

Ethiopia

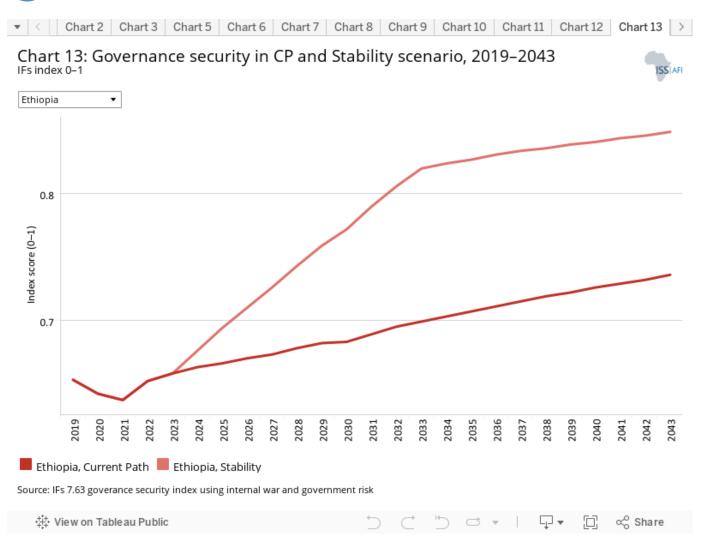
Sectoral Scenarios for Ethiopia

Sectoral Scenarios for Ethiopia	:
Stability scenario	:
Demographic scenario	(
Health/WaSH scenario	1
Agriculture scenario	1:
Education scenario	1
Manufacturing scenario	2
Leapfrogging scenario	2
Free Trade scenario	29
Financial Flows scenario	3:
Infrastructure scenario	3
Governance scenario	4
Impact of scenarios on carbon emissions	44
Endnotes	4:
Donors and Sponsors	4!
Reuse our work	4!
Cite this research	4!

Sectoral Scenarios for Ethiopia

- · Stability scenario
- Demographic scenario
- · Health/WaSH scenario
- · Agriculture scenario
- Education scenario
- Manufacturing scenario
- Leapfrogging scenario
- Free Trade scenario
- · Financial Flows scenario
- Infrastructure scenario
- · Governance scenario
- · Impact of scenarios on carbon emissions

Stability scenario



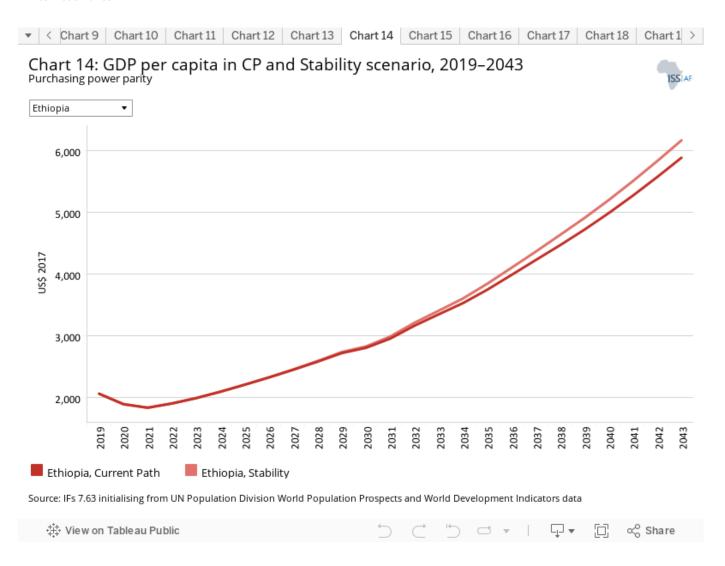
The Stability scenario represents reasonable but ambitious reductions in the risk of regime instability and lower levels of

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.

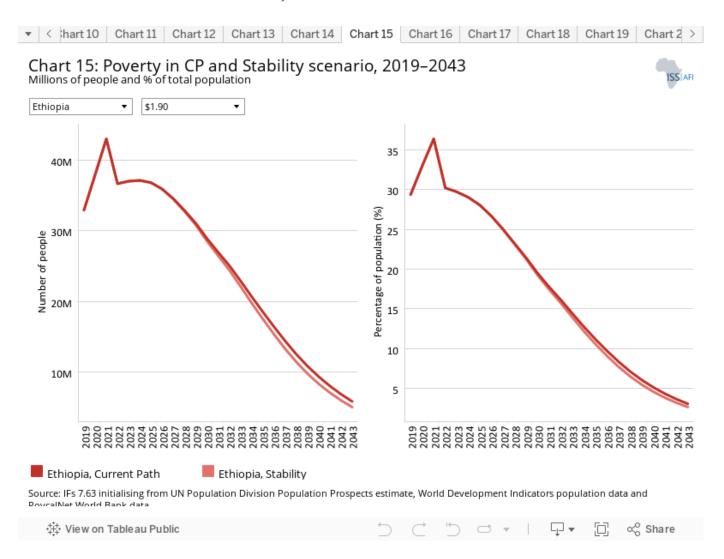
The war in Ethiopia has shown how instability can jeopardise an impressive economic growth record. Protracted conflict would likely undo most or all of the country's past economic gains, demonstrating that a state's capacity to maintain order and stability is an important condition for development.

IFs' governance security index ranges from 0 (low security) to 1 (high security). The score for Ethiopia on the governance security index was 0.65 in 2019, compared to 0.64 for low-income African countries. The Stability scenario improves security and stability in Ethiopia. By 2043, the score in the Stability scenario will be 0.85, about 15% higher than the Current Path forecast of 0.74 and 19.7% higher than the projected average of 0.71 on the Current Path for low-income African countries.



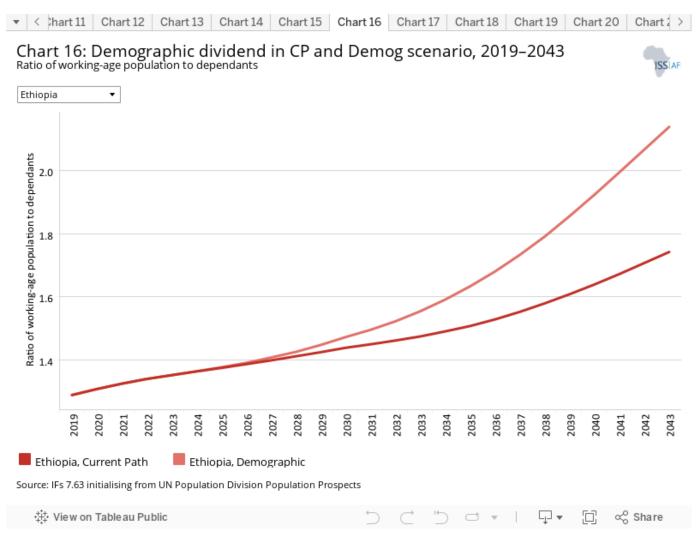
A new political settlement in Ethiopia would increase stability and encourage greater domestic and foreign investment, positively affecting per capita income growth. Thus, by 2033 Ethiopia's GDP per capita would be US\$59 higher in the Stability scenario compared to the Current Path forecast for that year. In 2043, the difference would increase to US\$281,

with Ethiopia recording a GDP per capita of US\$6 169 — 4.77% higher than the Current Path forecast of US\$5 888. Ethiopia's GDP per capita in the Stability scenario would be 62.8% above the projected average of US\$3 790 for low-income African countries in the Current Path forecast by 2043.



Stability in a country is an essential condition for economic growth and poverty reduction. When using the low-income countries' extreme poverty threshold of US\$1.90, 32.9 million Ethiopians (29.4% of the population) were considered to be extremely poor in 2019. The number of poor people will stand at 5.1 million (2.6%) by 2043 in the Stability scenario, compared to 5.9 million (3.1%) in the Current Path forecast for that year — a difference of 800 000 fewer people in extreme poverty. The poverty rate in the Stability scenario (at US\$1.90 per day) in 2043 is 22.6 percentage points below the projected average of 25.2% for low-income African countries in the Current Path forecast.





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.

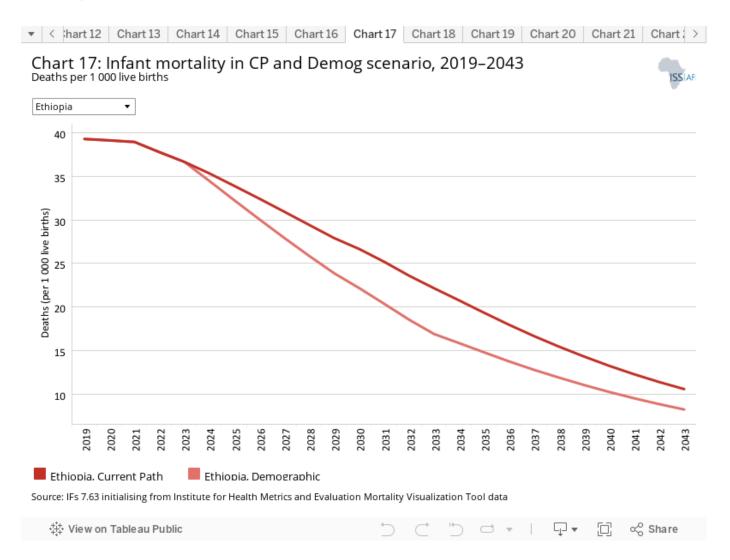
The intervention is explained here in the thematic part of the website.

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.

A demographic dividend can simply be defined as the economic growth generated by change in the structure of a country's population. It generally materialises when the size of the working-age population increases faster than that of the dependants (elderly and children) to reach a minimum ratio of 1.7 to 1. In 2019, the ratio of the working-age population to dependants stood at 1.3 to 1, meaning that there are 1.3 persons of the working-age population for each dependant. The minimum ratio of 1.7 to 1 necessary for the materialisation of the demographic dividend will be reached in

2037 in the Demographic scenario, six years earlier than the Current Path forecast. On the Current Path, it is forecast to be 1.74 to 1 by 2043. In the Demographic scenario, the working-age population to dependants' ratio is 2.14 to 1 by 2043 above the Current Path average of 1.53 to 1 for low-income African countries.

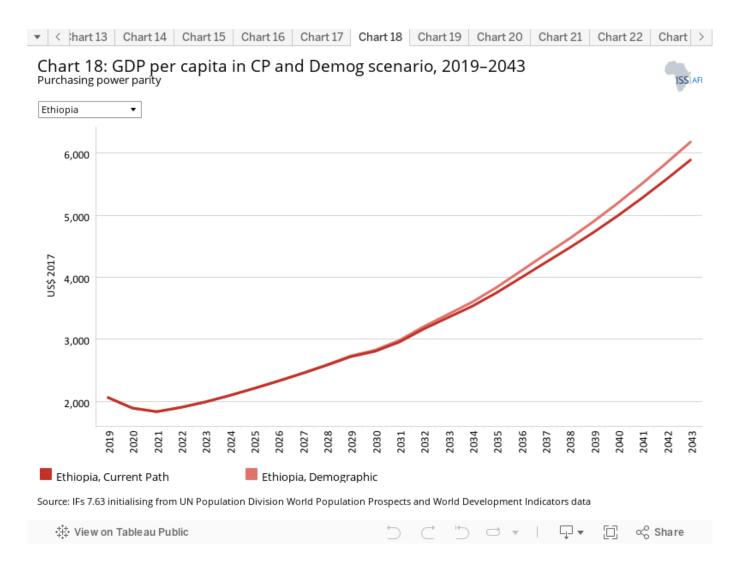
The increasing size of the working-age population in the Ethiopia can be a catalyst for growth if sufficient education and employment are provided to successfully harness their productive powers, otherwise it could turn into a demographic 'bomb' instead of demographic dividend, as many people of working age may remain in poverty, potentially creating frustration, social tension and conflict.



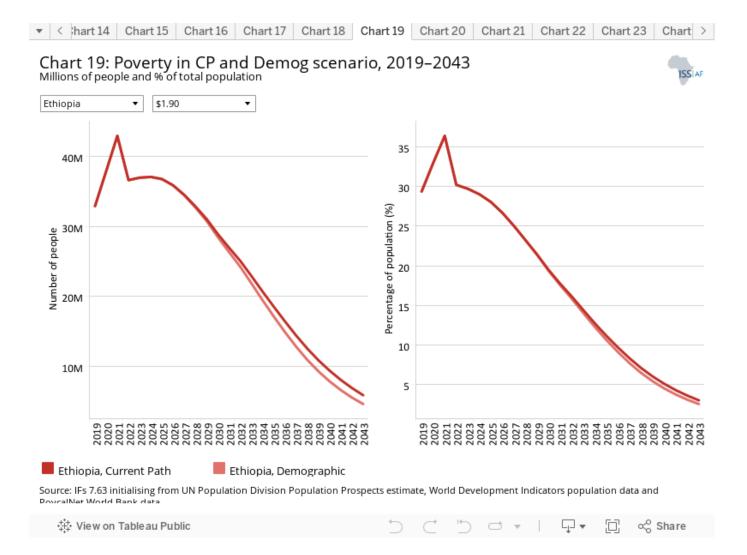
The infant mortality rate is the number of infant deaths per 1 000 live births and is an important marker of the overall quality of the health system in a country.

In 2019, the infant mortality rate in Ethiopia was 39.3 deaths per 1 000 live births — 9.2 deaths below the average of 48.5 for Africa's low-income countries. The Demographic scenario reduces infant mortality to 16.9 deaths per 1 000 live births, compared to 22.1 in the Current Path forecast by 2033. By 2043, the infant mortality rate will be 8.2 deaths per 1 000 live births, compared to 10.6 in the Current Path forecast.

The infant mortality rate in the scenario is 13 deaths less than the average for low-income countries in Africa at 21.2 deaths per 1 000 live births by 2043.

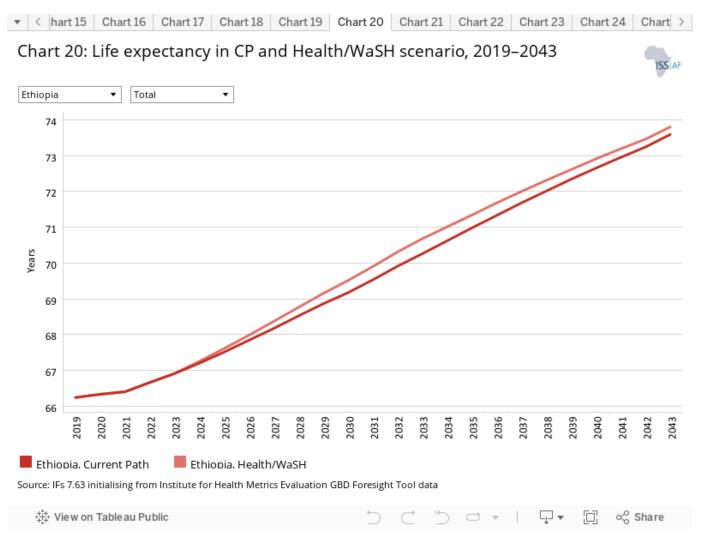


By 2043, the GDP per capita of Ethiopia in the Demographic scenario will be US\$6 178, US\$290 more than in the Current Path forecast at US\$5 888 — a nearly 5% improvement. The GDP per person in the scenario is also US\$2 388, equivalent to 63% more than the projected average of US\$3 790 for low-income African countries in the Current Path forecast in 2043.



When using the low-income countries' extreme poverty threshold of US\$1.90, 32.9 million Ethiopians (29.4% of the population) were considered to be extremely poor in 2019. The number of poor people will stand at 4.6 million, or 2.6% of the population, by 2043 in the Demographic scenario, compared to 5.9 million, or 3.1%, in the Current Path forecast for that year — a difference of 1.3 million fewer people in extreme poverty. The poverty rate in the Demographic scenario in 2043 will be 22.6 percentage points below the Current Path forecast average of 25.2% for low-income African countries.





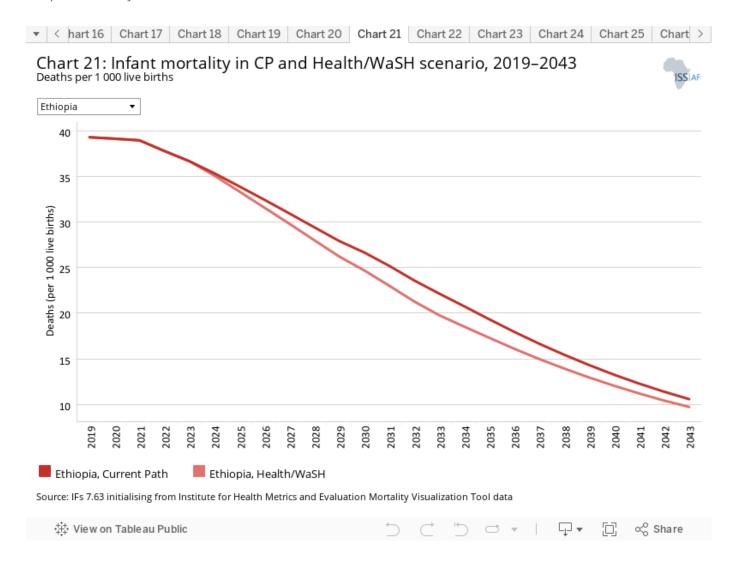
This section presents reasonable but ambitious improvements in the Health/WaSH scenario, which include reductions in the mortality rate associated with both communicable diseases (e.g. AIDS, diarrhoea, malaria and respiratory infections) and non-communicable diseases (NCDs) (e.g. diabetes), as well as 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.

Recent trends in the health sector in Ethiopia have largely been positive. In the past 25 years, the government and donor organisations have made significant investments in health infrastructure accompanied by a roll out of health services, particularly for women and children. Since the late 1990s, the government and its development partners have founded 16 440 health posts and 3 547 health centres and built 311 hospitals.[1] Given this broad and sustained investment, Ethiopia has made notable gains across various indicators related to health such as life expectancy, infant mortality and maternal mortality.

Life expectancy in Ethiopia has increased from 46.4 years in 1990 to 66.2 in 2019 — an increase of nearly 43% since 1990. This is 2.4 years more than the average of 63.7 years for low-income countries in Africa. Based on the Health/WaSH scenario, the average Ethiopian can expect to live up to 73.8 by 2043 compared to the Current Path forecast of 73.6 years. In the scenario, life expectancy in Ethiopia is three years higher than the projected average for low-income countries in

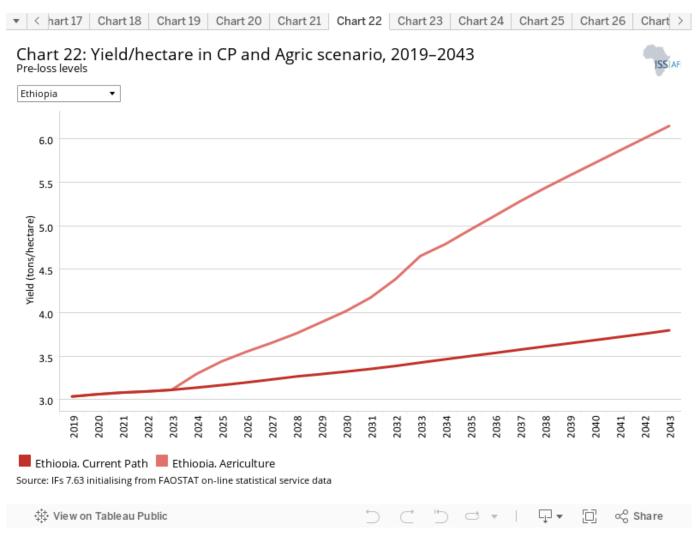
Africa, at 70.9 years in 2043. On average, females had a higher life expectancy at birth of 67.1 years compared to 65.3 for males in 2019. In the Health/WaSH scenario, life expectancy at birth for females is projected to be 75 years by 2043 compared to 72.6 years for males.



Along with investing in basic healthcare improvements, Ethiopia has made significant progress towards lowering its infant mortality rate. Indeed, the infant mortality rate in Ethiopia has declined from 113.6 deaths per 1 000 live births in 1990 to about 39.3 deaths in 2019 — about 23.4% lower than the average for African countries at similar levels of income.

The Health/WaSH scenario reduces infant mortality rate to 9.7 deaths per 1 000 live births compared to 10.6 in the Current Path forecast by 2043. By 2043, the infant mortality rate in the scenario is less than half the projected average of 21.2 for low-income African countries.





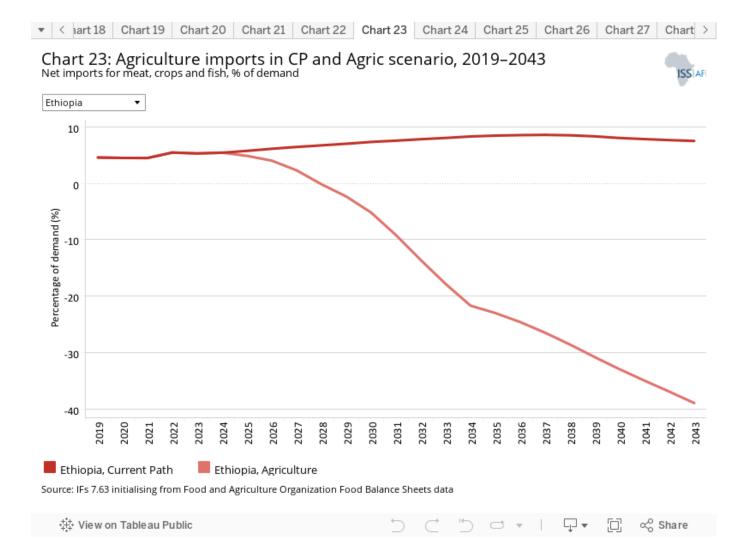
The Agriculture scenario represents reasonable but ambitious increases in yields per hectare (reflecting better management and seed and fertiliser technology), increased land under irrigation and reduced loss and waste. Where appropriate, it includes an increase in calorie consumption, reflecting the 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.

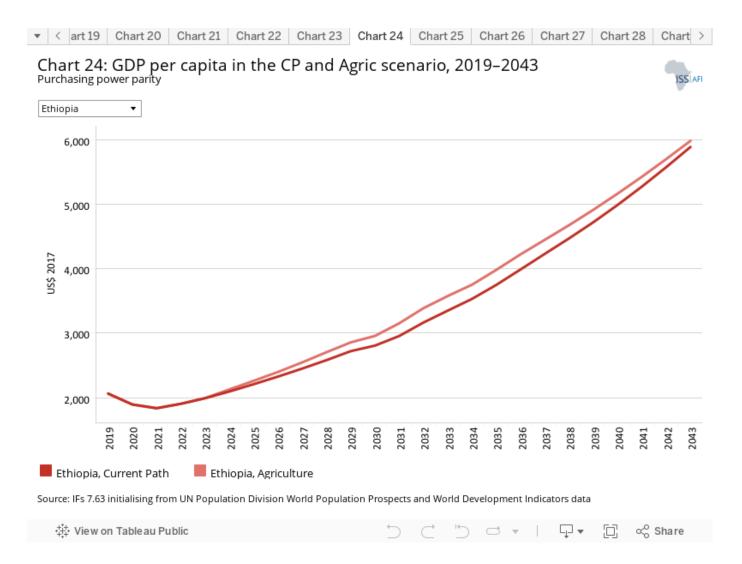
The data on yield per hectare (in metric tons) is for crops but does not distinguish between different categories of crops.

The agriculture sector in Ethiopia has experienced impressive progress recently. For instance, between 2005 and 2015, total cereal yields increased by more than 85%, while the area harvested only increased by about 10%.[2] Despite this improvement, the sector still faces some challenges: just 5% of land is irrigated and crop yields from small farms are below regional averages; the use of improved seeds, fertilisers and pesticides remains limited.

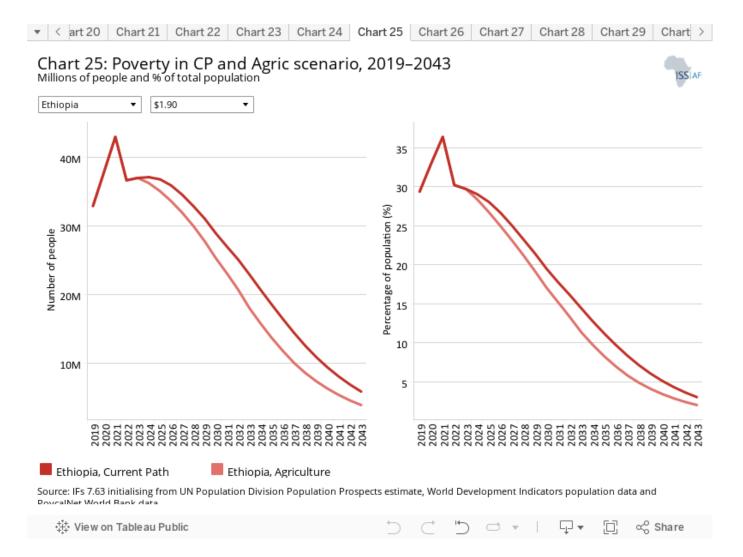
In the Agriculture scenario, crop yields in Ethiopia improve from 3 tons per hectare in 2019 to 6.1 tons per hectare in 2043, compared to 3.8 tons in the Current Path forecast. This is 60.5% higher than the Current Path forecast and 74.3% above the projected average for low-income Africa at 3.5 tons per hectare in the Current Path forecast for that year.



Without significant efforts to improve agricultural production, the current low crop yield will continue to make Ethiopia a net food importer for the foreseeable future. Official Ethiopian trade statistics indicate that Ethiopia imports nearly US\$2 billion worth of food products per annum.[3] On the Current Path, the food import dependence will continue to increase to about 7.5% of food demand by 2043. However, in the Agriculture scenario, Ethiopia will record a food surplus equivalent to about 39% of total demand.



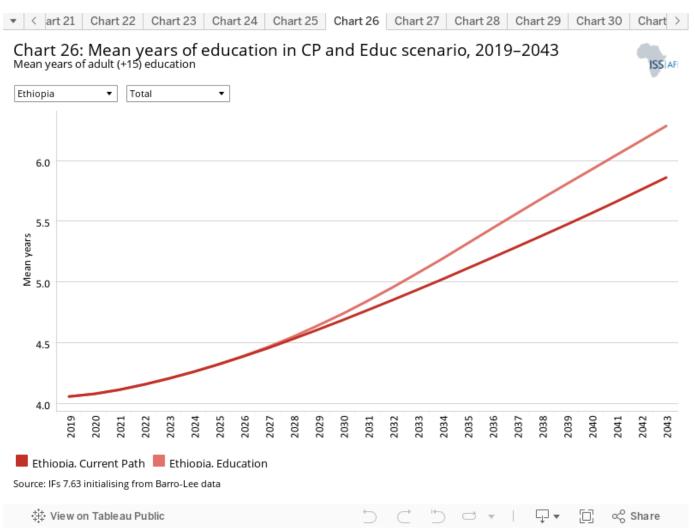
By 2043, the Agriculture scenario improves GDP per capita by about US\$95 or 1.6% compared to the Current Path forecast, meaning the average Ethiopian will be earning US\$5 983 at that stage. This will be US\$2 193, or 57.9%, higher than the average for low-income countries in Africa in 2043.



The agriculture sector is a crucial lifeline for millions of Ethiopians as an estimated 75% of the country's workforce is employed in the agriculture sector. Using the US\$1.90 per person per day extreme poverty threshold, the poverty rate in the Agriculture scenario by 2043 is 2%, compared to 3.1% in the Current Path forecast for the same year. This is equivalent to 1.96 million fewer people living in extreme poverty. The extreme poverty rate in the Agriculture scenario will be 23.2 percentage points below the Current Path average for low-income African countries.

Given that agriculture remains the predominant economic and cultural way of life, boosting the efficiency of the sector is vital to improving livelihoods and transforming the economy. More investment in the sector will increase consumption, income and food security, improve nutrition and even pave the way for agro-industry, positively affecting growth and poverty reduction.





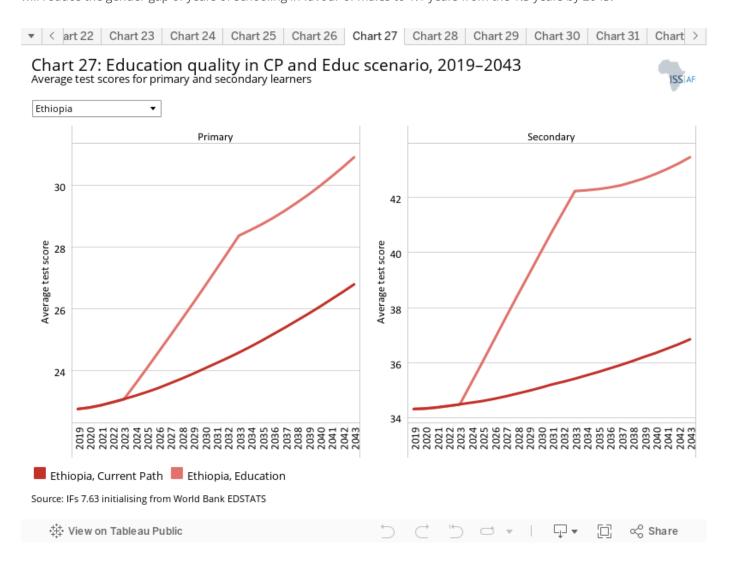
The Education scenario represents reasonable but ambitious improved intake, transition and graduation rates from primary to tertiary levels and better quality of education. It also models substantive progress towards gender parity at all levels, additional vocational training at secondary school level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

The intervention is explained here in the thematic part of the website.

Recent progress notwithstanding, the reality is that human development outcomes (education in particular) in Ethiopia are well below other low-income countries in Africa and around the globe. The average years of education in the adult population (aged 15 years and older) is a good indicator of the stock of education in a country. The average Ethiopian adult (15 years and older) received about 4.1 years of schooling in 2019. By contrast, the average adult in low-income African countries received 4.4 years of schooling. On average, males received about 4.7 years of schooling, 1.3 extra years of education compared to females at 3.4 years in 2019.

On the Current Path, the average years of education for the adult population (15 years and older) is projected to improve to 6.3 years by 2043. This is 0.2 years above the average for low-income countries in Africa. Technically, this means that

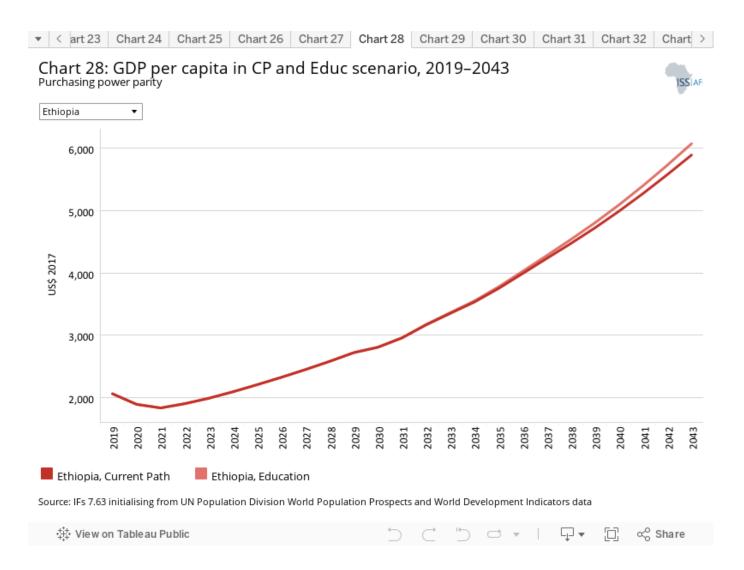
most Ethiopians will have at least primary education by 2043. In the Education scenario, the mean years of education improves by 0.3 years above the Current Path forecast by 2043. Both the Education scenario and the Current Path forecast will reduce the gender gap of years of schooling in favour of males to 1.1 years from the 1.3 years by 2043.



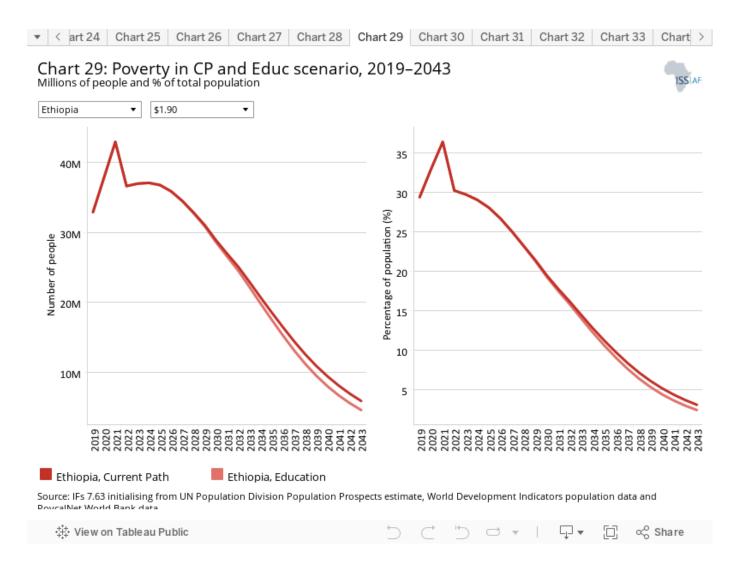
Ethiopia's education system faces enormous challenges at nearly every stage. Low attainment rates are fuelled by poor quality education and high learner-to-teacher ratios. As children and young people comprise the large share of the population, Ethiopia can lift itself out of poverty by ensuring children have access to quality education.

In the Education scenario, the score for the quality of primary education improves from 22.8 in 2019 to 30.9 in 2043, slightly above the Current Path average for low-income countries in Africa. This represents a 15.3% increase compared to the Current Path forecast of 26.8 in the same year. In addition, the score for the quality of secondary education increases from 34.3 in 2019 to 43.5 in 2043 in the scenario — a 17.8% improvement compared to the Current Path forecast of 36.9 in 2043 and 15.1% above the Current Path average for its income peers in Africa in the same year.

Quality education is crucial for economic development. It not only allows the country to increase its current added value but it also creates tomorrow's technological innovations. Thus, Ethiopian authorities should accelerate reforms to improve the quality of education in the country.



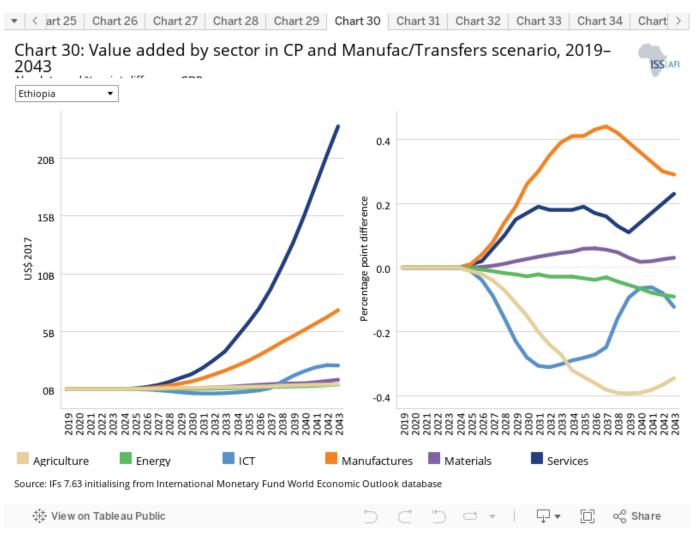
By 2043, the Education scenario will increase the GDP per capita by about US\$181 above US\$5 888 in the Current Path forecast — an increase of 3.1%. The projected GDP per capita of US\$6 069 in the Education scenario will also be 60.1% more than the Current Path average of US\$3 790 for low-income African countries. Investment in education significantly impacts economic growth, but it takes time to materialise. For instance, it will take more than a decade for a child enrolled in primary school to contribute meaningfully to the economy.



Education is one of the important tools to reduce poverty. It improves the employment and income prospects of the poor segment of society.

By 2043, Ethiopia will record a poverty rate of 2.4% (4.6 million people) in the Education scenario, compared to 3.1% (5.9 million people) in the Current Path forecast. This means 1.3 million fewer people will live in extreme poverty than in the Current Path forecast for 2043. The extreme poverty rate in the Education scenario will be 22.8 percentage points lower than Current Path average for low-income African countries.





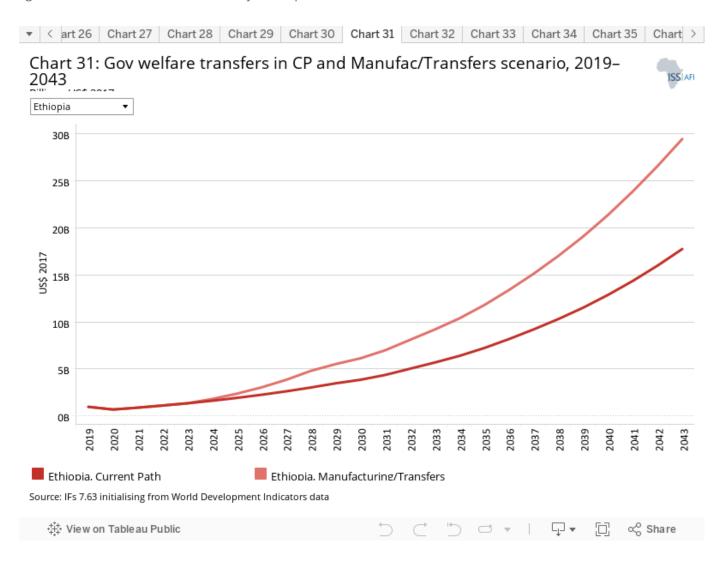
The Manufacturing/Transfers scenario represents reasonable but ambitious manufacturing growth through greater investment in the economy, investments in research and development, and promotion of the export of manufactured goods. It is accompanied by an increase in welfare transfers (social grants) to 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.

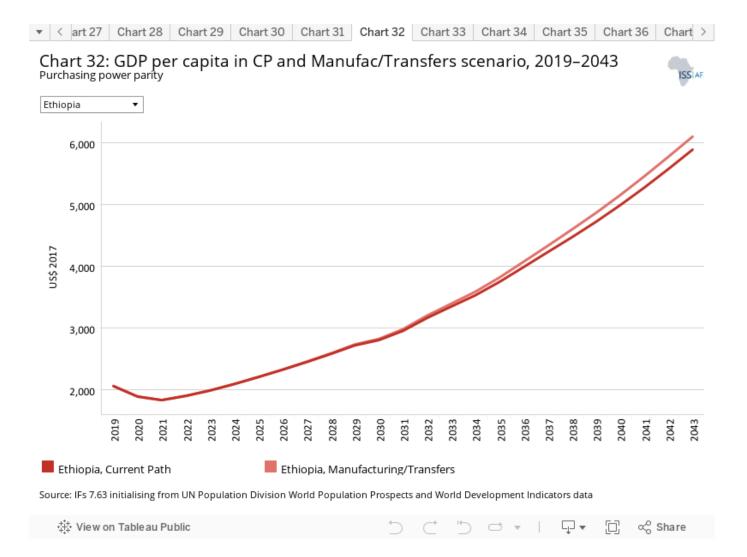
Chart 30 should be read with Chart 8 that presents a stacked area graph on the contribution to GDP and size, in billion US\$, of the Current Path economy for each of the sectors.

In absolute terms, the contribution of the service sector to GDP has the highest improvement compared to the Current Path forecast in 2043. It is forecast to be US\$22.8 billion larger than in the Current Path forecast in 2043. The service sector is followed by the manufacturing sector with its contribution of US\$6.8 billion above the Current Path in 2043. In terms of percentage of GDP, the share of the manufacturing sector in GDP is 0.29 percentage points of GDP larger in the Manufacturing/Transfers scenario than in the Current Path forecast in 2043. Services closely follow it with 0.23 percentage point of GDP above the Current Path forecast. Materials is third with an increase of only 0.03 percentage points compared to the Current Path forecast in 2043. The share of agriculture in GDP (%) is 0.34 percentage points lower in the scenario

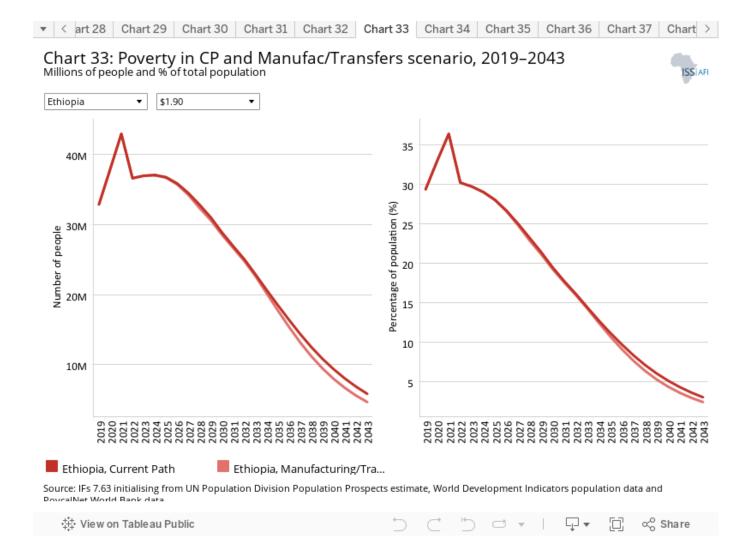
than the Current Path in 2043 — a trend that reflects the structural shifts occurring in Ethiopia's economy. Although this trend is inevitable, it should not distract the Ethiopian government from the goal of improving productivity in the agriculture sector to achieve food security and improve livelihoods.



Compared to the Current Path, the Manufacturing/Transfers scenario increases household transfers and welfare by 66.1% to US\$29.4 billion in 2043. This represents US\$11.7 billion, or 66.1%, more than the Current Path forecast of US\$17.7 billion. These transfers will be needed to address the initial increase in poverty generally associated with the investment in the manufacturing sector. Industrialisation is generally funded by an initial crunch in consumption which increases poverty in the first few years. However, these efforts stimulate inclusive growth with greater impact on poverty alleviation in the long term. To make the social safety net programmes more effective at reducing poverty, better targeting and efficient approaches are critical.

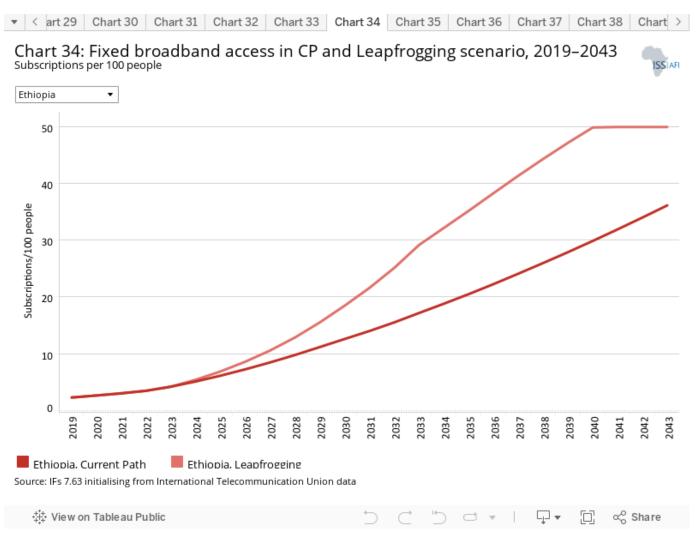


In the Manufacturing/Transfers scenario, the GDP per capita will be US\$6 099 compared to US\$5 888 in the Current Path forecast in 2043 — an increase of 3.6% (US\$211). Manufacturing is important for economic growth due to its backward and forward linkages with other sectors and its ability to transform the productivity structures across an economy. Thus, a robust manufacturing sector is crucial for sustained growth and significantly improves the population's living standard.



At the poverty threshold of US\$1.90, 32.9 million Ethiopians (29.4% of the population) were considered to be extremely poor in 2019. The number of poor people by 2043 will stand at 4.7 million, or 2.4% of the population, in the Manufacturing/Transfers scenario compared to 5.9 million, or 3.1%, in the Current Path forecast for that year — a difference of 1.2 million people. The poverty rate in the Manufacturing/Transfers scenario in 2043 is 22.7 percentage points below the projected average in the Current Path forecast for low-income African countries.





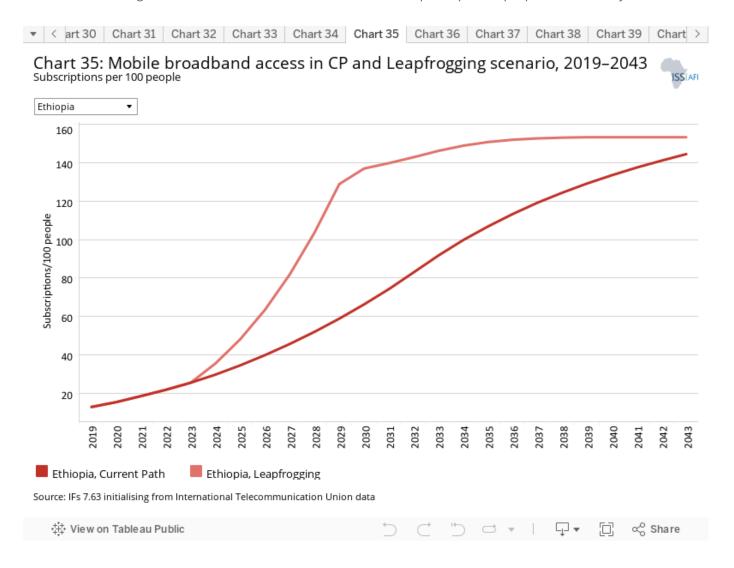
The Leapfrogging scenario represents a reasonable but ambitious adoption of and investment in renewable energy technologies, resulting in better access to electricity in urban and rural areas. The scenario includes accelerated access to mobile and fixed broadband and the adoption of modern technology 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.).

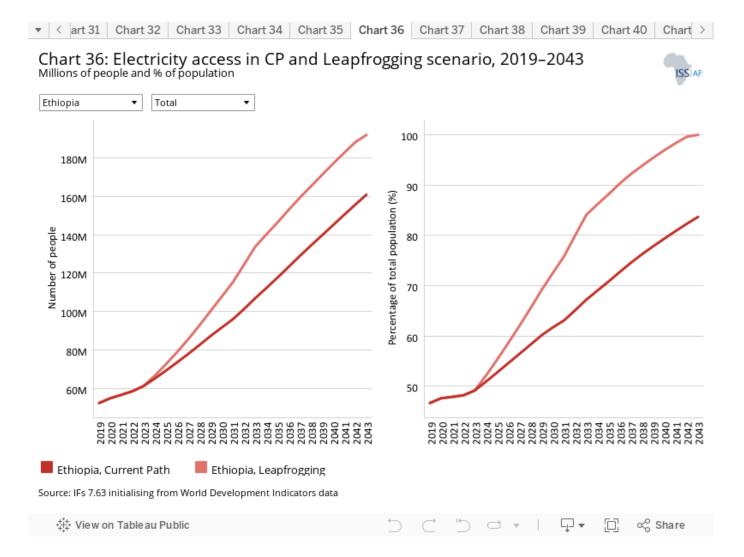
In terms of ICT, Ethiopia, Djibouti and Eritrea are the only three countries in the world that have maintained state monopoly on all telecommunication services, including fixed lines, mobile, Internet and broadband. As a consequence, penetration rates have remained low despite the progress made in recent years. For instance, 19% of Ethiopians are Internet users.[4] However, efforts to partially privatise the public operator Ethio Telecom and open the market to new licences are underway. In May 2021, the Ethiopian government granted telecoms operating licences worth US\$850 million to Kenya's Safaricom-led consortium.[5]

Fixed broadband subscriptions stood at roughly 2.3 per 100 people in 2019, on par with the average for low-income countries in Africa. In the Leapfrogging scenario, fixed broadband subscriptions increase to 50 per 100 people by 2043, which is about 4% higher than the Current Path forecast of 48.2 subscriptions per 100 people for the same year.



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

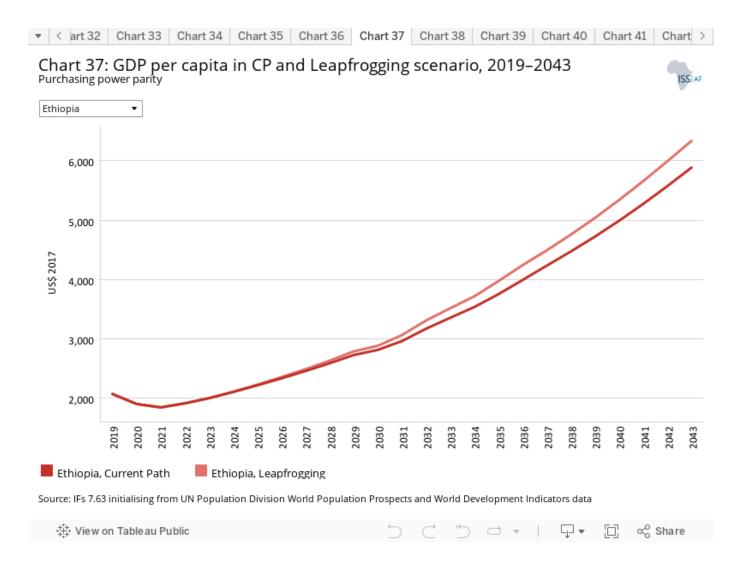
Mobile broadband subscriptions stood at 12.8 per 100 people in Ethiopia in 2019, about 79% below the average of 22.9 for low-income Africa. In the Leapfrogging scenario, mobile broadband subscriptions per 100 people in Ethiopia increase to 153.4 by 2043, above the Current Path forecast of 144.6. In other words, mobile broadband subscriptions in the scenario are about 9 subscriptions per 100 people, or 6.1%, higher than the Current Path forecast for 2043. It will further be 14.6% higher than the Current Path average for low-income countries in Africa.



Over the past decade, the Ethiopian government has managed to expand the electricity grid to nearly 60% of the country, from only 667 towns and villages to approximately 6 000.[6] The target of the Ethiopian government is universal electricity access by 2025, with 35% being off-grid and 65% grid.[7] The Grand Ethiopian Renaissance Dam (GERD), with a projected installed capacity of 5 600 MW, will contribute significantly to improve electricity generating capacity and electricity access rate.

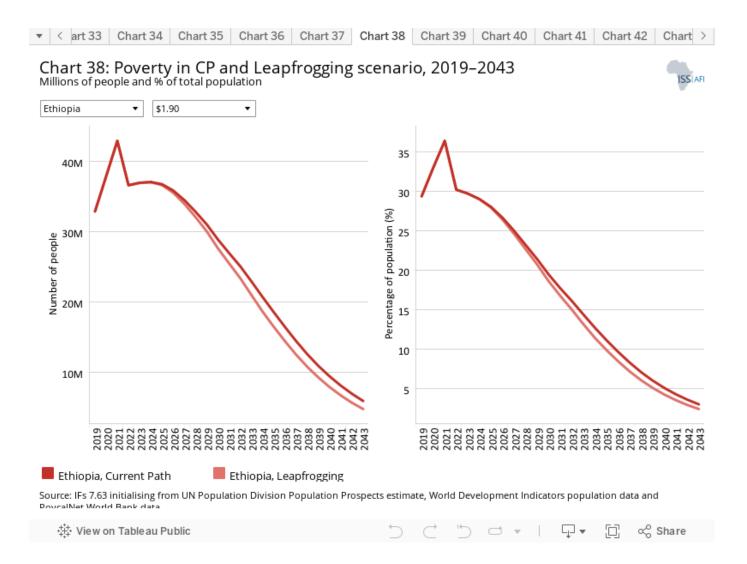
The number of Ethiopians who had access to electricity in 2019 was 52.3 million people, representing 46.6% of the total population. This is above the average of 32.2% for low-income countries in Africa. However, access to electricity is skewed toward the urban areas. In 2019, about 88.2% of the urban population had access to electricity, compared to only 35.9% in rural areas. In the Leapfrogging scenario, Ethiopia achieves universal electricity access by 2043, compared to 83.7% in the Current Path forecast.

By 2033, all the urban population (100%) is forecast to have access to electricity in the Leapfrogging scenario compared to 95.4% in the Current Path forecast in the same year. In the rural areas, electricity access rate will reach 100% by 2043 in the Leapfrogging scenario compared to nearly 75.9% in the Current Path forecast for the same year.



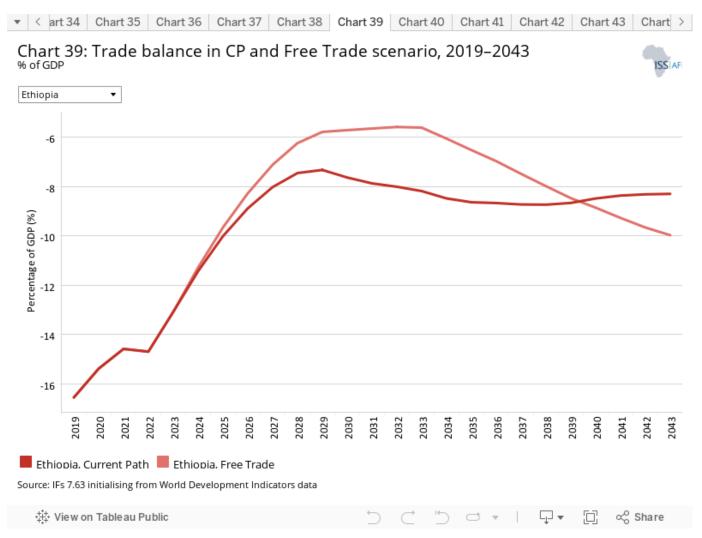
Widespread access to electricity and high-speed Internet has the potential to improve a country's socio-economic outcomes. Broadband can increase productivity, reduce transaction costs and optimise supply chains, thus positively affecting economic growth.

By 2033, the GDP per capita in the Leapfrogging scenario will be at US\$3 512, compared to US\$3 351 in the Current Path forecast — a difference of US\$161. In 2043, this difference will grow to US\$451, representing 7.7% above the Current Path forecast. The GDP per capita in the Leapfrogging scenario is US\$2 549, or 67.3%, higher than the Current Path for the average for low-income countries in Africa in 2043.



In the Leapfrogging scenario, the number of poor people in 2043 is 4.7 million, representing 2.5% of the population. This is 1.15 million fewer poor people (equivalent to a 0.6 percentage point decline) than the Current Path forecast for the same year. In the Current Path forecast for other countries, the poverty rate in the Leapfrogging scenario by 2043 is 22.7 percentage points below the projected average for Africa's low-income countries.





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.

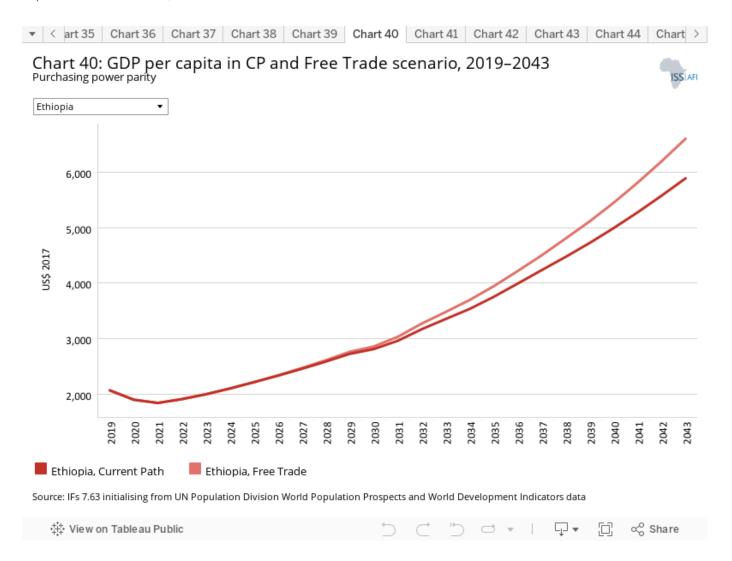
The intervention is explained here in the thematic part of the website.

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.

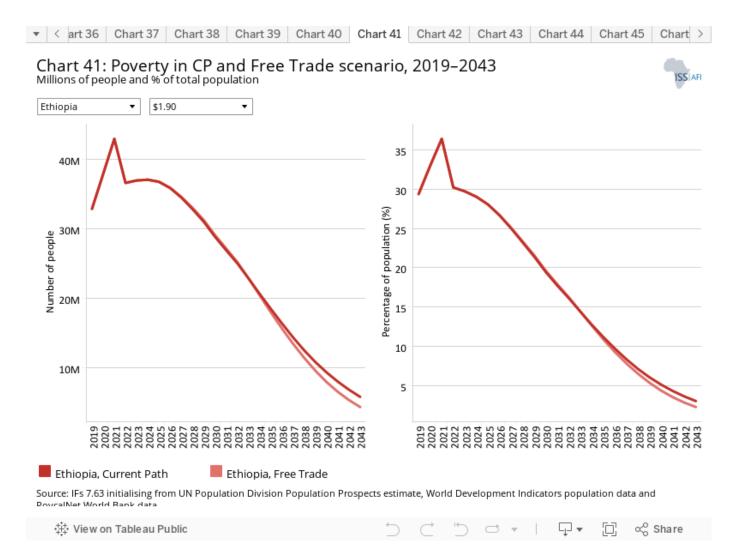
The external trade pattern of Ethiopia is similar to that of many other African countries that rely on a few key primary commodity exports while importing higher-value manufactured goods, consumer items and foodstuffs. Coffee is the main export product of Ethiopia. Going forward, this is likely to change as the country is doing relatively well in developing its manufacturing sector.

In 2019, the country's trade deficit amounted to nearly 16.6% of GDP. In the Free Trade scenario, Ethiopia's trade balance improves to reach a deficit of 5.6% of GDP in 2033. After that, the trade deficit increases to nearly 10% of GDP by 2043 compared to a deficit of 8.3% of GDP in the Current Path forecast. With the removal of trade restrictions, following trade liberalisation, it becomes easier to import while Ethiopian firms face intense competition on the export markets. However,

only using the trade balance is not a viable indicator to conclude that in the long term, Ethiopia will be a loser in the implementation of AfCFTA, as other indicators need to be considered too.



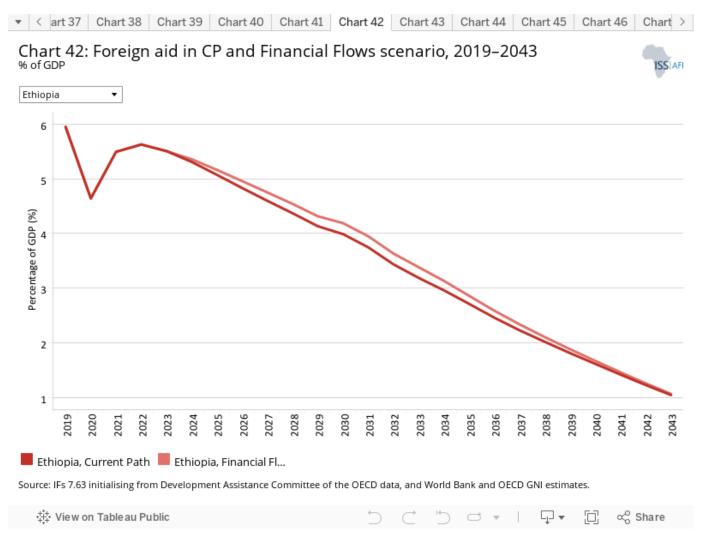
Generally, trade liberalisation improves productivity through competition and technology diffusion, stimulating growth and raising income levels. In the Current Path forecast, GDP per capita increases from US\$2 063 in 2019 to US\$5 888 in 2043 but is US\$6 602 in the Free Trade scenario, an increase of US\$714 above the Current Path forecast for that year. This shows that the full implementation of AfCFTA will enhance economic growth in Ethiopia.



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.

The poverty rate at US\$1.90 in the Free Trade scenario is 2.3% (4.4 million people) in 2043 compared to 3.1% in the Current Path forecast — this is equivalent to 1.46 million fewer poor people living in extreme poverty than on the Current Path. The full implementation of the AfCFTA will improve growth, raise incomes and reduce Ethiopia's poverty. In 2043, the projected poverty rate in the Free Trade scenario of 2.3% is far below the average of 25.2% in the Current Path forecast for low-income Africa.

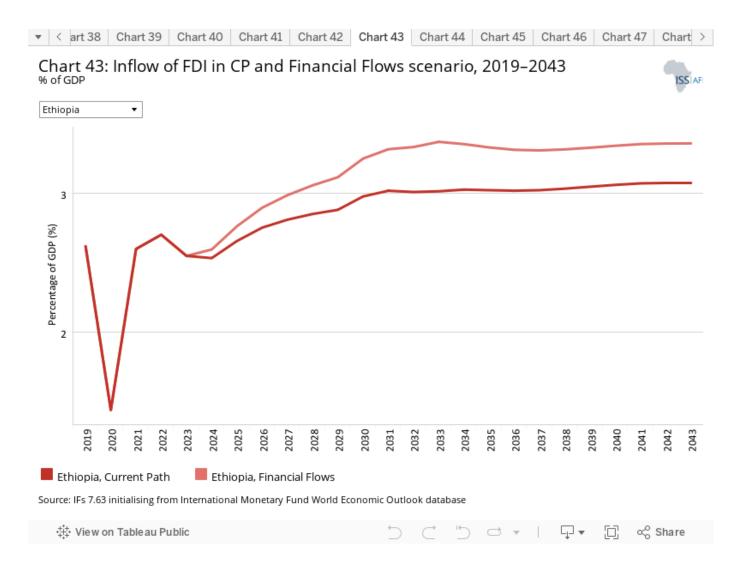




The Financial Flows scenario represents a reasonable but ambitious increase in worker remittances and aid flows to poor countries, and an increase in the stock of foreign direct investment (FDI) and additional portfolio investment inflows to middle-income countries. We also reduced outward financial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

The intervention is explained here in the thematic part of the website.

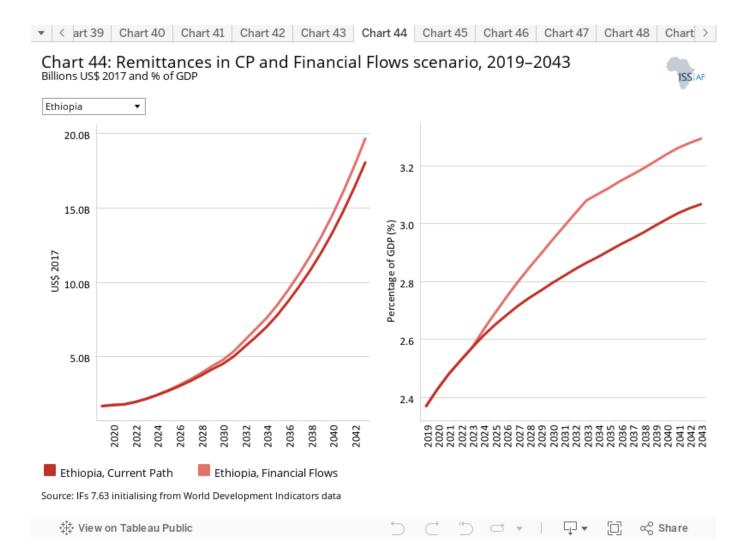
Many countries in sub-Saharan Africa are still heavily dependent on foreign aid to provide basic services like education and health. This is the case of Ethiopia. In absolute terms, most aid inflows into the Horn of Africa go to Ethiopia. Aid constituted roughly 6% of the country's GDP in 2019, below the average of 8.5% of GDP for low-income Africa. In the Financial Flows scenario, foreign aid flows to Ethiopia as a percentage of GDP will converge with the Current Path forecast to reach 1.05% of GDP by 2043, which is below the average of 3.8% of GDP for low-income countries in Africa.



The Ethiopian government has recently implemented several policies and reforms to attract more foreign direct investment, especially to the manufacturing sector. In absolute terms, most FDI inflows into the Horn of Africa go to Ethiopia. Foreign direct investment flows to Ethiopia roughly quadrupled from 2011 to 2017, and the vast majority — about 80% — flowed into the manufacturing sector.[8] However, it still remains below the level that could be a game changer for the country's development, probably due to political instability and poor business climate. In the 2020 Doing Business report by the World Bank, Ethiopia ranked 159 out of 190 countries.[9]

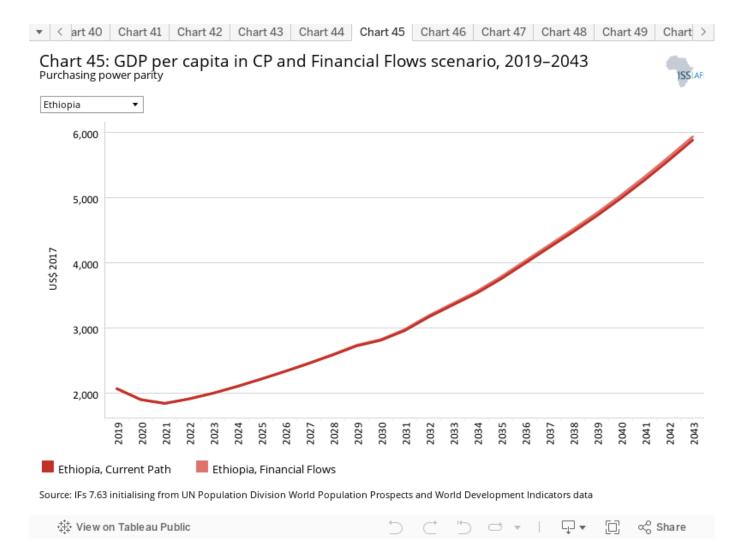
In 2019, FDI inflows represented 2.6% of the country's GDP, below the 4.3% average for low-income African countries. It dropped to 1.4% in 2020 due to political turmoil and the COVID-19 pandemic and its associated economic crisis.

In the Financial Flows scenario, FDI inflows in 2043 will represent about 3.4% of GDP compared to 3.1% on the Current Path but remain below the Current Path average of 4.7% of GDP for low-income countries. FDI can act as a catalyst for economic development as it brings much needed capital and technology to recipient countries. A diplomatic resolution to the conflict in Tigray would help Ethiopia regain investor confidence and attract more FDI.

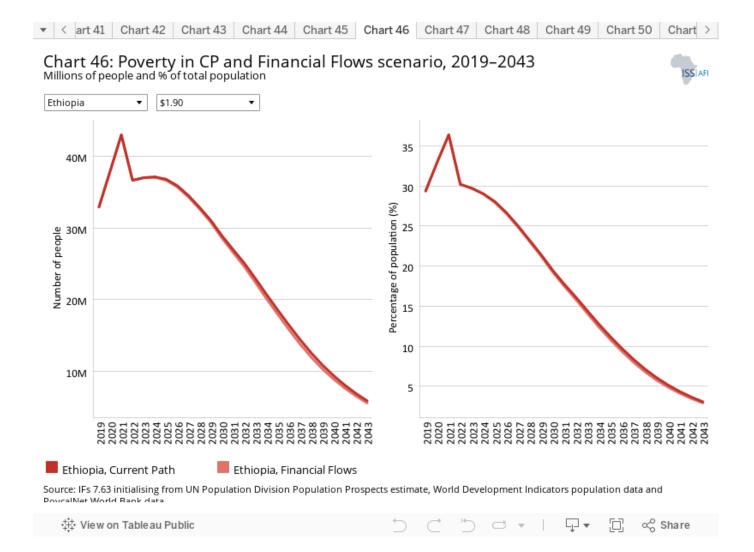


International remittance is an essential source of foreign exchange for Ethiopia. Official remittance flows to Ethiopia reached US\$5 billion in 2018 — a large increase from only US\$140 million in 2002/03.[10] The actual amount is likely much larger as informal remittances are not captured in official data.

Remittances flows to Ethiopia amounted to US\$1.7 billion in 2019, or 2.4% of GDP above the average of 1.1% of GDP for low-income countries in Africa. Across the forecast horizon, Ethiopia remains a net recipient of remittances. In the Financial Flows scenario, the total net remittances to Ethiopia are US\$19.7 billion (3.3% of GDP) by 2043, compared with US\$18.1 billion (3.1% of GDP) in the Current Path forecast for 2043. Remittances as a percentage of GDP to Ethiopia in 2043 will be 2 percentage points higher than the average for low-income countries in Africa.

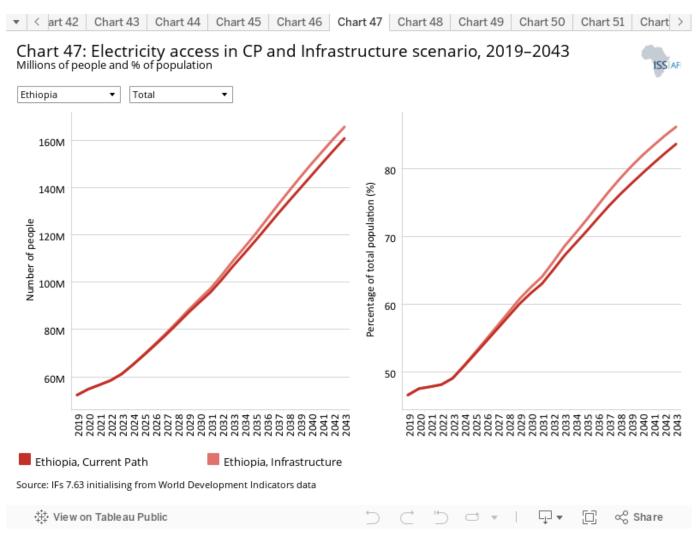


In the Financial Flows scenario, the GDP per capita of Ethiopia increases from US\$2 063 in 2019 to US\$5 939 in 2043, which is US\$51 (0.9%) higher than in the Current Path forecast for the same year. Overall, the Financial Flows scenario has a marginal impact on GDP per capita in Ethiopia. FDI, for instance, can boost growth and development but is not straightforward. Studies have shown that the impact of FDI on economic growth is conditional on the recipient countries' absorptive capacities (domestic conditions) such as the level of human capital stock, infrastructure development, financial development and institutional development, among others.[11] Ethiopian authorities should not only implement policies to attract FDI but they should also improve domestic conditions to harness the growth enhancing effect of FDI and other external financial flows.



The Financial Flows scenario reduces the number of extremely poor Ethiopian people by only additional 310 000 by 2043 compared to the Current Path forecast, using the US\$1.90 poverty threshold. Whereas 29.4% of the Ethiopian population lived in extreme poverty in 2019, by 2043, it would be 2.9% in the Financial Flows scenario compared to 3.1% in the Current Path forecast. The extreme poverty rate in this scenario will be 22.3 percentage points lower than Current Path average for low-income African countries.





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.

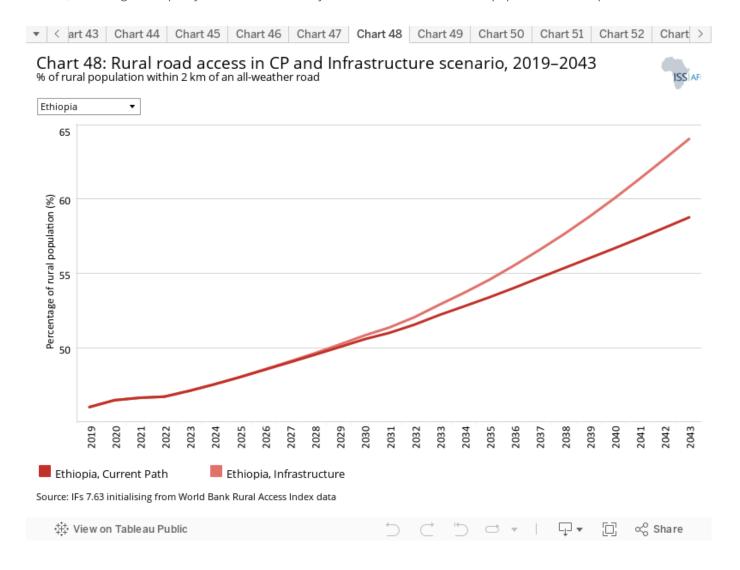
Note that health and sanitation infrastructure is included as part of the Health/WaSH scenario and that ICT infrastructure and more rapid uptake of renewables are part of the Leapfrogging scenario. The interventions there push directly on outcomes, whereas those modelled in this scenario increase infrastructure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

In 2019, the total number of people with access to electricity in Ethiopia was 52.3 million, representing 46.6% of the population. The Infrastructure scenario increases it to 165.7 million in 2043, constituting 86.2% of the population. This is above the projected value of 160.8 million, representing 83.7% of the population, in the Current Path forecast.

By 2043 it is projected that 100% of the urban population in Ethiopia will have access to electricity in the Infrastructure scenario, compared to 99.9% in the Current Path forecast. In the Infrastructure scenario and Current Path forecast, 79.6%

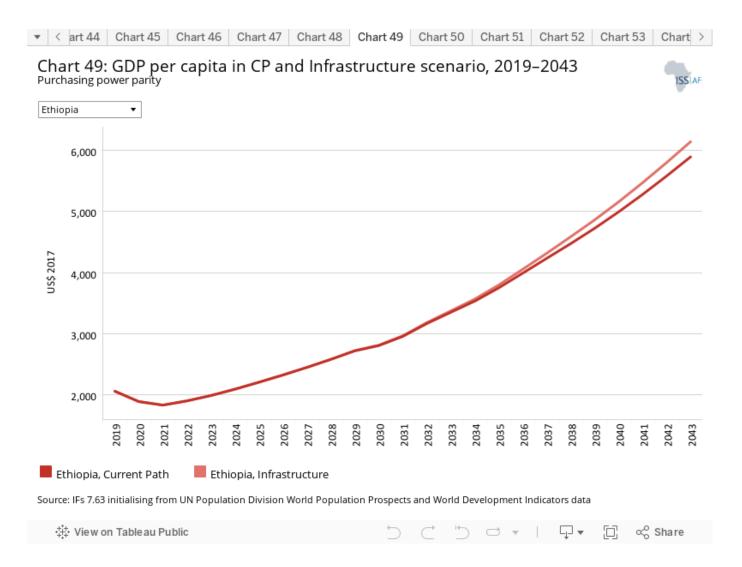
(102.5 million people) and 75.8% (97.66 million people) of the rural population, respectively, will have access to electricity in 2043, indicating the disparity in access to electricity between the urban and rural population in Ethiopia.



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.

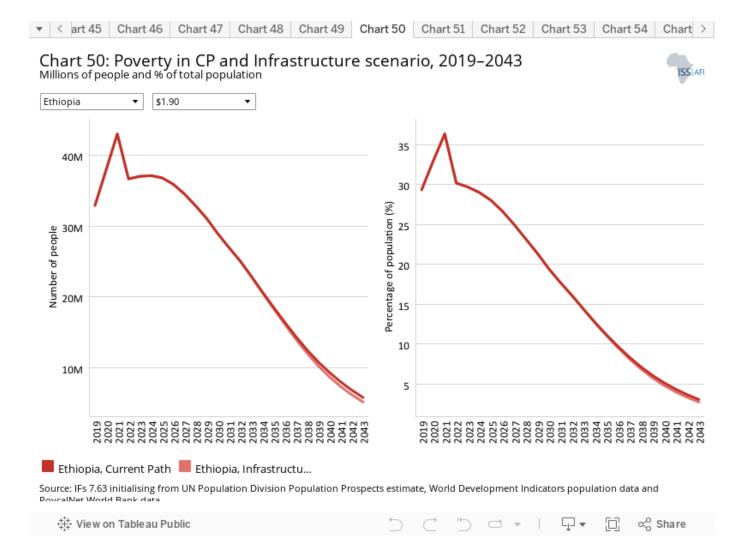
Accessibility to rural areas spurs on socio-economic development and improves the rural population's living standards. Better rural roads facilitate trade between rural and urban areas. For instance, they enable the rural population to enjoy products and amenities from nearby urban areas while allowing the urban population to more easily access agricultural products supplied by the population in rural areas.

In 2019, 46% of the rural population in Ethiopia resided within 2 km of an all-weather road, above the average of 43% for low-income African countries. In the Infrastructure scenario, it is projected to increase to 64.1% by 2043, slightly above the 58.8% projected in the Current Path forecast for that year and the 51% estimated for average low-income African countries on the Current Path.



Quality infrastructure not only enables business and industry development but also increases efficiency in the delivery of social services. Important basic infrastructure, such as roads and electricity, play a vital role in achieving sustainable and inclusive economic growth.

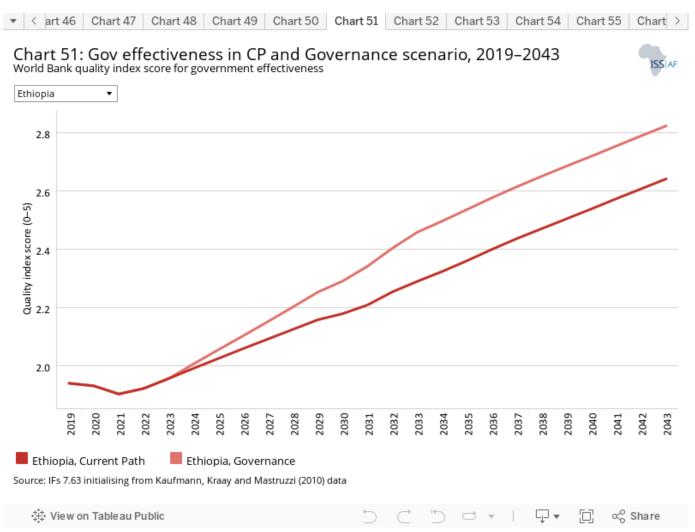
The Ethiopia's GDP per capita is forecast to rise to US\$6 136 by 2043 in the Infrastructure scenario. This is US\$248, or 4.2%, more than the Current Path forecast and 61.9% more than the Current Path forecast average of US\$3 790 for low-income African countries in 2043.



The provision of quality roads reduces transaction costs, improves productivity and stimulates growth with a positive effect on poverty reduction. In the case of Ethiopia in particular, the provision of an improved transportation network will afford rural farmers the opportunity to have a readily accessible urban market to sell their products, reduce post-harvest losses and increase income thereby reducing household poverty which is widespread among the farmers.

In the Infrastructure scenario, the extreme poverty rate is projected to decline from 29.4% in 2019 to 2.7% in 2043, which is equivalent to 5.2 million poor people in 2043, compared to 5.9 million in the Current Path forecast. This suggests 700 000 fewer people will be living in extreme poverty in the Infrastructure scenario than in the Current Path forecast for the same year. The extreme poverty rate of 2.7% in the scenario by 2043 is far below the projected Current Path forecast average of 25.2% for low-income African countries.





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.

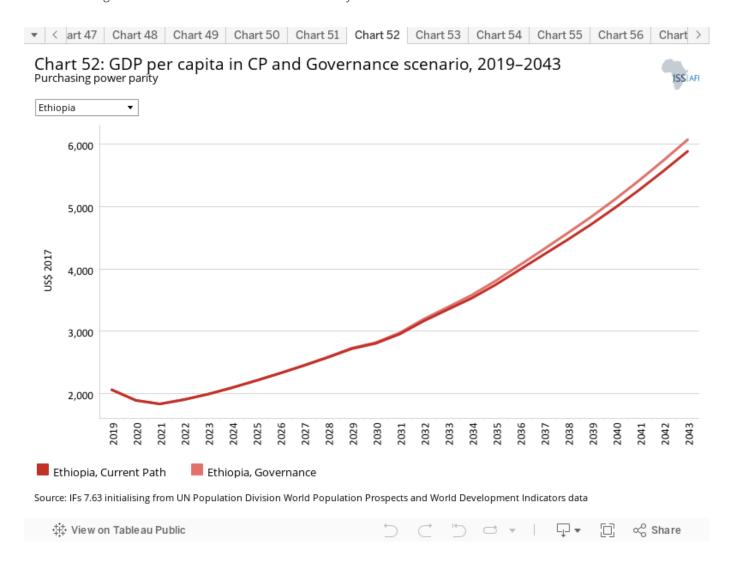
As defined by the World Bank, government effectiveness 'captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies'.

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

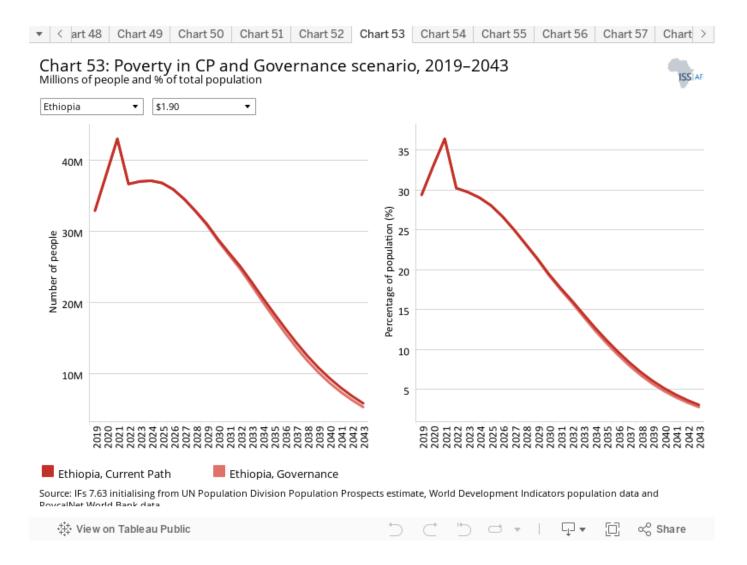
The Ethiopian government has been engaged in several reform programmes to improve the delivery of services within the public sector. According to the 2020 Ibrahim Index of African Governance, Ethiopia is the only country to have improved in all 16 sub-categories of governance during the period 2010–2019.[12]

In the Current Path forecast and in the Governance scenario, the government effectiveness score for Ethiopia is projected to increase. The projected score for government effectiveness in the Governance scenario by 2043 is 2.8 (out of a maximum of 5), up from the 1.9 in 2019. This is 0.2 points higher than the projected score of 2.6 in the Current Path

forecast for the same year. Ethiopia will still have a higher government effectiveness score than the projected Current Path forecast average of 1.9 for low-income African countries by 2043.

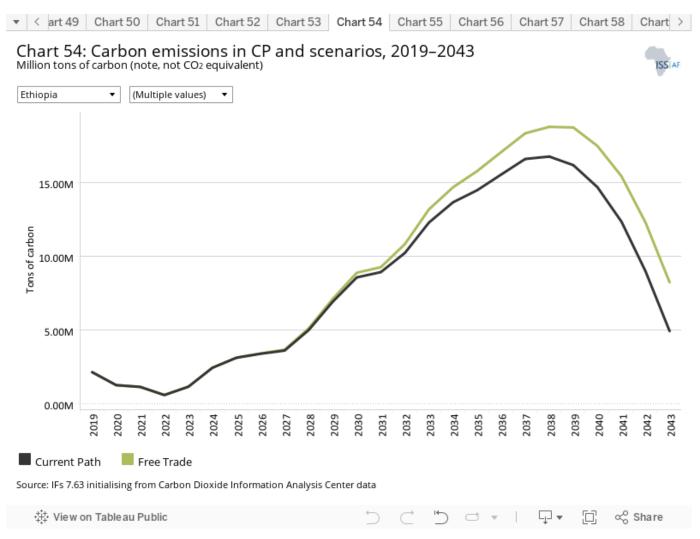


Critical determinants of growth depend on governance and the institutional settings in a country. In the Governance scenario, Ethiopia's GDP per capita is projected to increase to US\$6 075 in 2043, which is US\$187, or 3.1%, more than the Current Path forecast for the same year. The GDP per capita of US\$6 075 in the scenario in 2043 is 60.3% above the Current Path forecast average of US\$3 790 for low-income countries in Africa for the same year.



Using the US\$1.90 poverty threshold for low-income countries, the poverty rate in Ethiopia is projected to decline to 2.8% in 2043 in the Governance scenario, which is far below the projected average of 25.1% for low-income countries in Africa. The poverty rate of 2.8% in the scenario in 2043 equates to 520 000 fewer poor people than in the Current Path forecast by 2043.





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

In 2019, Ethiopia released about 2.2 million tons of carbon, and in the Current Path forecast the country will release 4.9 million tons by 2043 — an increase of 122.7%. Although carbon emissions are set to increase as economic activity increases, Ethiopia's carbon emissions come from a very low base. Like many developing countries, the country will disproportionately suffer from climate change which it has contributed very little to. Nonetheless, the country must reduce its carbon emissions and move towards renewable energy for sustainable growth to mitigate climate change.

The Free Trade scenario has the most significant impact on carbon emissions by 2043. The Leapfrogging scenario has the lowest level of carbon emissions. By 2043, the carbon emissions range from 8.3 million tons for the Free Trade scenario, 67.3% higher than the Current Path forecast, to 2.3 million tons of carbon in the Leapfrogging scenario.

Endnotes

- 1. The Federal Democratic Republic of Ethiopia Ministry of Health, Ethiopia Health Sector Transformation Plan, October 2015
- 2. Food and Agriculture Organization of the United Nations, Ethiopia
- 3. USDA Foreign Agricultural Service, Ethiopia: FAIRS Country Report, 30 September 2021
- 4. K Yeboua and J Cilliers, Development Prospects for the Horn of Africa Countries to 2040, East Africa Report 42, Institute of Security Studies, 20 October 2021
- 5. J Afrique, Ethiopia rewards Safaricom-led consortium with telco licence, The Africa Report, 25 May 2021
- 6. World Bank, ESMAP Impact, Ethiopia's energy sector transformation, Issue 18, November 2019
- 7. World Bank, ESMAP Impact, Ethiopia's energy sector transformation, Issue 18, November 2019
- 8. The Economist, The violence in Ethiopia imperils an impressive record growth, 20 November 2021
- 9. World Bank, Doing Business report
- 10. K Yeboua and J Cilliers, Development Prospects for the Horn of Africa Countries to 2040, East Africa Report 42, Institute of Security Studies, 20 October 2021
- 11. K Yeboua, Foreign Direct Investment and Economic Growth in Africa: New Empirical Approach on the Role of Institutional Development, Journal of African Business, 22:3, 2021, 361–78.
- 12. Mo Ibrahim Foundation, 2020 Ibrahim Index of African Governance: Key Findings, 25 November 2020

Donors and sponsors











Reuse our work

- All visualizations, data, and text produced by African Futures are completely open access under the Creative Commons BY license. You have the permission to use, distribute, and reproduce these in any medium, provided the source and authors are credited.
- The data produced by third parties and made available by African Futures is subject to the license terms from the original third-party authors. We will always indicate the original source of the data in our documentation, so you should always check the license of any such third-party data before use and redistribution.
- All of our charts can be embedded in any site.

Cite this research

Kouassi Yeboua (2024) Ethiopia. Published online at futures.issafrica.org. Retrieved from https://futures.issafrica.org/geographic/countries/ethiopia/ [Online Resource] Updated 13 December 2023.



About the authors

Dr Kouassi Yeboua is a senior researcher in African Futures and Innovation programme in Pretoria. He recently served as lead author on ISS studies on the long-term development prospects of the DR Congo, the Horn of Africa, Nigeria and Malawi. Kouassi has published on various issues relating to foreign direct investment in Africa and is interested in development economics, macroeconomics, international economics, and economic modelling. He has a PhD in Economics.

About African Futures & Innovation

Scenarios and forecasting can help Africa identify and respond to opportunities and threats. The work of the African Futures & Innovation (AFI) program at the Institute for Security Studies aims to understand and address a widening gap between indices of wellbeing in Africa and elsewhere in the world. The AFI helps stakeholders understand likely future developments. Research findings and their policy implications are widely disseminated, often in collaboration with in-country partners. Forecasting tools inspire debate and provide insights into possible trajectories that inform planning, prioritisation and effective resource allocation. Africa's future depends on today's choices and actions by governments and their non-governmental and international partners. The AFI provides empirical data that informs short- and medium-term decisions with long-term implications. The AFI enhances Africa's capacity to prepare for and respond to future challenges. The program is headed by Dr Jakkie Cilliers.

The opinions expressed do not necessarily reflect those of the ISS, its trustees, members of the Advisory Council or donors. Authors contribute to ISS publications in their personal capacity.