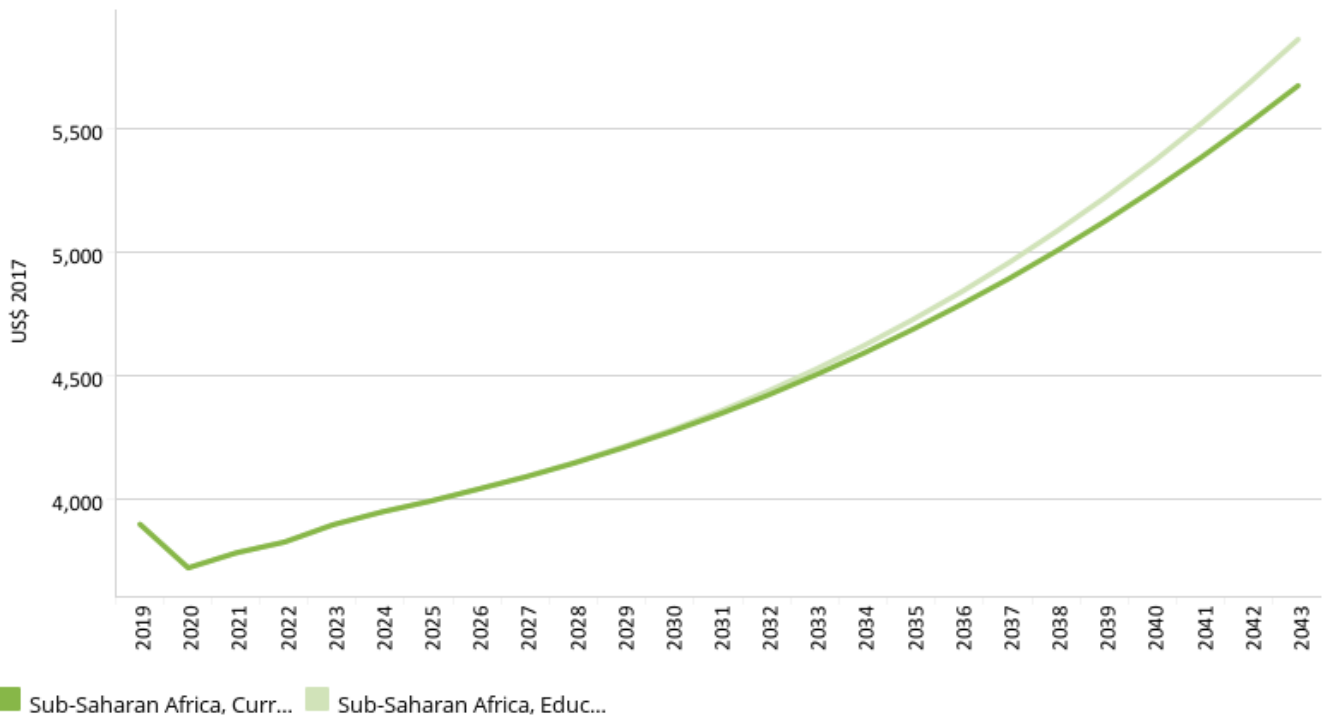
Quality education nurtures sound human capital and long-term economic growth of a country. The Education scenario will see modest improvement in education quality of secondary learners of 6.3 and 5.2 additional points for primary learners compared to the Current Path forecast in 2043. Average test scores are higher among the secondary learners than primary learners in the Education scenario. The average test scores for primary and secondary learners in the Education scenario in 2043 are lower than the average world test scores in Current Path in 2043. This means that the actualisation of the Education scenario will fall short of bringing sub-Saharan Africa on par with world average test scores in 2043.

Chart 28: GDP per capita in CP and Educ scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa ▾



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

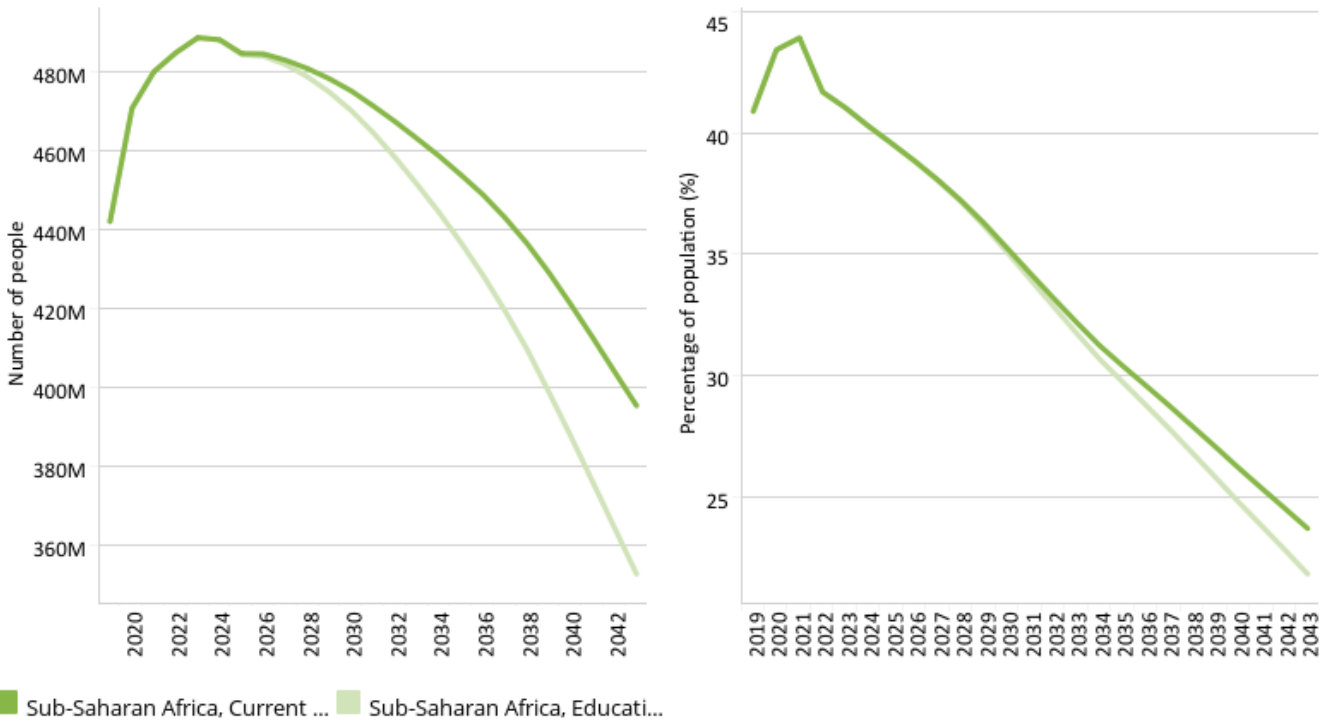
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The GDP per capita for sub-Saharan Africa will increase from US\$3 897 in 2019 to US\$5 671 in 2043 in the Current Path. In the Education scenario in 2043, GDP per capita will improve by US\$188 compared to the Current Path forecast. Despite the improvement in the Education scenario, the average sub-Saharan African country's GDP per capita is below the average in the Current Path forecast for the world at US\$16 652 in 2043.

Chart 29: Poverty in CP and Educ scenario, 2019–2043
Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNet World Bank data

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By 2043, the Education scenario will lift 42.7 million people out of extreme poverty compared to the Current Path GDP per capita. Meanwhile, in 2043 the Education scenario will reduce the poverty rate in sub-Saharan Africa by 1.9 percentage points compared to the Current Path. In the Education scenario, the poverty rate will fall to 21.8%, which is still more than three times the world average poverty rate of 6% in 2043.



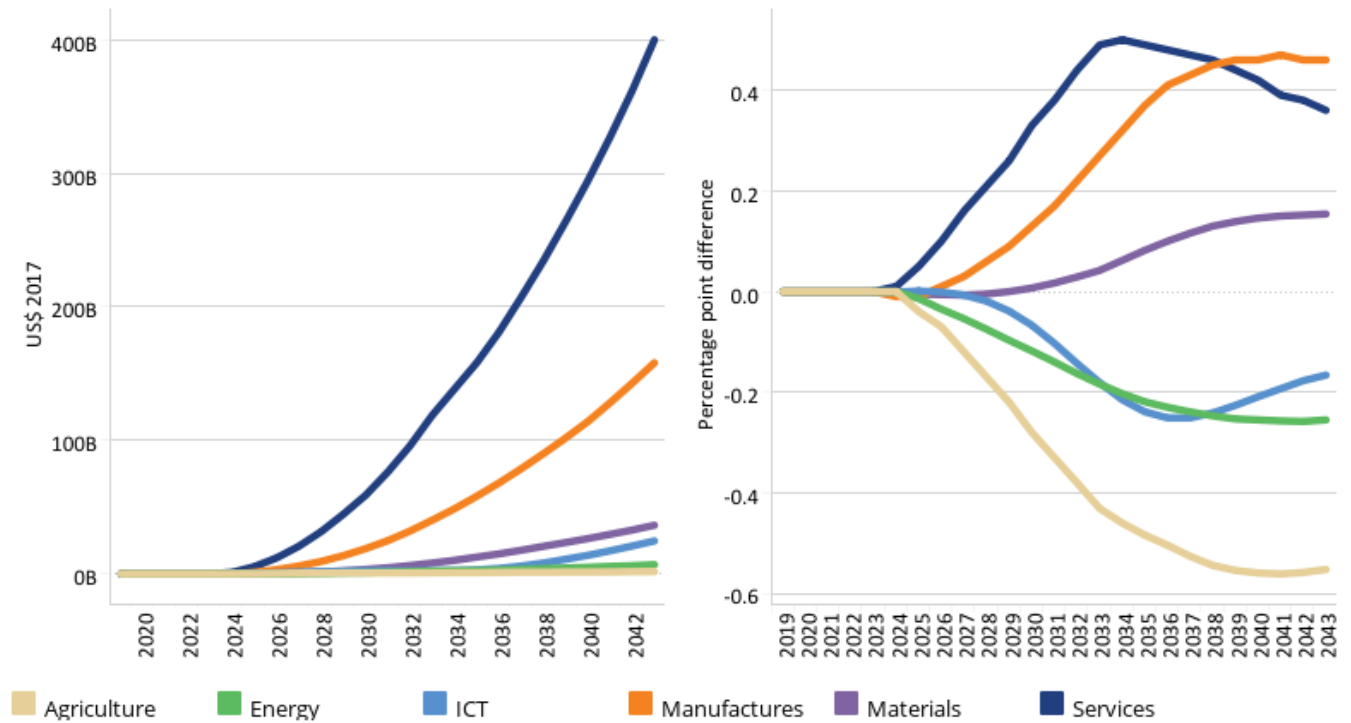
Manufacturing scenario

Chart 25 Chart 26 Chart 27 Chart 28 Chart 29 Chart 30 Chart 31 Chart 32 Chart 33 Chart 34

Chart 30: Value added by sector in CP and Manufac/Transfers scenario, 2019-2043



Sub-Saharan Africa



Source: IFs 7.63 initialising from International Monetary Fund World Economic Outlook database

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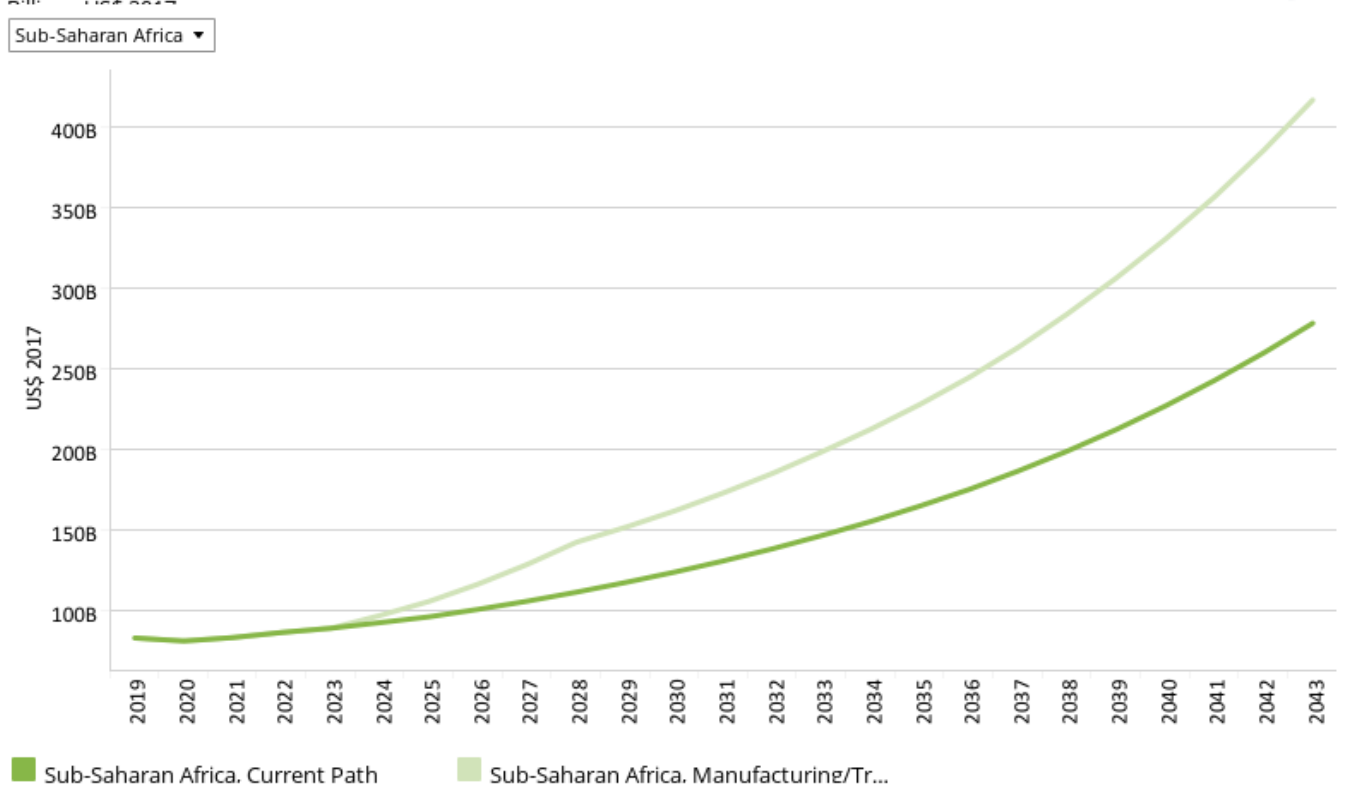
The Manufacturing/Transfers scenario represents reasonable but ambitious manufacturing growth through greater investment in the economy, investments in research and development, and promotion of the export of manufactured goods. It is accompanied by an increase in welfare transfers (social grants) to moderate the initial increases in inequality that are typically associated with a manufacturing transition. To this end, the scenario improves tax administration and increases government revenues.

The intervention is explained [here](#) in the thematic part of the website.

Chart 30 should be read with [Chart 8](#) that presents a stacked area graph on the contribution to GDP and size, in billion US\$, of the Current Path economy for each of the sectors.

In the Manufacturing/Transfers scenario, the service sector will add the largest contribution to the economy of sub-Saharan Africa of US\$407.1 billion compared to the Current Path — a 0.27 percentage point difference. In the distant second is the manufacturing sector which will add US\$177.6 billion, or 0.51 percentage points, more to the economy in the Manufacturing/Transfers scenario compared to the Current Path forecast in 2043. The ICT sector will contribute US\$46.98 million, or 0.06 percentage points, more to the economy in the Manufacturing/Transfers scenario compared to the Current Path forecast in 2043.

Chart 31: Gov welfare transfers in CP and Manufac/Transfers scenario, 2019-2043



Source: IFs 7.63 initialising from World Development Indicators data

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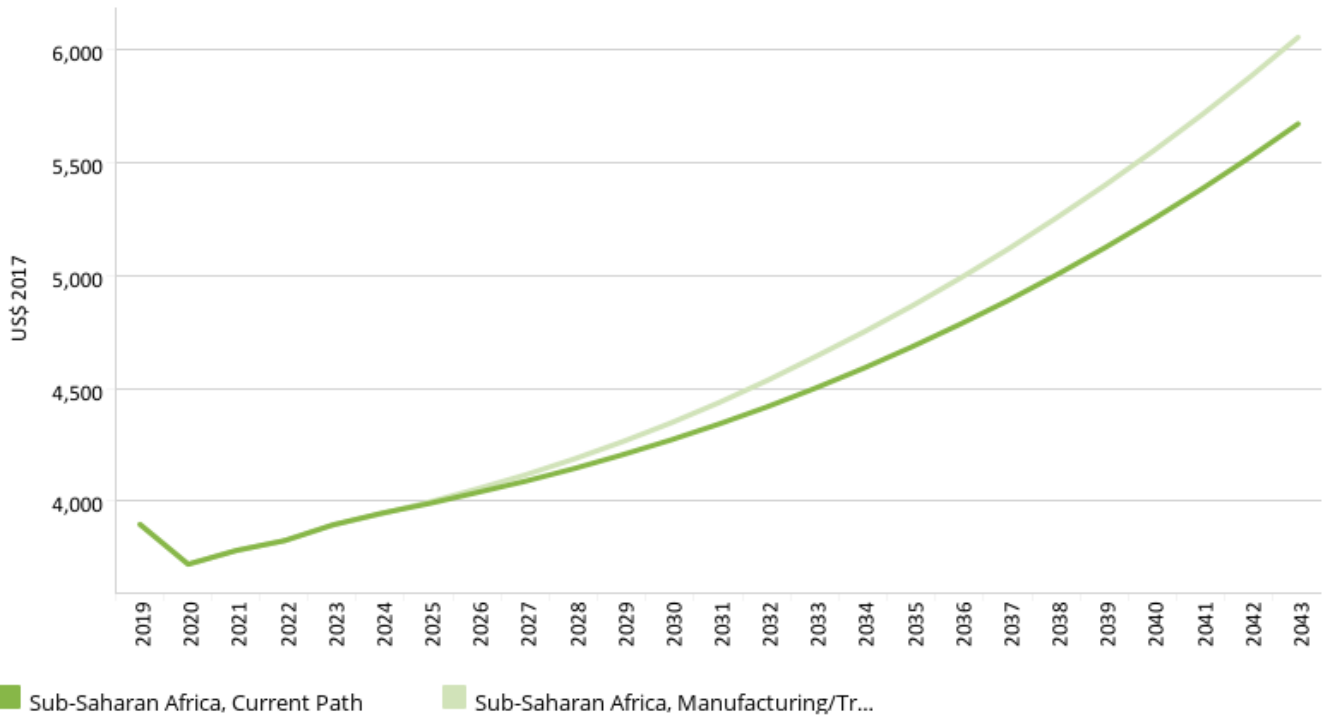
In the Current Path, the average government welfare transfers to households in sub-Saharan Africa will rise from US\$82.8 billion in 2019 to US\$277.8 billion in 2043. In the Manufacturing/Transfers scenario, these government welfare transfers will rise to US\$416.3 billion by 2043, an increase of US\$138.5 billion compared to the Current Path.

Chart 32: GDP per capita in CP and Manufac/Transfers scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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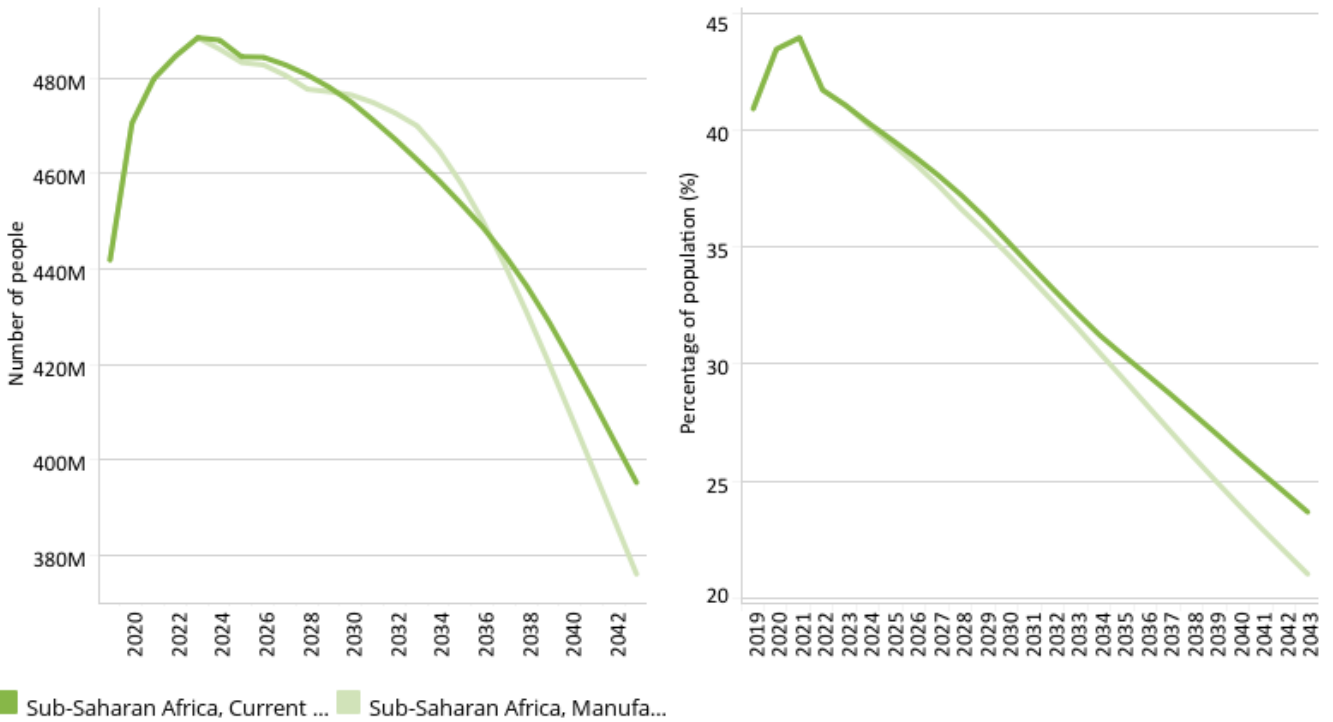
In 2019, the GDP per capita in sub-Saharan Africa was US\$3 897, which was lower than the world average GDP per capita of US\$17 734. In the Current Path, sub-Saharan Africa will increase its GDP per capita to US\$5 671 in 2043. The GDP per capita in the Current Path is US\$384 less than in the Manufacturing/Transfer scenario in 2043 due to greater investment, the promotion of manufacturing exports and better tax administration.

Chart 33: Poverty in CP and Manufac/Transfers scenario, 2019–2043

Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNet World Bank data

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The Manufacturing/Transfers scenario will reduce the number of poor people to 376 million (21%) by 2043, down from 441.9 million in 2019. This scenario will result in a 4.86 percentage points reduction of extreme poverty compared to the Current Path forecast in 2043, which constitutes 65.9 million people being lifted out of extreme poverty.



Leapfrogging scenario

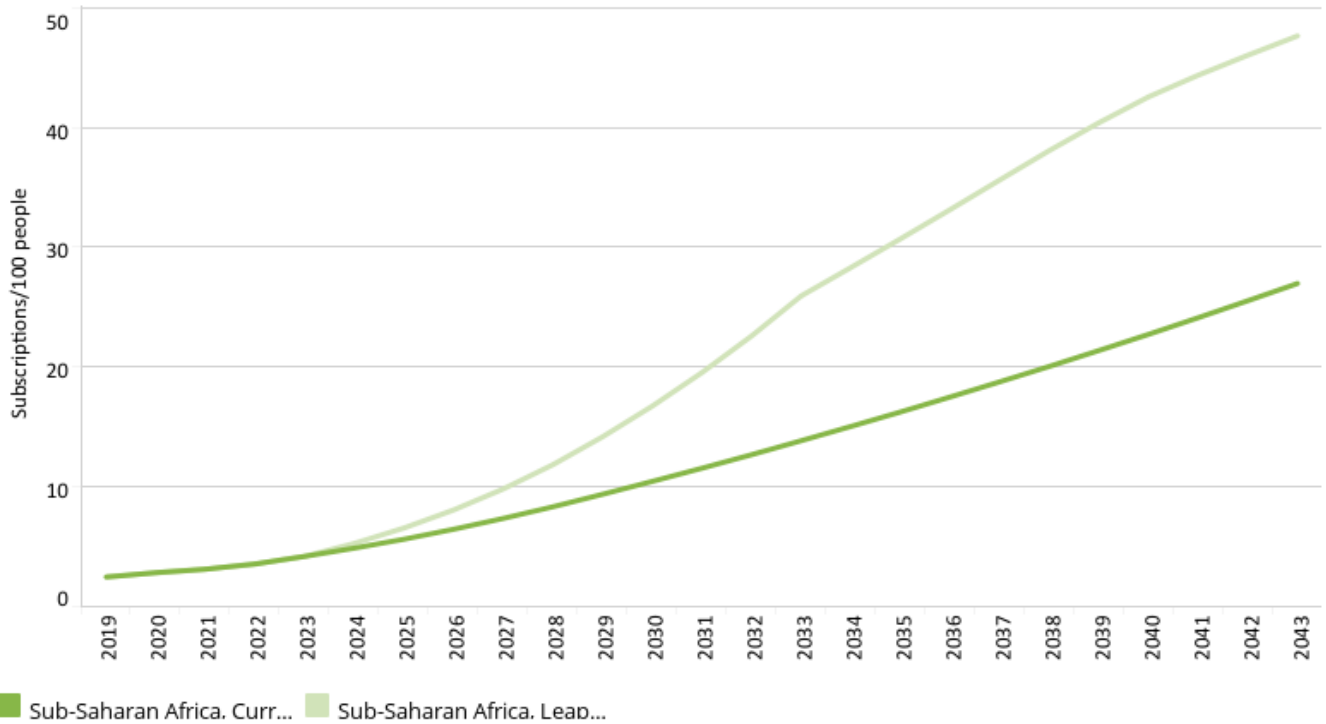
Chart 29 Chart 30 Chart 31 Chart 32 Chart 33 Chart 34 Chart 35 Chart 36 Chart 37 Chart 38 Chart 39

Chart 34: Fixed broadband access in CP and Leapfrogging scenario, 2019–2043

Subscriptions per 100 people



Sub-Saharan Africa



Source: IFS 7.63 initialising from International Telecommunication Union data

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The Leapfrogging scenario represents a reasonable but ambitious adoption of and investment in renewable energy technologies, resulting in better access to electricity in urban and rural areas. The scenario includes accelerated access to mobile and fixed broadband and the adoption of modern technology that improves government efficiency and allows for the more rapid formalisation of the informal sector.

The intervention is explained [here](#) in the thematic part of the website.

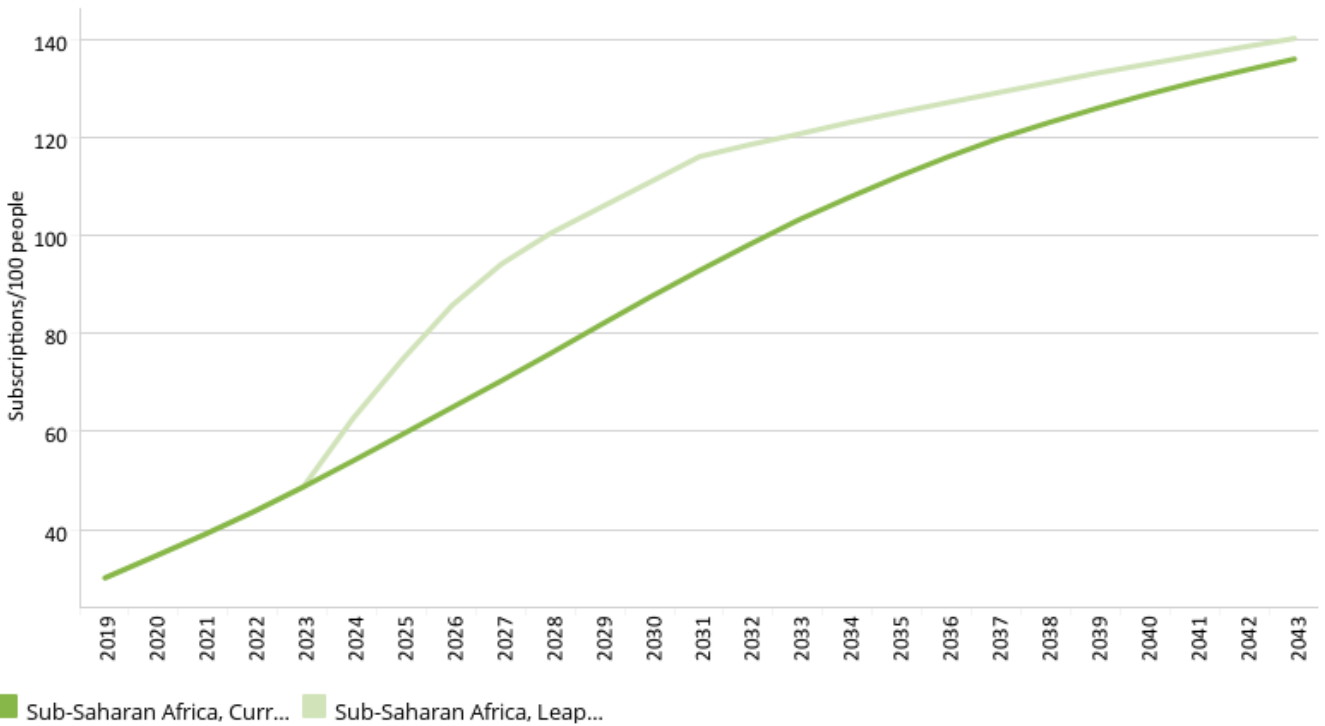
Fixed broadband includes cable modem Internet connections, DSL Internet connections of at least 256 KB/s, fibre and other fixed broadband technology connections (such as satellite broadband Internet, ethernet local area networks, fixed-wireless access, wireless local area networks, WiMAX, etc.).

Sub-Saharan Africa will increase its fixed broadband subscriptions by 24.6 per 100 people in the Current Path forecast from 2019 to 2043. In the Leapfrogging scenario, fixed broadband subscriptions increase to 45.3 per 100 people by 2043, representing 20.7 per 100 more subscriptions than in the Current Path forecast. In 2043, broadband subscriptions are projected to be greater in sub-Saharan Africa in the Leapfrogging scenario than the average for the world (40.4 per 100 people).

Chart 35: Mobile broadband access in CP and Leapfrogging scenario, 2019–2043
Subscriptions per 100 people



Sub-Saharan Africa



Source: IFs 7.63 initialising from International Telecommunication Union data

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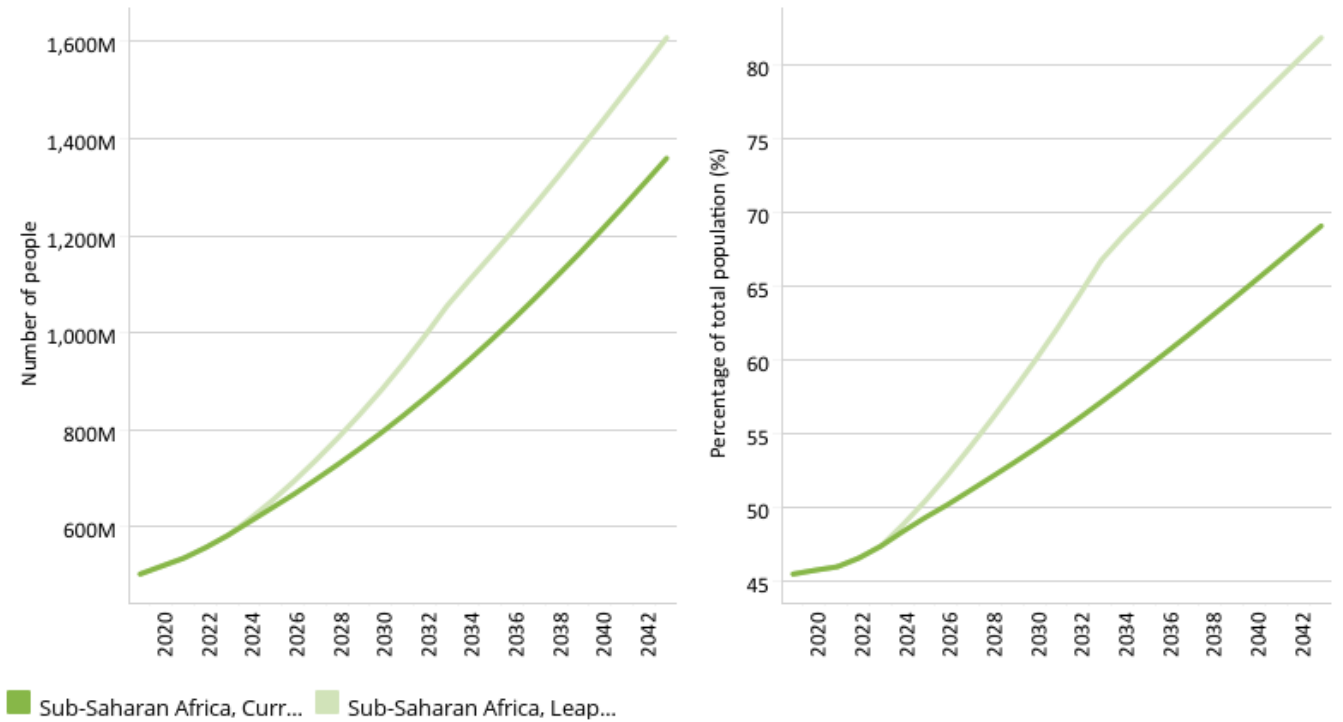
Mobile broadband refers to wireless Internet access delivered through cellular towers to computers and other digital devices.

Access to mobile broadband will increase more quickly than for fixed broadband, reaching saturation levels. In 2019, 30.1 out of every 100 persons in sub-Saharan Africa had a mobile broadband subscription. In the Current Path forecast, that ratio will increase to 92.9 by 2031 and in the Leapfrogging scenario it will reach 100 by 2028. Within IFs, broadband saturation is set at 150 subscriptions per 100 people. The Leapfrogging scenario will fall short of the broadband saturation point of 150 by 7.4 persons per 100 subscriptions in 2043.

Chart 36: Electricity access in CP and Leapfrogging scenario, 2019–2043
Millions of people and % of population



Sub-Saharan Africa Total



Source: IFs 7.63 initialising from World Development Indicators data

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In 2019, 503.3 million people in sub-Saharan Africa had access to electricity. In the Current Path forecast, that number will increase to 794.7 million people by 2030 and to 1 359.8 million by 2043. In the Leapfrogging scenario, 87.9 million more people will have access in 2030 and 248.2 million more in 2043.

In the Leapfrogging scenario, 12.7 percentage points more people in sub-Saharan Africa will be connected to electricity grids compared to the Current Path forecast. The SDG target for 2030 (Indicator 7.1.1) is 98% electricity access, and in the Leapfrogging scenario only Seychelles is projected to meet this target, while Comoros, Mauritius and Gabon will meet the target in 2033, 2036 and 2041, respectively.

Average urban electrification rates in sub-Saharan Africa were 76.4% in 2019 and are forecast to improve to 80% in 2030 and to 87.4% in the Current Path forecast. In the Leapfrogging scenario, urban electricity access improves to 92.9% in 2043. In 2019, the average rate of electricity access in sub-Saharan Africa was 7.7 percentage points below the African average — a gap that shrinks towards 2043.

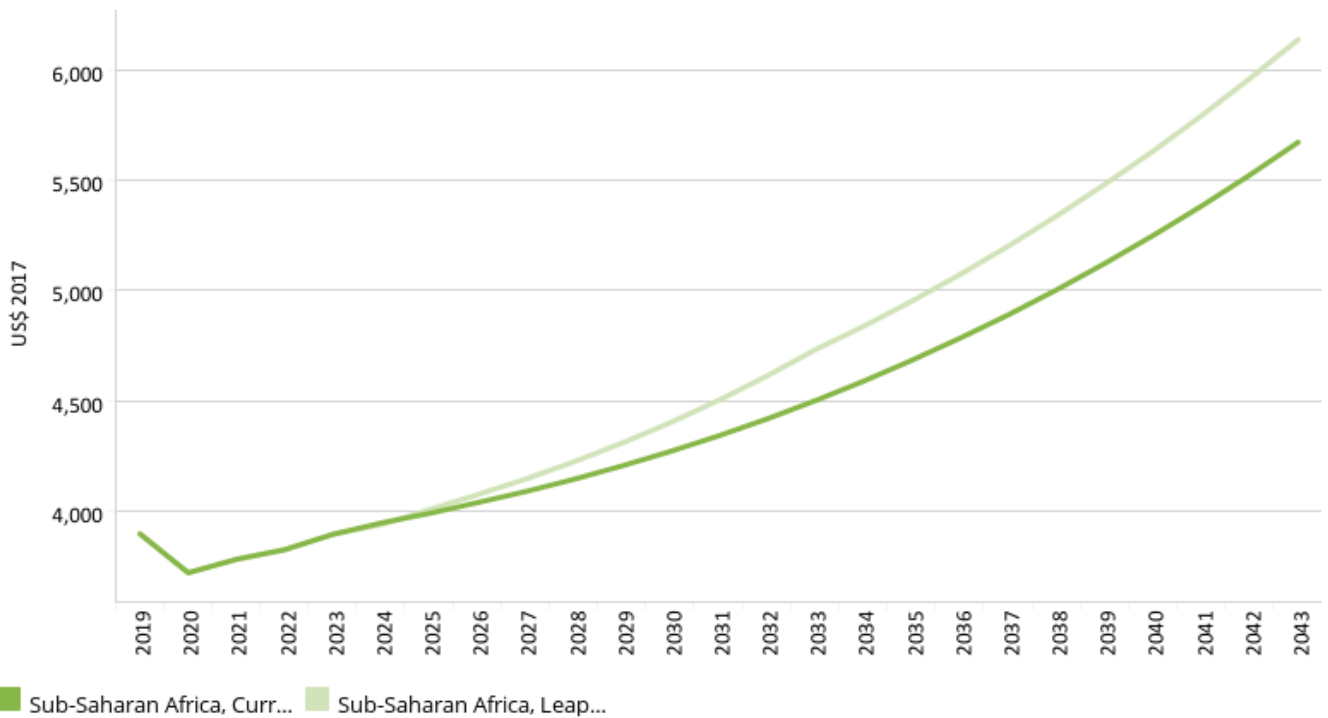
Rural electricity access improves from 25.6% in 2019 to 41.1 % in 2030 (compared to 33.3% on the Current Path forecast) and to 70% in 2043 (compared to 50.7% on the Current Path) in the Leapfrogging scenario.

Chart 37: GDP per capita in CP and Leapfrogging scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

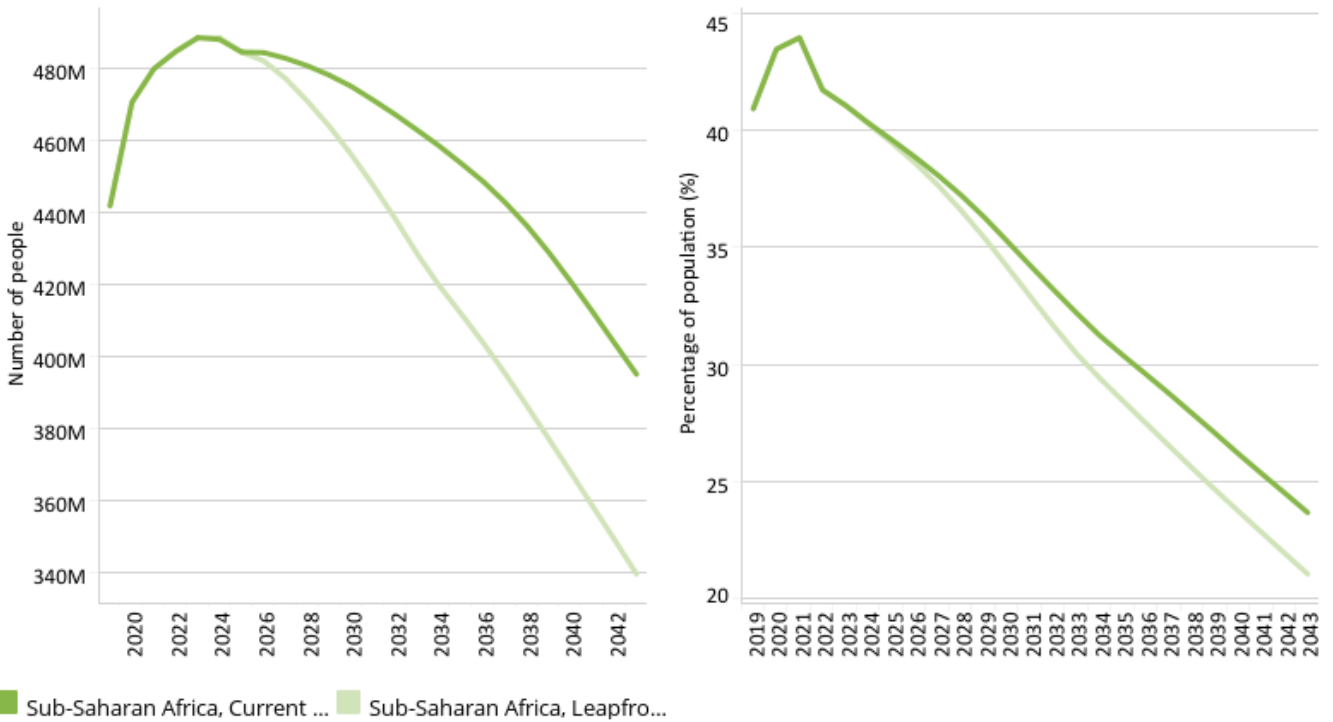
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In 2019, GDP per capita was at US\$3 897 and is forecast to increase to US\$5 671 by 2043 in the Current Path forecast. In the Leapfrogging scenario, GDP per capita will increase by US\$466 to US\$6 137 in 2043 compared to the Current Path forecast. In the Leapfrogging scenario, GDP per capita in sub-Saharan Africa will be short of US\$1 020 compared to the Current Path forecast for Africa in 2043.

Chart 38: Poverty in CP and Leapfrogging scenario, 2019–2043
 Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNet World Bank data

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In the Leapfrogging scenario, sub-Saharan Africa will experience a decline in the number of poor people by 18.9 million in 2030 and by 55.4 million by 2043. In 2019, 40.9% of the population of sub-Saharan Africa were living below US\$1.90 per person per day, a number that will decline to 35.3% in 2030 and to 23.7% in 2043. In the Leapfrogging scenario, the rate will be 34.2% in 2030 and 21.1% in 2043 more.



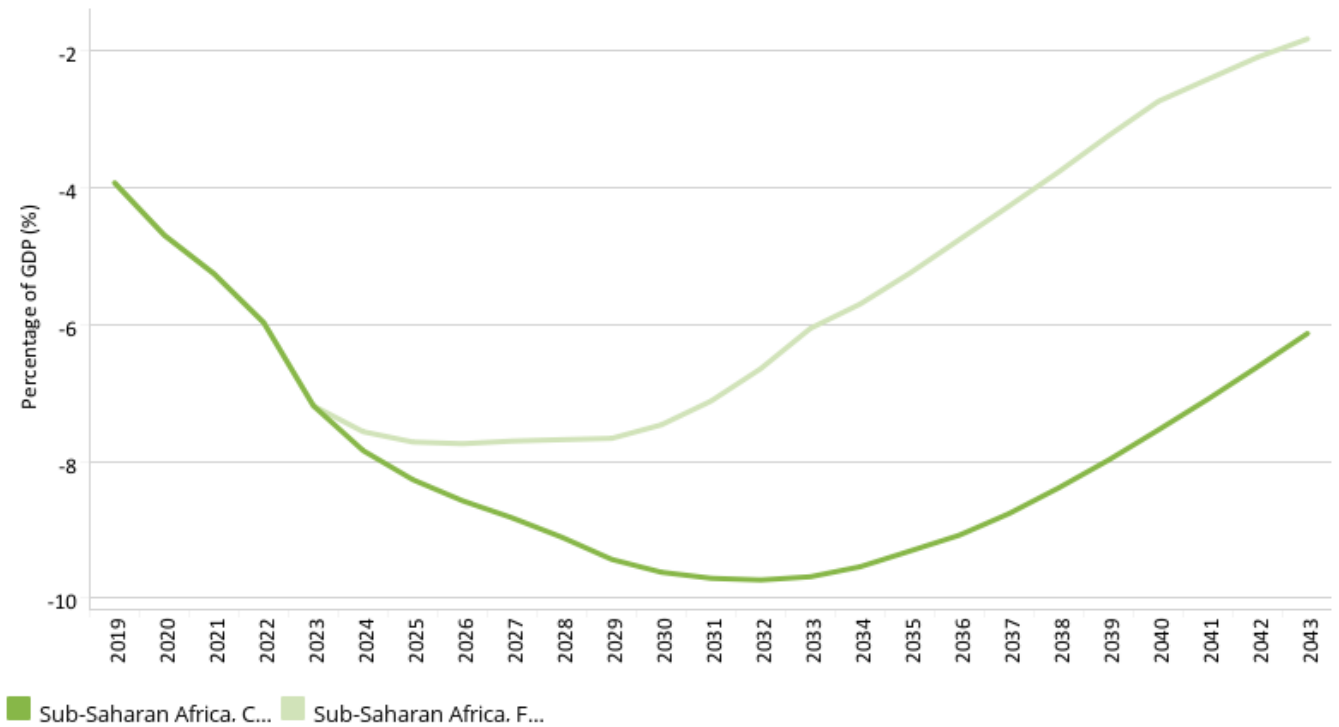
Free Trade scenario

Chart 34 Chart 35 Chart 36 Chart 37 Chart 38 Chart 39 Chart 40 Chart 41 Chart 42 Chart 43 Chart 44

Chart 39: Trade balance in CP and Free Trade scenario, 2019–2043



Sub-Saharan Africa



Source: IFs 7.63 initialising from World Development Indicators data

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The Free Trade scenario represents the impact of the full implementation of the African Continental Free Trade Area (AfCFTA) by 2034 through increases in exports, improved productivity and increased trade and economic freedom.

The intervention is explained [here](#) in the thematic part of the website.

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.

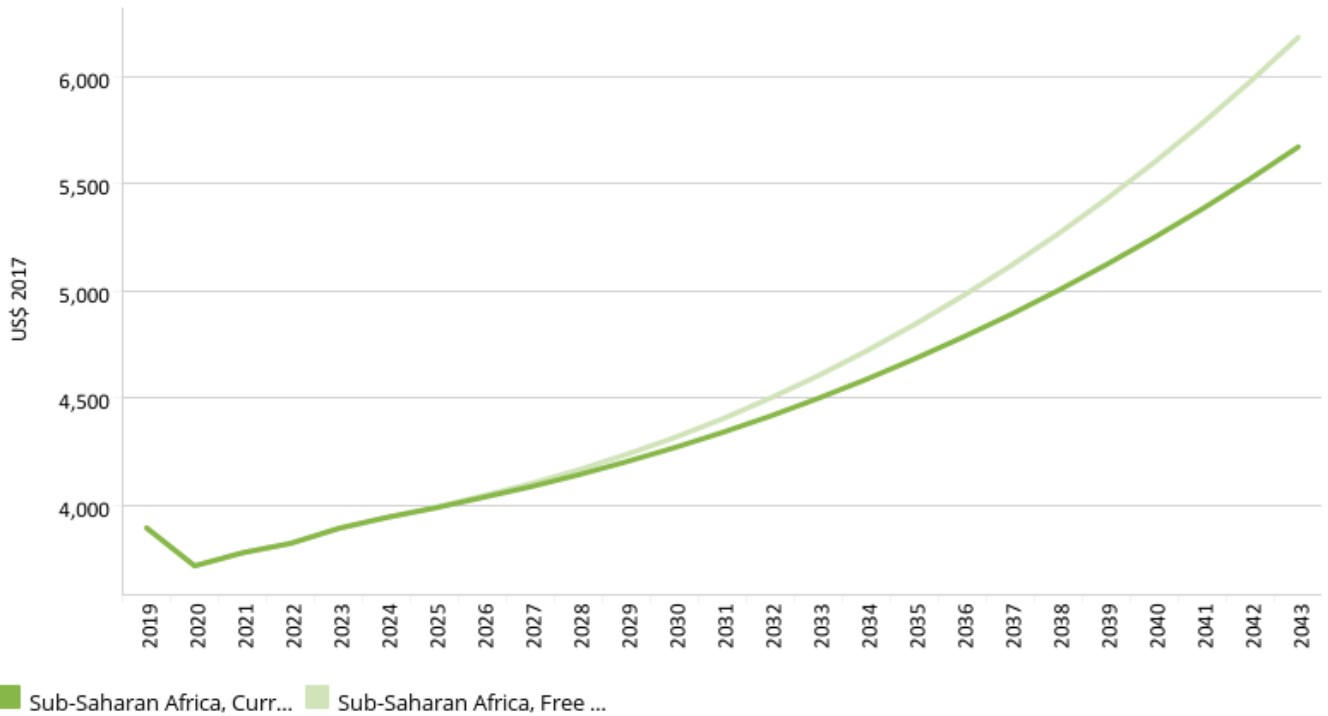
In 2019, sub-Saharan Africa had a negative trade balance of 3.9% of GDP, which is expected to deteriorate to 9.4% by 2029 before it improves. The impact of the Free Trade scenario is to reduce this negative trade balance until around 2033. By 2043, the sub-Saharan Africa group would be exporting to the value of US\$1 469 billion instead of US\$1 475 billion in the Current Path and importing US\$1 965 billion instead of US\$1 857 billion.

Chart 40: GDP per capita in CP and Free Trade scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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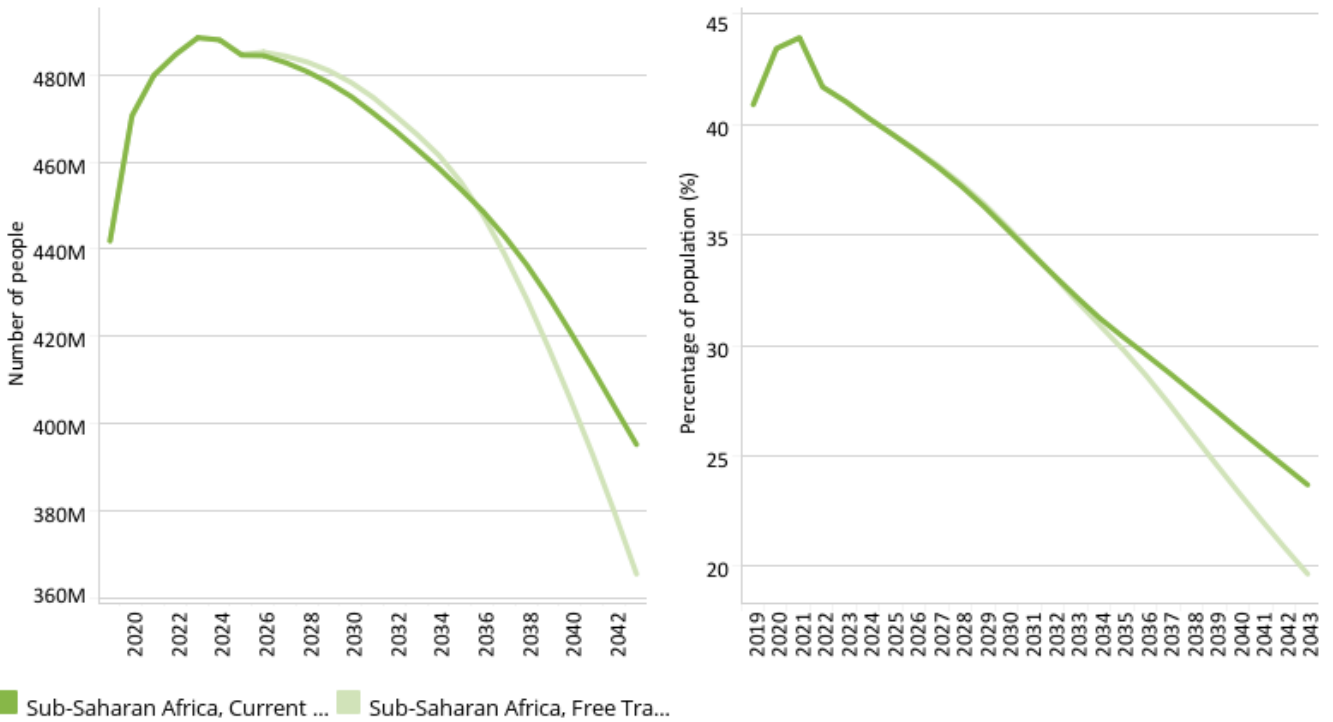
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The GDP per capita for sub-Saharan Africa was US\$3 897 in 2019 and is set to increase to US\$5 671 in the Current Path forecast. In the Free Trade scenario, it will increase by more than US\$510 to US\$6 181 in 2043. The countries that gain the most from the Free Trade scenario (percentage increase in GDP per capita by 2043) will be Malawi (20.43% improvement), Rwanda (9.06%) and Madagascar (16.26%). Gabon, Mauritius and Equatorial Guinea gain the least.

Chart 41: Poverty in CP and Free Trade scenario, 2019–2043
Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNet World Bank data

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In the Current Path forecast, rates of extreme poverty (using US\$1.90) in sub-Saharan Africa are set to decline from 40.9% in 2019 to 35.3% in 2030 and to 23.7% in 2043. In the Free Trade scenario, rates of extreme poverty start to decline from 2035 to 19.6% in 2043 — a difference of 4.03 percentage points.

In 2019, 441.9 million people were considered to be living on less than US\$1.90 per person per day in sub-Saharan Africa. In the Current Path forecast, it will increase to 475 million in 2030 and decrease to 395.2 million in 2043. In the Free Trade scenario, extreme poverty in 2030 will decline to 478.2 million in 2043. The countries that gain the most in the decline in extreme poverty will be Tanzania (5.8 million people), Nigeria (12.1 million) and the DR Congo (22 million).



Financial Flows scenario

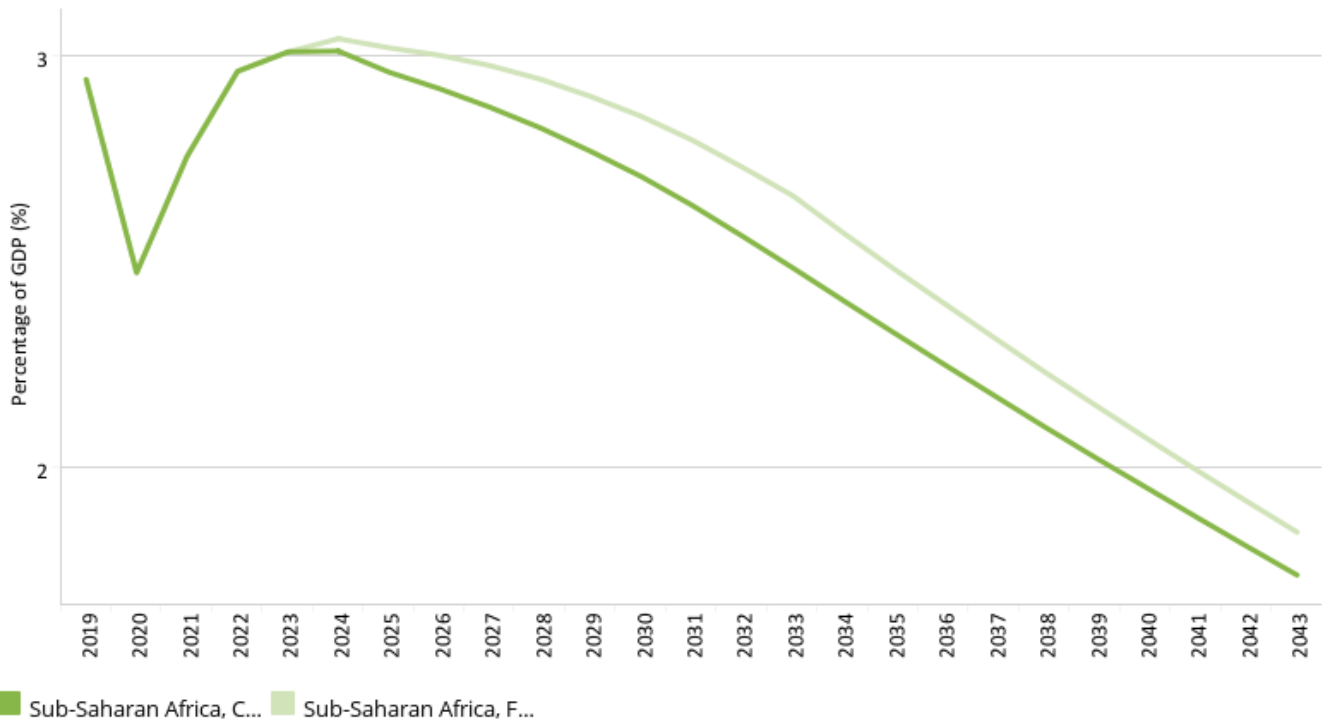
Chart 37 Chart 38 Chart 39 Chart 40 Chart 41 Chart 42 Chart 43 Chart 44 Chart 45 Chart 46 Chart 47

Chart 42: Foreign aid in CP and Financial Flows scenario, 2019–2043

% of GDP



Sub-Saharan Africa



Source: IFs 7.63 initialising from Development Assistance Committee of the OECD data, and World Bank and OECD GNI estimates.

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

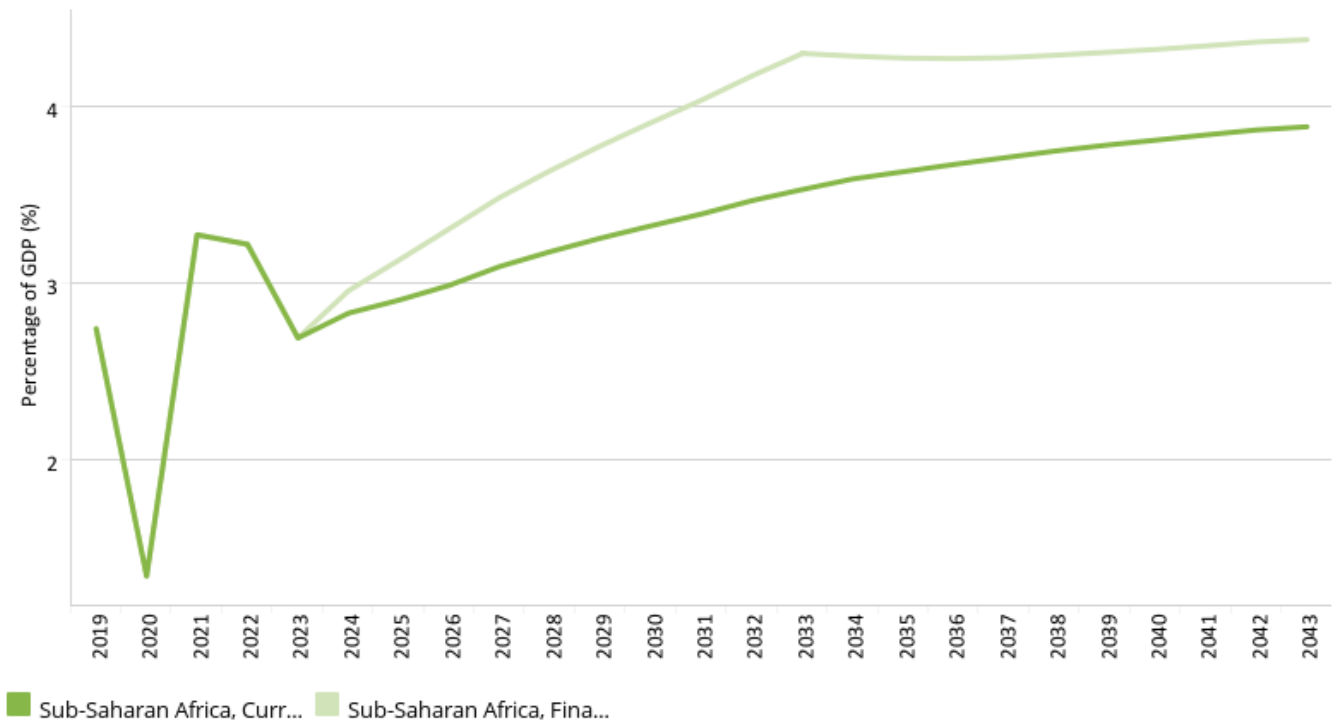
The intervention is explained [here](#) in the thematic part of the website.

Most aid goes to low-income countries. In 2019, the sub-Saharan Africa group received US\$65.81 billion net aid which will increase to US\$89.39 billion in 2030 and to US\$104.54 billion in 2043 in the Current Path forecast. However, as a per cent of GDP, aid reduces from 2.9% of GDP to 2.7% in 2030 and to 1.7% in 2043 since the increases in aid do not keep up with the expansion of sub-Saharan African countries' economies. As a result, in the Financial Flows scenario, aid constitutes 2.9% of GDP by 2030 and 1.8% by 2043. In 2030, sub-Saharan Africa will receive US\$90 billion more aid in the Financial Flows scenario than in the Current Path forecast and US\$37 billion more in 2043. By 2043 the region would, cumulatively, have received US\$5.55 billion more aid in the Financial Flows scenario compared to the Current Path forecast. The increase is, however, not evenly distributed among countries. The upper middle-income countries of Gabon and Equatorial Guinea receive very little aid.

Chart 43: Inflow of FDI in CP and Financial Flows scenario, 2019–2043
% of GDP



Sub-Saharan Africa



Source: IFs 7.63 initialising from International Monetary Fund World Economic Outlook database

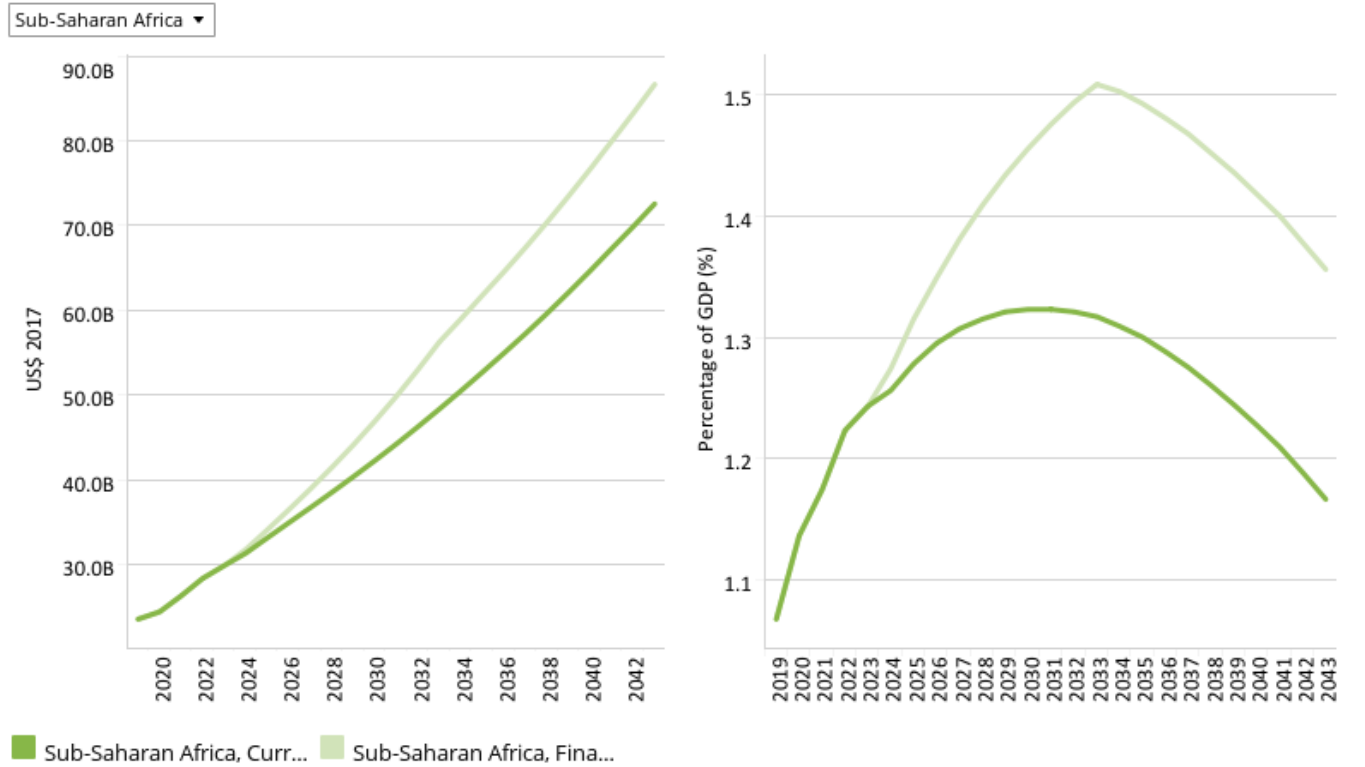
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FDI typically goes to middle- and high-income countries rather than to low-income countries. In 2019, sub-Saharan Africa received FDI inflows equivalent to 2.7% of GDP that increased to 3.3 % by 2030 and to 3.9% in 2043. In the Financial Flows scenario, however, FDI inflows increase to 3.9% of GDP in 2030 and to 4.4% in 2043. As a per cent of GDP, the inflows of FDI are most significant in Seychelles, Liberia, Mozambique and São Tomé and Príncipe.

Chart 44: Remittances in CP and Financial Flows scenario, 2019–2043

Billions US\$ 2017 and % of GDP



Source: IFs 7.63 initialising from World Development Indicators data

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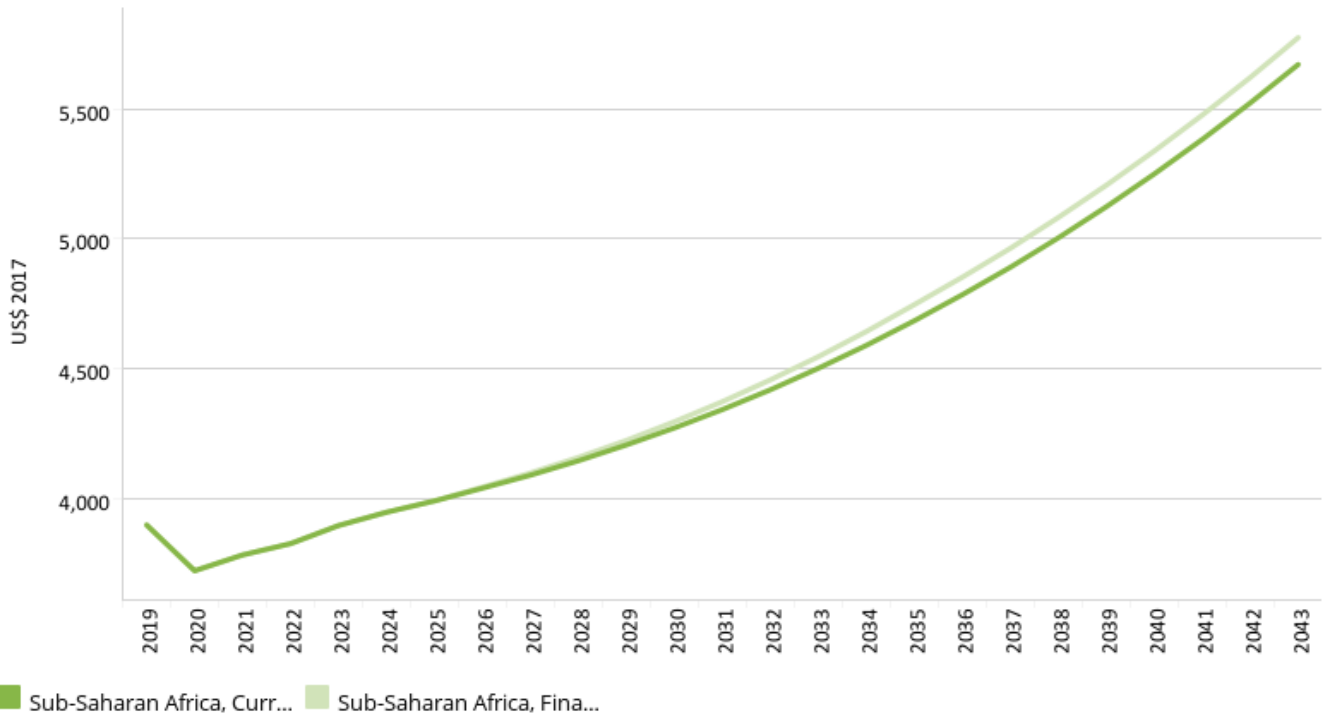
The amount of remittance to sub-Saharan Africa is set to increase to US\$72.56 billion in 2043 in the Current Path forecast, up from just US\$23.55 billion in 2019. In the Financial Flows scenarios, remittance flows will increase to US\$86.66 billion — US\$14.1 billion more than the value in 2043 in the Current Path forecast. This improvement in remittance receipt is represented by a 0.19 percentage point increase compared to the 2043 Current Path forecast of 1.17%. Perhaps unsurprising, Nigeria will experience the largest increase in remittances, with an additional US\$9.65 billion in 2043. Some countries, particularly South Africa, Mauritius and Angola see their annual remittance outflows increase.

Chart 45: GDP per capita in CP and Financial Flows scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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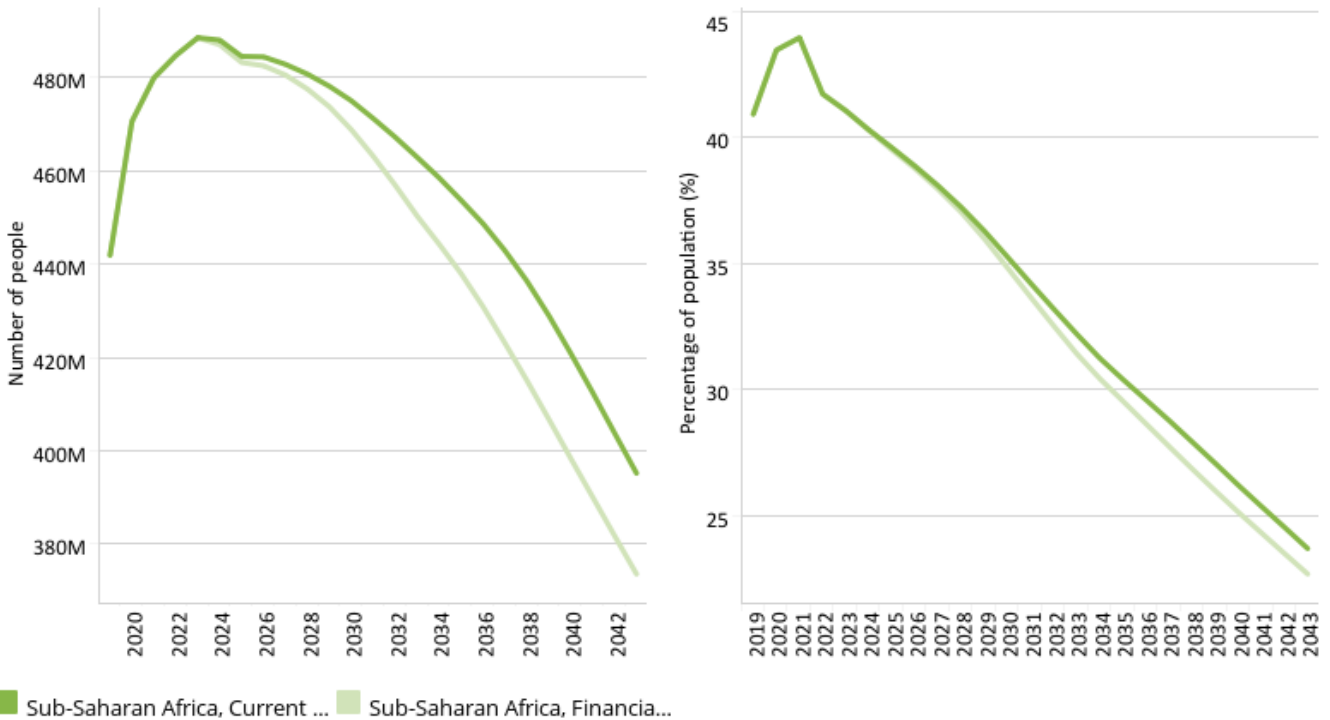
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In 2019, the GDP per capita of sub-Saharan Africa was US\$3 897, which was lower than the average GDP per capita for the world. In the Current Path forecast, sub-Saharan Africa will increase its GDP per capita to US\$5 671 — US\$16 674 lower than the world average GDP per capita in 2043. In the Financial Flows scenario, GDP per capita increases to US\$5 775 in 2043, mainly due to remittances and aid flows to Africa. In 2043, Seychelles will benefit the most from the Financial Flows scenario by increasing its GDP per capita by US\$28 381 above the Current Path forecast, followed by Mauritius at US\$24 064, while Central African Republic (CAR) and Burundi will benefit the least at US\$-4 088 and US\$-4 404, respectively.

Chart 46: Poverty in CP and Financial Flows scenario, 2019–2043
Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNat World Bank data

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Trade openness will reduce poverty in the long term after initially increasing it due to the redistributive effects of trade. 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. Countries with inefficient, high-cost manufacturing sectors might be displaced as the AfCFTA is implemented, thereby pushing up poverty rates. 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.

While the poverty rate reduces from 40.9% to 23.7% in sub-Saharan Africa, the number of poor people will decrease from 441.9 million to 395.2 million. In the Financial Flows scenarios, the poverty rate declines marginally (1%) more than the Current Path amounting to 21.6 million fewer people in poverty by 2043. The poverty reduction as a result of free trade is due to an increase in productivity, trade and economic freedom. Despite the significant gains in the Free Trade scenario, poverty rates will remain higher in sub-Saharan Africa compared to the average of the rest of the world. Within the region, the Free Trade scenario will benefit the DR Congo the most by reducing poverty by 12.7 percentage points compared to the Current Path forecast in 2043, followed by Madagascar at 11.7 percentage points, whereas Mauritius (0.01) and Burundi (9.3) will see an increase in poverty above the Current Path forecast.



Infrastructure scenario

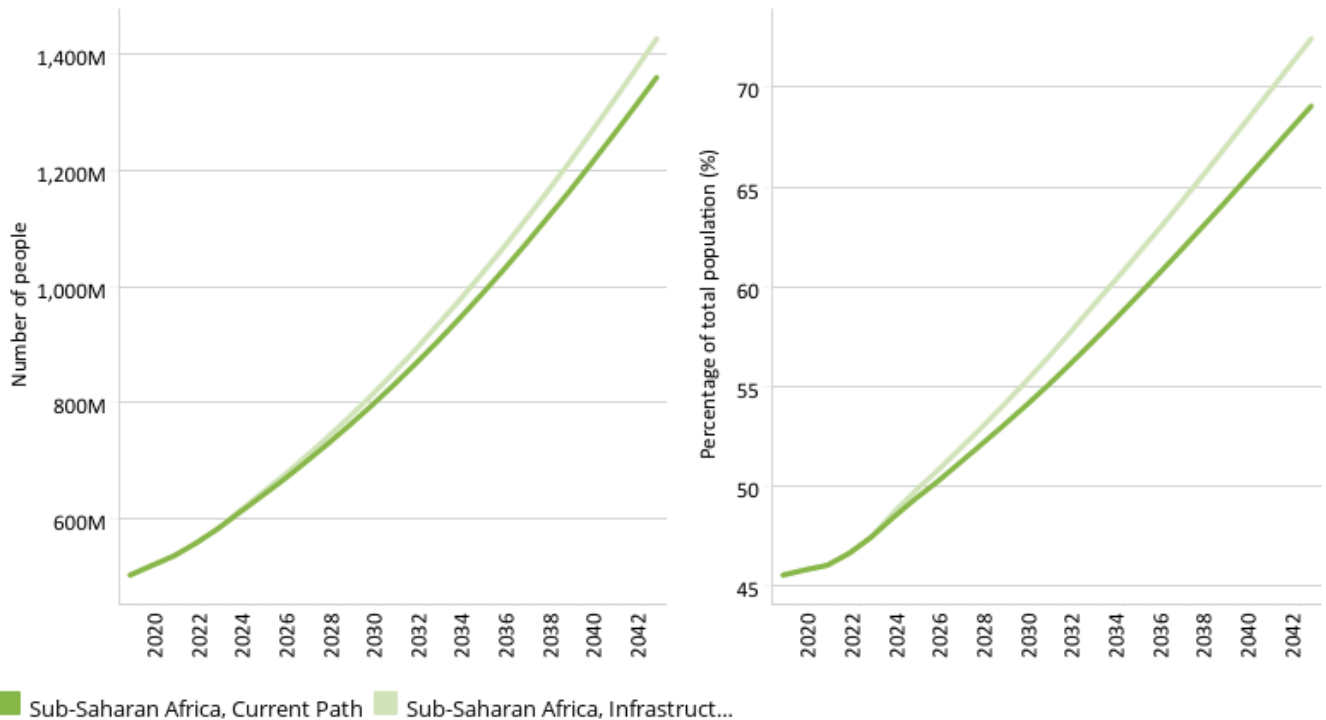
Chart 42 Chart 43 Chart 44 Chart 45 Chart 46 Chart 47 Chart 48 Chart 49 Chart 50 Chart 51 Chart >

Chart 47: Electricity access in CP and Infrastructure scenario, 2019–2043

Millions of people and % of population



Sub-Saharan Africa Total



Source: IFs 7.63 initialising from World Development Indicators data

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The Infrastructure scenario represents a reasonable but ambitious increase in infrastructure spending across Africa, focusing on basic infrastructure (roads, water, sanitation, electricity access and ICT) in low-income countries and increasing emphasis on advanced infrastructure (such as ports, airports, railway and electricity generation) in higher-income countries.

Note that health and sanitation infrastructure is included as part of the Health/WaSH scenario and that ICT infrastructure and more rapid uptake of renewables are part of the Leapfrogging scenario. The interventions there push directly on outcomes, whereas those modelled in this scenario increase infrastructure spending, indirectly boosting other forms of infrastructure, including those supporting health, sanitation and ICT.

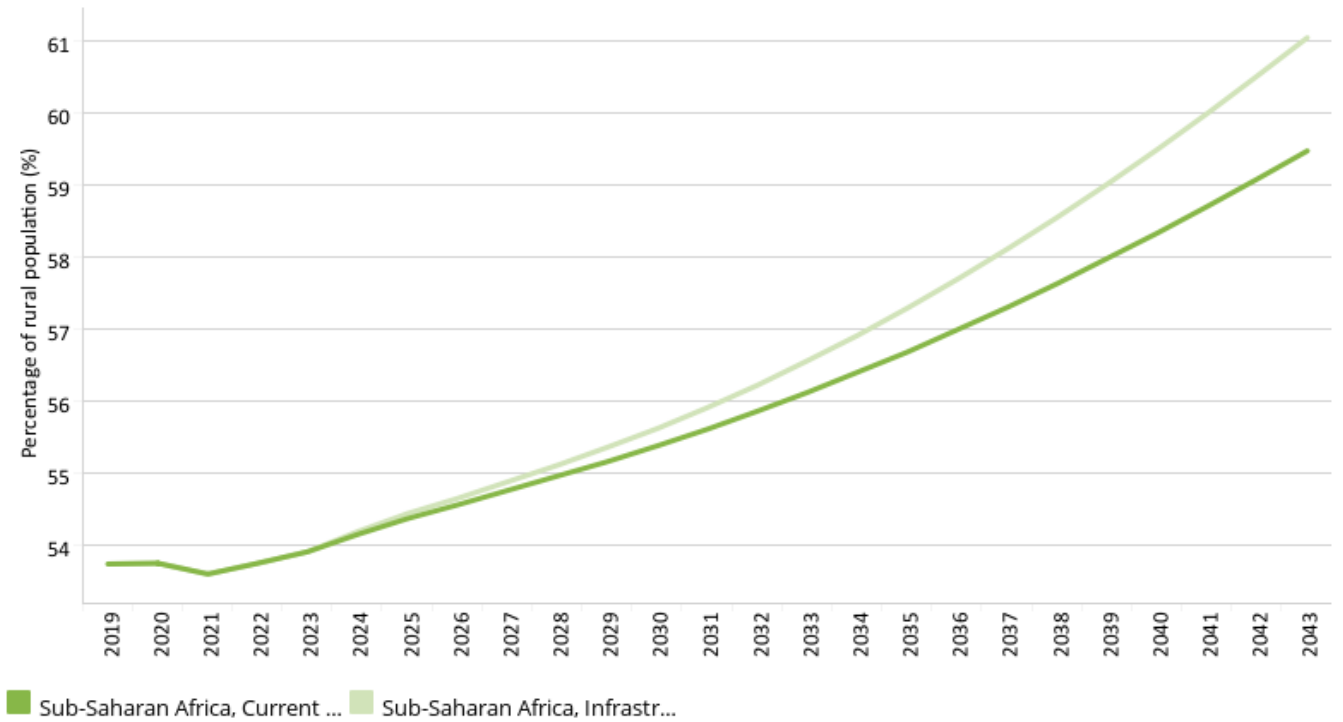
The intervention is explained [here](#) in the thematic part of the website.

By 2043, 856.5 million more people will have access to electricity in the Current Path forecast, and this number is set to increase to 923 million people in the Infrastructure scenarios in 2043. The proportion of the population that will have access to electricity will increase from 45.5% to 69.1% in the Current Path forecast in 2043. In the Infrastructure scenario, sub-Saharan Africa will add an additional 3.3 percentage points more to electricity grids compared to the Current Path in 2043.

Chart 48: Rural road access in CP and Infrastructure scenario, 2019–2043
 % of rural population within 2 km of an all-weather road



Sub-Saharan Africa



Source: IFs 7.63 initialising from World Bank Rural Access Index data

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Indicator 9.1.1 in the 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.

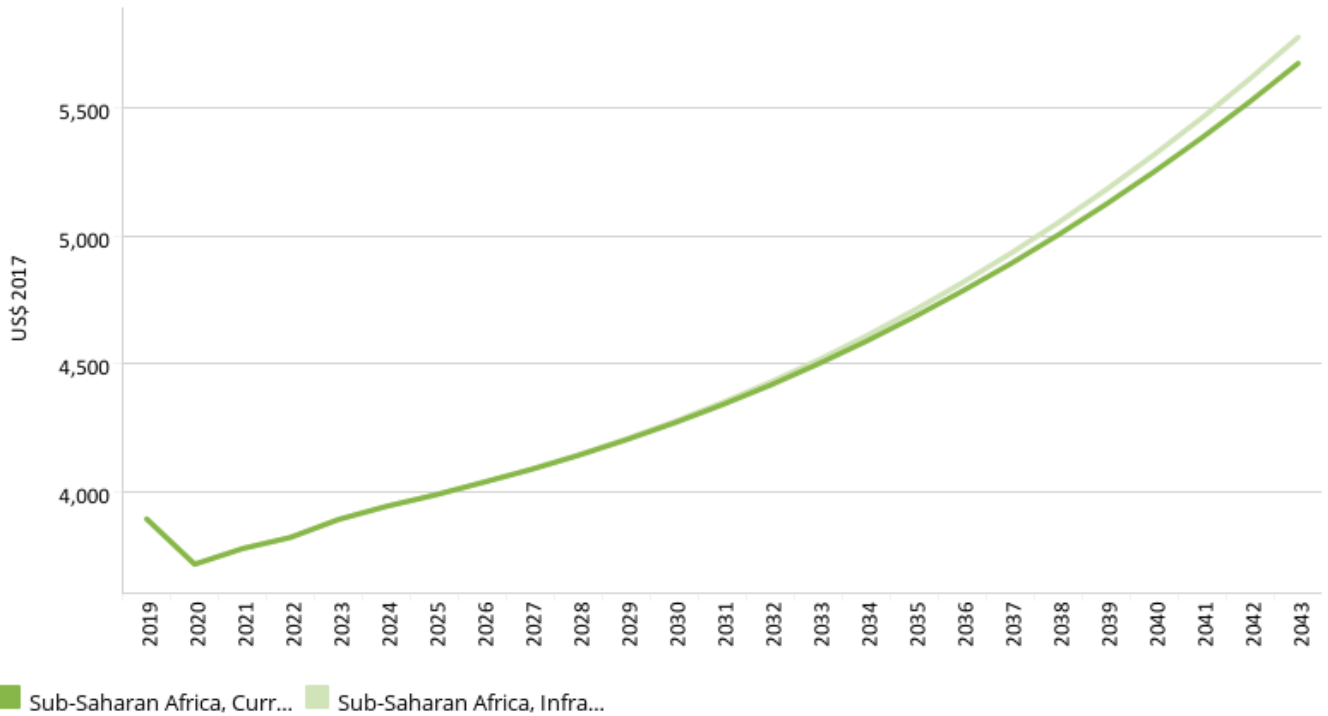
The proportion of all-season road access in sub-Saharan Africa is set to increase from 53.8% to 59.5% from 2019 to 2043 in the Current Path. In the Infrastructure scenario, 1.6 percentage points more of the rural population will have access to all-season roads compared to the 2043 Current Path value. Within the region, the effect of the Infrastructure scenario is greatest in the Republic of the Congo, where it adds an additional 6.4 percentage points of rural population that live within 2 km of an all-season road compared to the Current Path forecast in 2043. Equatorial Guinea and Seychelles will already have 100% rural access by 2043 in the Current Path forecast.

Chart 49: GDP per capita in CP and Infrastructure scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

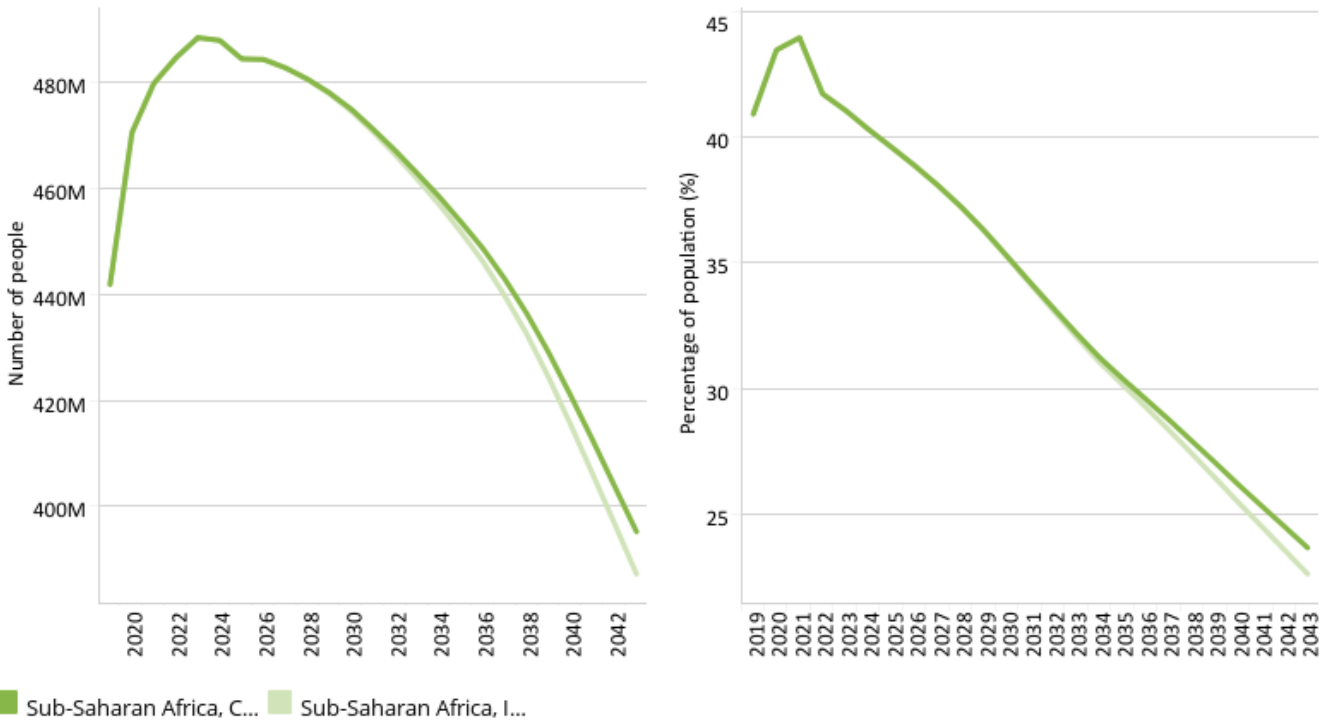
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In 2019, the GDP per capita in sub-Saharan Africa was US\$3 897, which was lower than the world average GDP per capita of US\$17 734. In the Current Path forecast, sub-Saharan Africa will increase its GDP per capita to US\$5 671, lower than the world average GDP per capita of US\$22 323 in 2043. In the Infrastructure scenario, GDP per capita increases to US\$5 773 in 2043, adding US\$102 to the Current Path value.

Chart 50: Poverty in CP and Infrastructure scenario, 2019–2043
Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNat World Bank data

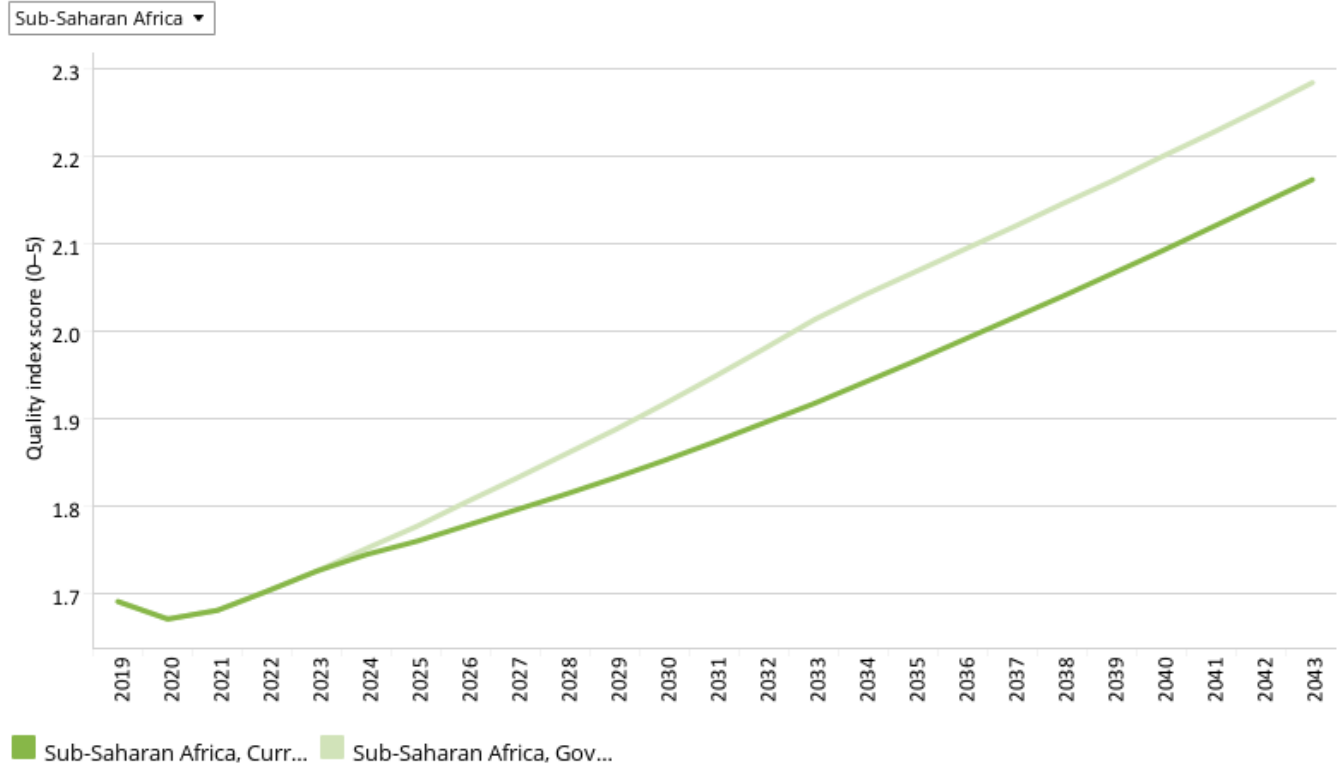
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In the Current Path forecast, the poverty rate (at the US\$1.90 poverty line) in sub-Saharan Africa is set to reduce from 40.9% to 23.7% from 2019 to 2043. Because of the rapidly increasing population of the region, the number of poor people will however decrease from 441.9 million to 395.2 million people. In the Infrastructure scenario, the poverty rate will decline marginally (2.02%) amounting to 8 million fewer people living in extreme poverty compared to the Current Path in 2043. Despite the significant gains in the Infrastructure scenario due to more trade and higher productivity, poverty rates will remain higher in sub-Saharan Africa compared to the average rate of poverty in the rest of Africa by 2043. The Infrastructure scenario will result in a 3.2 percentage point reduction in extreme poverty (at the US\$1.90 poverty line) in Zambia and Madagascar above the Current Path forecast, while in Equatorial Guinea the effect is a trivial 0.01 percentage points.



Chart 51: Gov effectiveness in CP and Governance scenario, 2019–2043

World Bank quality index score for government effectiveness



Source: IFs 7.63 initialising from Kaufmann, Kraay and Mastruzzi (2010) data

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The Governance scenario represents a reasonable but ambitious improvement in accountability and reduces corruption, and hence improves the quality of service delivery by government.

The intervention is explained [here](#) in the thematic part of the website.

As defined by the World Bank, government effectiveness ‘captures 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’.

Chart 51 presents the impact of the interventions in the Governance scenario on government effectiveness.

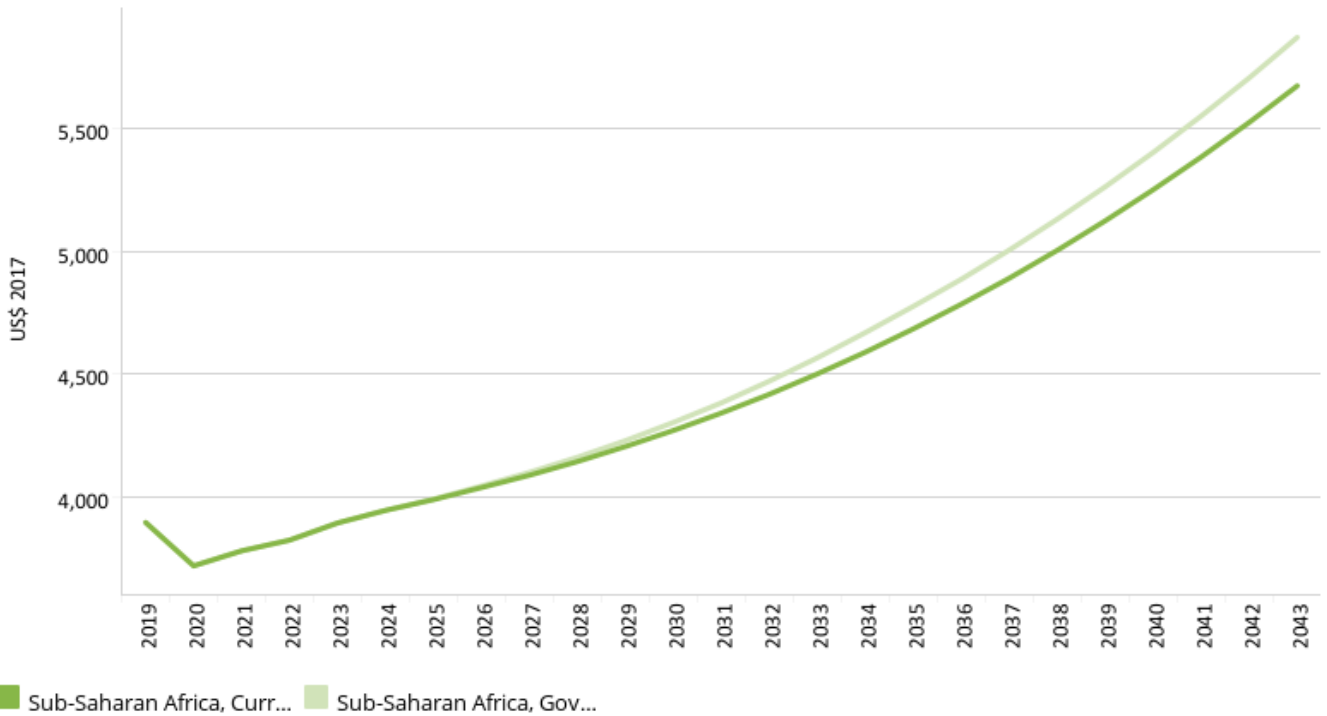
In the Governance scenario, government effectiveness will improve by 5% in the region in 2043. However, an average sub-Saharan African country's government will still be less effective compared to the average score of the world (2.9) in 2043. Coming from a very low base, South Sudan gains most in this scenario, while Seychelles, Cape Verde and Mauritius make negligible gains since government effectiveness in these countries is already high.

Chart 52: GDP per capita in CP and Governance scenario, 2019–2043

Purchasing power parity



Sub-Saharan Africa



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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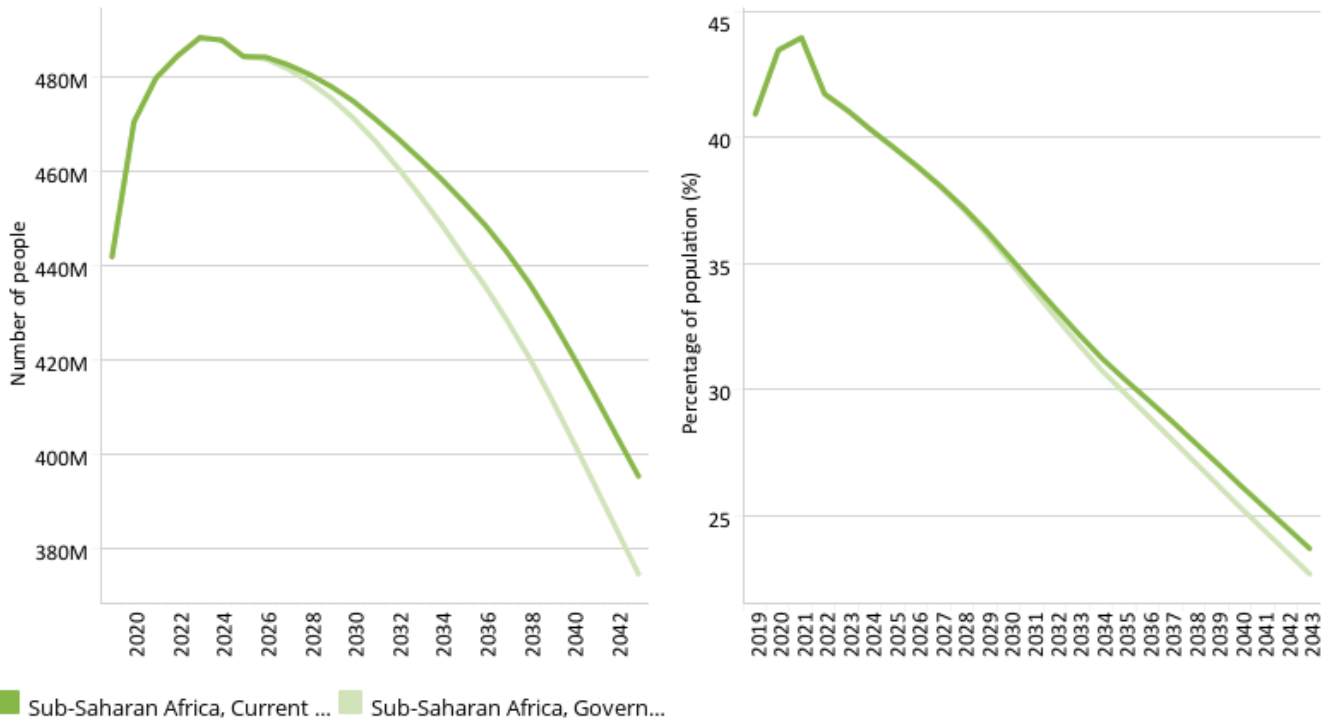
In 2019, the GDP per capita in sub-Saharan Africa was US\$3 897, which was lower than the world average GDP per capita of US\$7 048. In the Current Path forecast, sub-Saharan Africa will increase its GDP per capita to US\$5 980 in 2043. In the Governance scenario, GDP per capita will increase to US\$6 145 in 2043 due to reduced corruption and more efficient service delivery across Africa. Angola, Eswatini, Equatorial Guinea and Namibia all increase GDP per capita by more than US\$300 per person. However, CAR, Liberia, Burundi and Somalia gain least.

Chart 53: Poverty in CP and Governance scenario, 2019–2043

Millions of people and % of total population



Sub-Saharan Africa \$1.90



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate, World Development Indicators population data and DevPalNet World Bank data

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While the poverty rate reduces from 40.9% to 23.7%, the number of poor people in sub-Saharan Africa is set to increase from 441.9 million to 395.2 million people between 2019 and 2043. As in the Financial Flows scenario, the poverty rate declines marginally (1.01%) more than the Current Path to 22.7% in 2043 in the Governance scenario. This amounts to 20.8 million fewer people in poverty compared to the Current Path forecast in 2043.



Impact of scenarios on carbon emissions

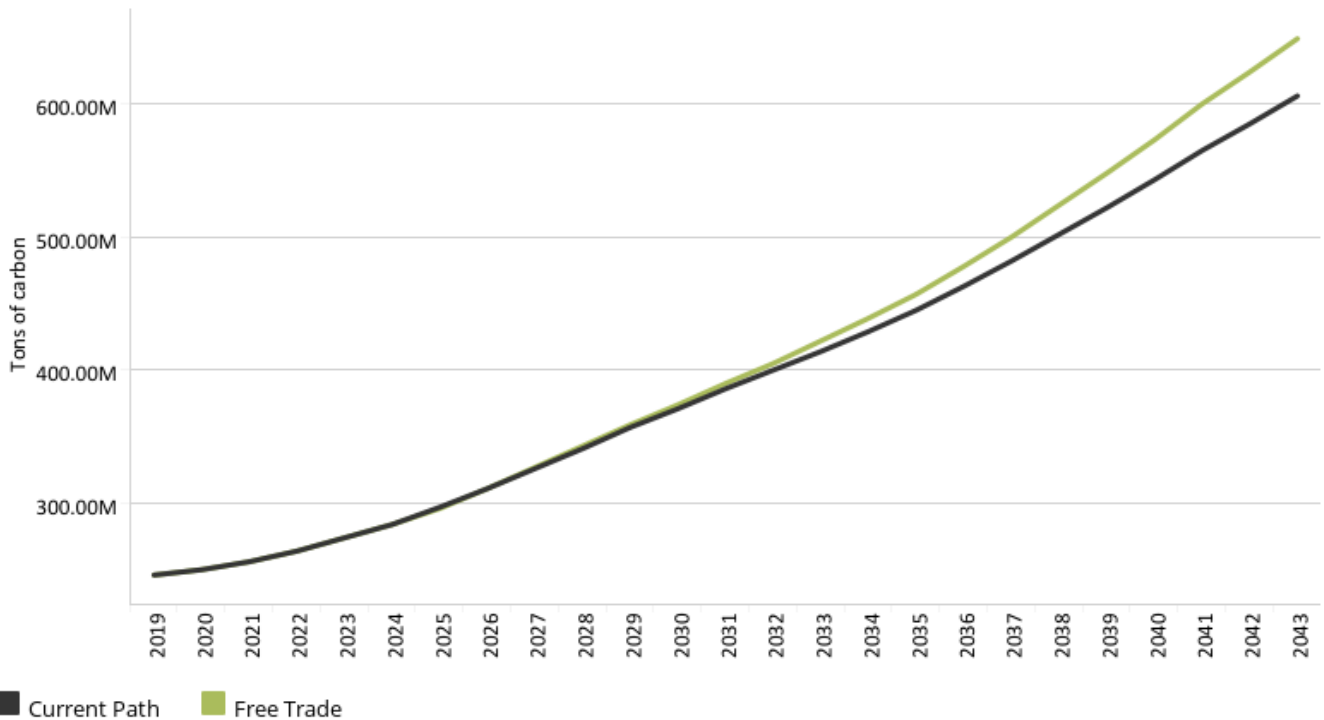
Chart 49 Chart 50 Chart 51 Chart 52 Chart 53 Chart 54 Chart 55 Chart 56 Chart 57 Chart 58 Chart 59

Chart 54: Carbon emissions in CP and scenarios, 2019–2043

Million tons of carbon (note, not CO₂ equivalent)



Sub-Saharan Africa (Multiple values)



Source: IFs 7.63 initialising from Carbon Dioxide Information Analysis Center data

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This section presents projections for carbon emissions in the Current Path for sub-Saharan Africa and the 11 scenarios. Note that IFs uses carbon equivalents rather than CO₂ equivalents.

In 2019, the sub-Saharan Africa region released only 246 million tons of carbon and on the Current Path forecast will release 606 million tons of carbon in 2043, the result of sustained economic and population growth in all the states in the region. In 2019, the largest emitters in the region were South Africa at 132.09 million tons, followed by Nigeria at 39.31 million tons, while Comoros and São Tomé and Príncipe emitted the least.

The Free Trade scenario is the most carbon-intensive scenario for sub-Saharan Africa, contributing 649 million tons of carbon; while in the Demographic scenario, carbon emissions in 2043 will be below the Current Path forecast (at 599 million tons).

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Mustapha Jobarteh joined the ISS in January 2022 as a Senior Researcher in the African Futures and Innovation programme in Pretoria. Before joining ISS, Mustapha was a senior lecturer and Head of the Department of Economics and Finance at the University of the Gambia and a research fellow with the Center for Policy, Research and Strategic Studies. His interests include macroeconomics, international trade and econometric modelling. Mustapha has a PhD in economics from Istanbul Medeniyet University, Istanbul, Turkey.

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