



Eritrea

Sectoral Scenarios for Eritrea

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Sectoral Scenarios for Eritrea

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



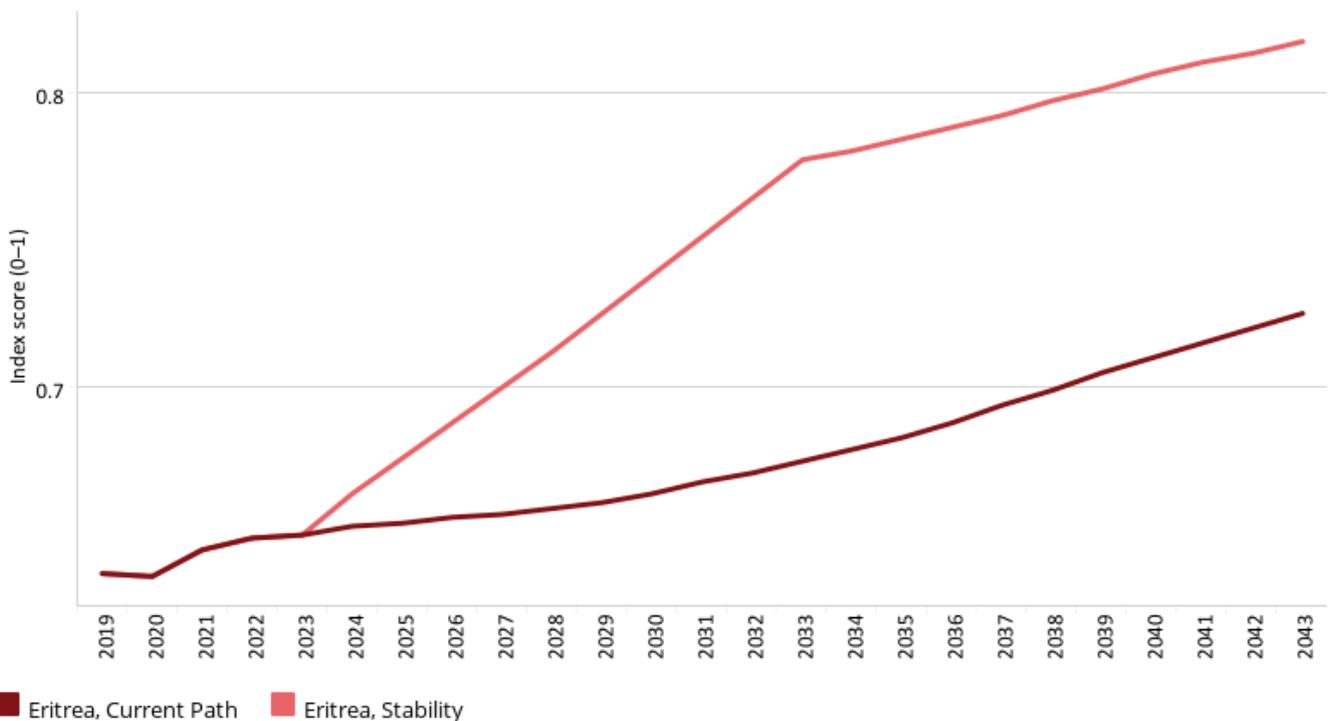
Stability scenario

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



Eritrea



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.

After a long liberation war, Eritrea regained self-rule in 1991 and full independence in 1993. The country enjoyed seven years of stabilisation, reconstruction and development, before the onset of a border war with Ethiopia in 1998. The brunt of hostilities ended in 2000 and a UN Eritrea–Ethiopia Boundary Commission ruled in favour of Eritrea in 2002, but the border zone remained militarised. UN Security Council sanctions were imposed in 2009 and reinforced in 2011. Eritrea remained in a state of mobilisation for almost two decades under transitional political arrangements focused on national security, with traditional checks and balances being suspended in the process.[1]

IFs' governance security index ranges from 0 (low security) to 1 (high security). Eritrea scored 0.64 in 2019, on par with the average for low-income countries in Africa.

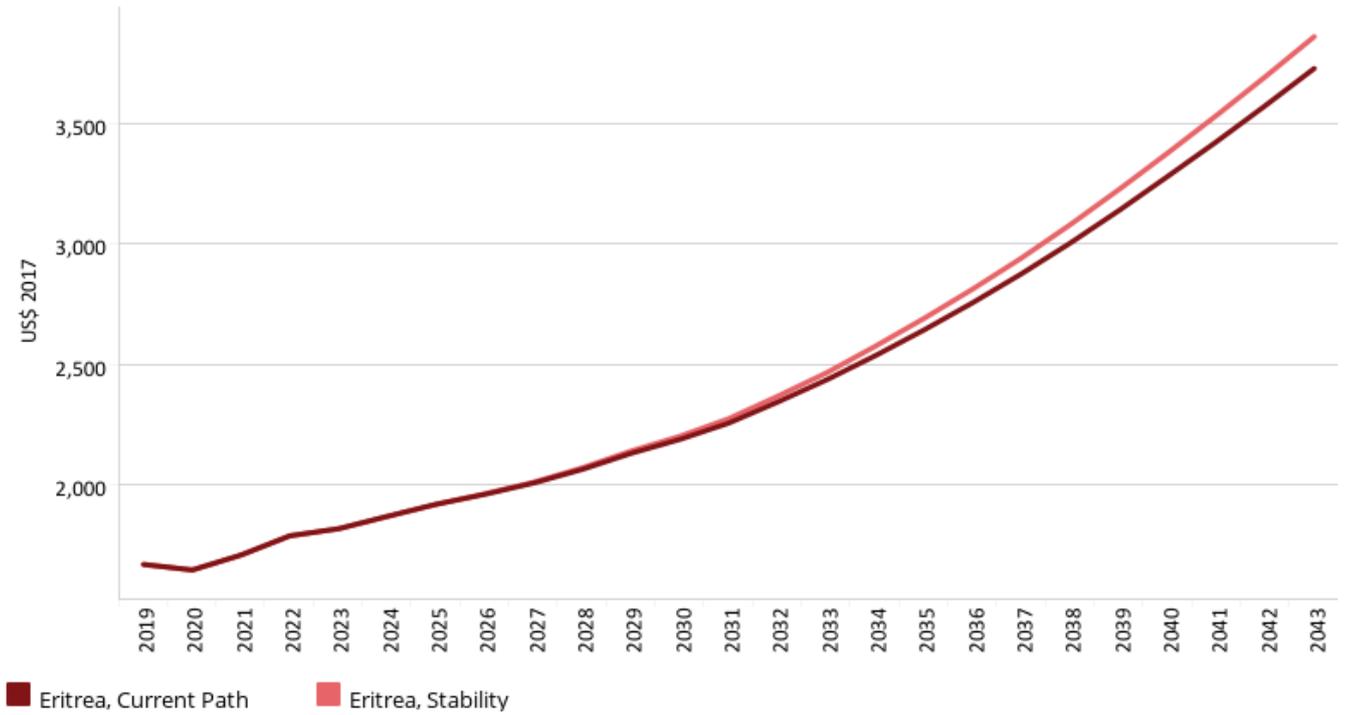
The Stability scenario improves security and stability in Eritrea, and by 2043, a score 0.82 is projected, about 12% higher than in the Current Path forecast and 15.5% higher than the projected average of 0.71 on the Current Path for low-income countries in Africa.

A state's capacity to maintain order is the most important condition for development. The government and policymakers in Eritrea should take proactive measures for more social and political stability.

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



Eritrea



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

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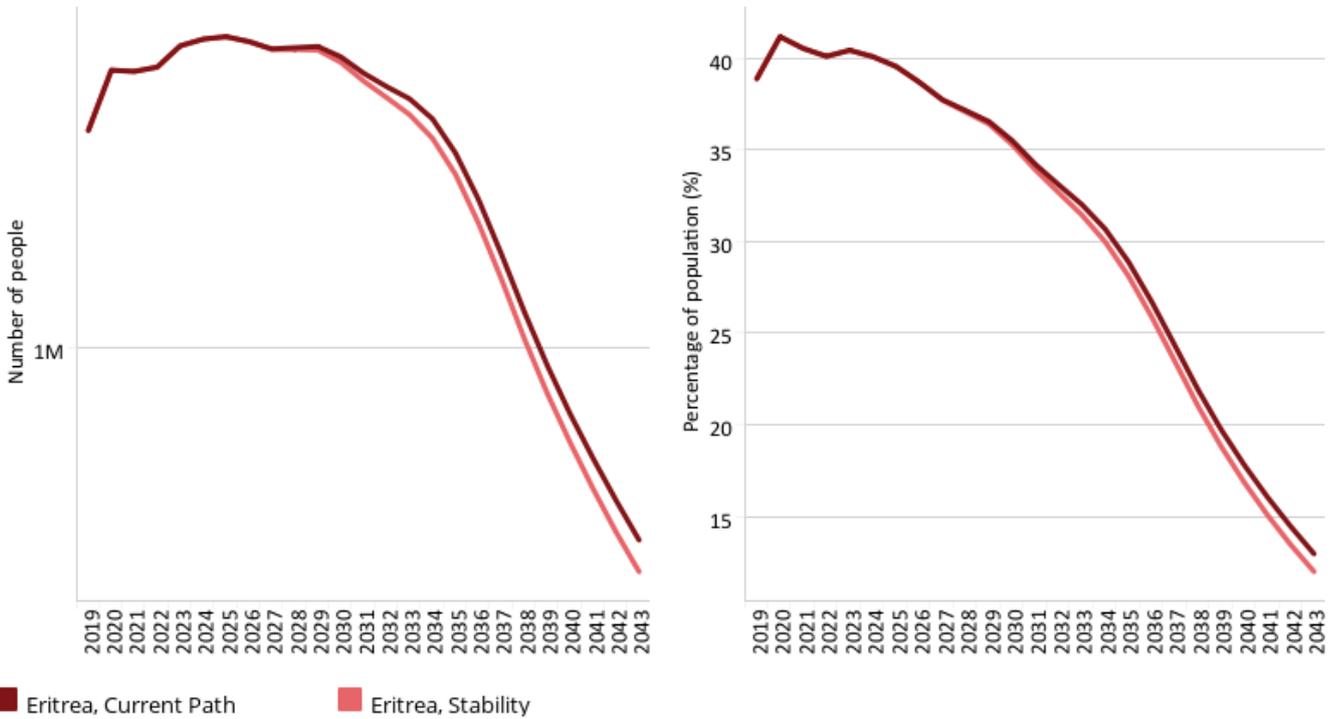
Increased stability would encourage greater domestic and foreign investment, positively affecting growth and income levels.

By 2033, Eritrea's GDP per capita would be US\$30 higher in the Stability scenario than in the Current Path forecast for that year. By 2043, the difference is expected to be US\$132, translating to a GDP per capita of US\$3 860 in Eritrea. This is higher than the Current Path forecast of US\$3 728. In the Stability scenario, Eritrea's projected GDP per capita by 2043 is above the expected average for low-income countries in Africa.

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



Eritrea \$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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More stability in a country is an essential condition for economic growth and poverty reduction. At the US\$1.90 threshold for extreme poverty in low-income countries, 1.36 million Eritreans (38.9% of the population) were considered to be extremely poor in 2019.

In the Stability scenario, the number of poor people will stand at 630 000 (12% of the population) by 2043, compared with 680 000 (13% of the population) in the Current Path forecast for that year. The poverty rate in the Stability scenario is far below the average of 25.2% projected for low-income countries in Africa in the Current Path forecast for 2043.



Demographic scenario

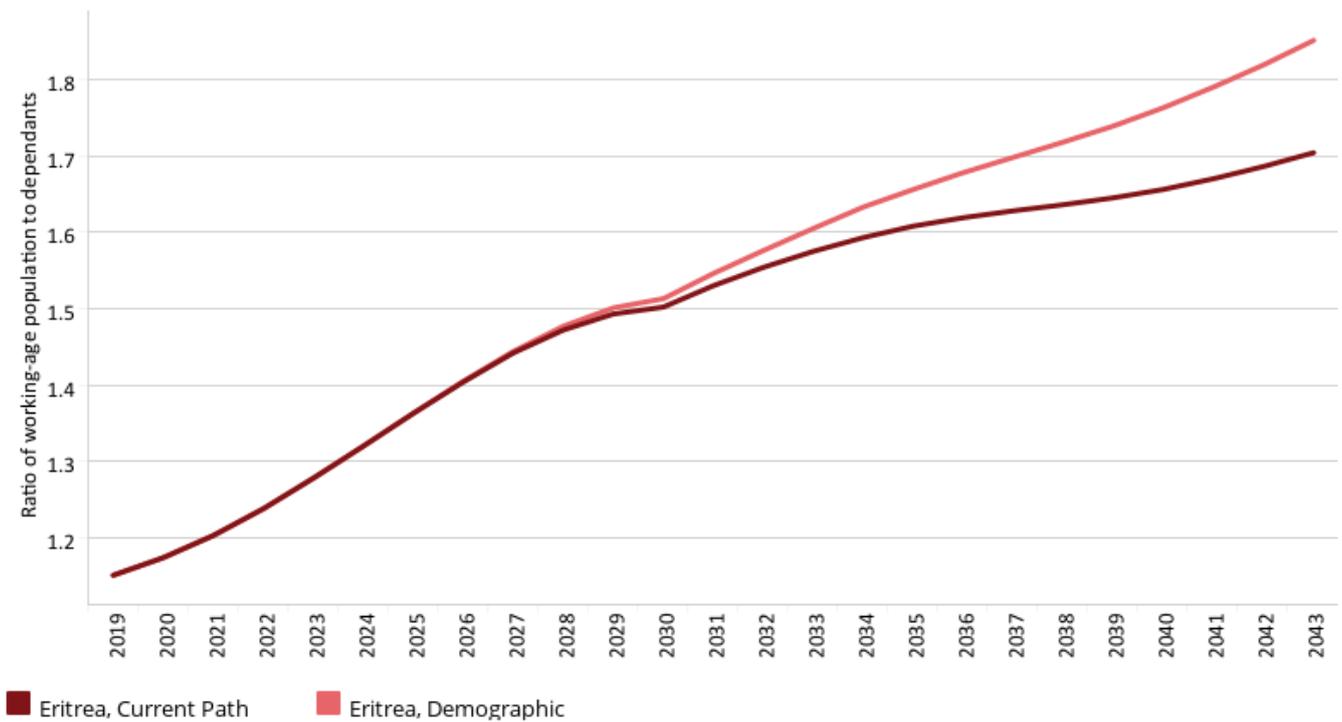
Chart 11 Chart 12 Chart 13 Chart 14 Chart 15 Chart 16 Chart 17 Chart 18 Chart 19 Chart 20 Chart 21

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

Ratio of working-age population to dependants



Eritrea



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 the working-age population to dependants stood at 1.15, meaning that there is roughly one person of working age for each dependant. In the Demographic scenario, the ratio is forecast to reach 1.7, the minimum required for the materialisation of the demographic dividend, by 2037, six years earlier than on the Current Path. By 2043, the ratio is set to be at 1.85 in this scenario, compared with the average of 1.53 for low-income countries in Africa.

Going forward, the increasing size of the working-age population in Eritrea can be a catalyst for growth if sufficient education and employment opportunities are generated to harness their productive power. But without these, it could

turn into a demographic 'disaster', as many people of working age may remain in poverty, potentially creating frustration, social tension and conflict.

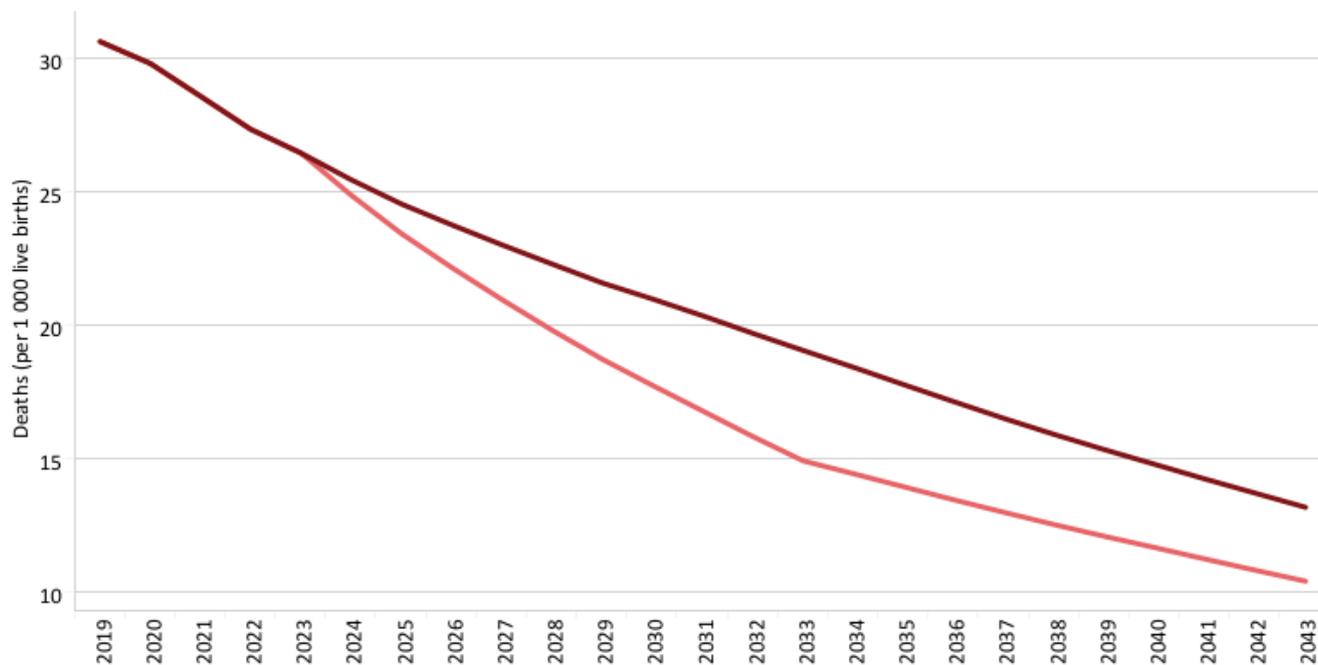
Chart 12 Chart 13 Chart 14 Chart 15 Chart 16 Chart 17 Chart 18 Chart 19 Chart 20 Chart 21 Chart 22

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

Deaths per 1 000 live births



Eritrea



■ Eritrea. Current Path ■ Eritrea. Demographic

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.

Infant mortality is decreasing in Eritrea. By 2019, the country recorded 30.7 deaths per 1 000 live births, below the average of 48.5 for Africa's low-income countries.

The Demographic scenario reduces infant mortality to 14.9 per 1 000 live births by 2033, compared with 19.1 in the Current Path forecast. By 2043, the infant mortality rate will be 10.4 in the Demographic scenario, compared with 13.2 in the Current Path forecast.

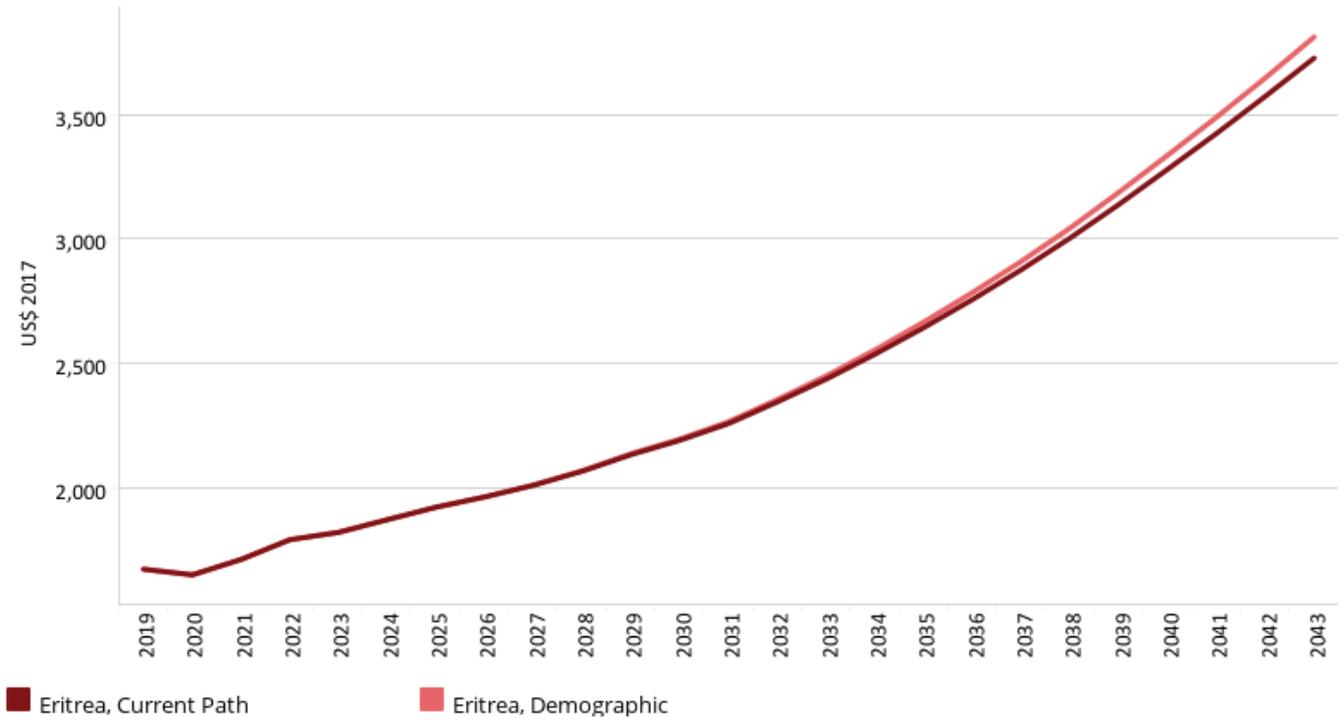
The infant mortality rate in this scenario is about 10 percentage points below the average for low-income countries in Africa (21.2 deaths per 1 000 live births) by 2043.

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

Purchasing power parity



Eritrea



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

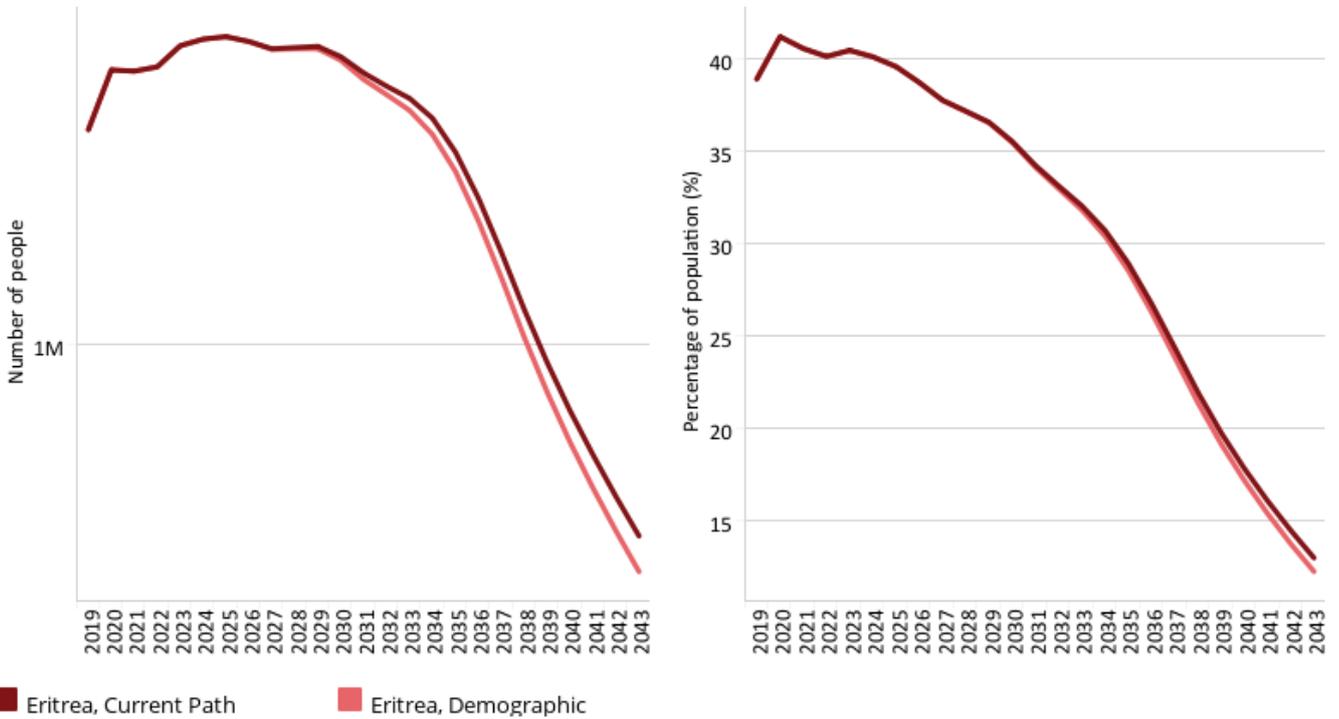
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When the number of dependants below 15 years of age decrease in a population, the government and parents are able to invest more in each child in terms of education and health, with positive implications for human capital formation and long-term growth. In 2043, the Demographic scenario's impact on per capita income is US\$85 more than the Current Path's forecast of US\$3 728, and US\$23 above the average for Africa's low-income countries.

Chart 19: Poverty in CP and Demog scenario, 2019–2043
Millions of people and % of total population



Eritrea \$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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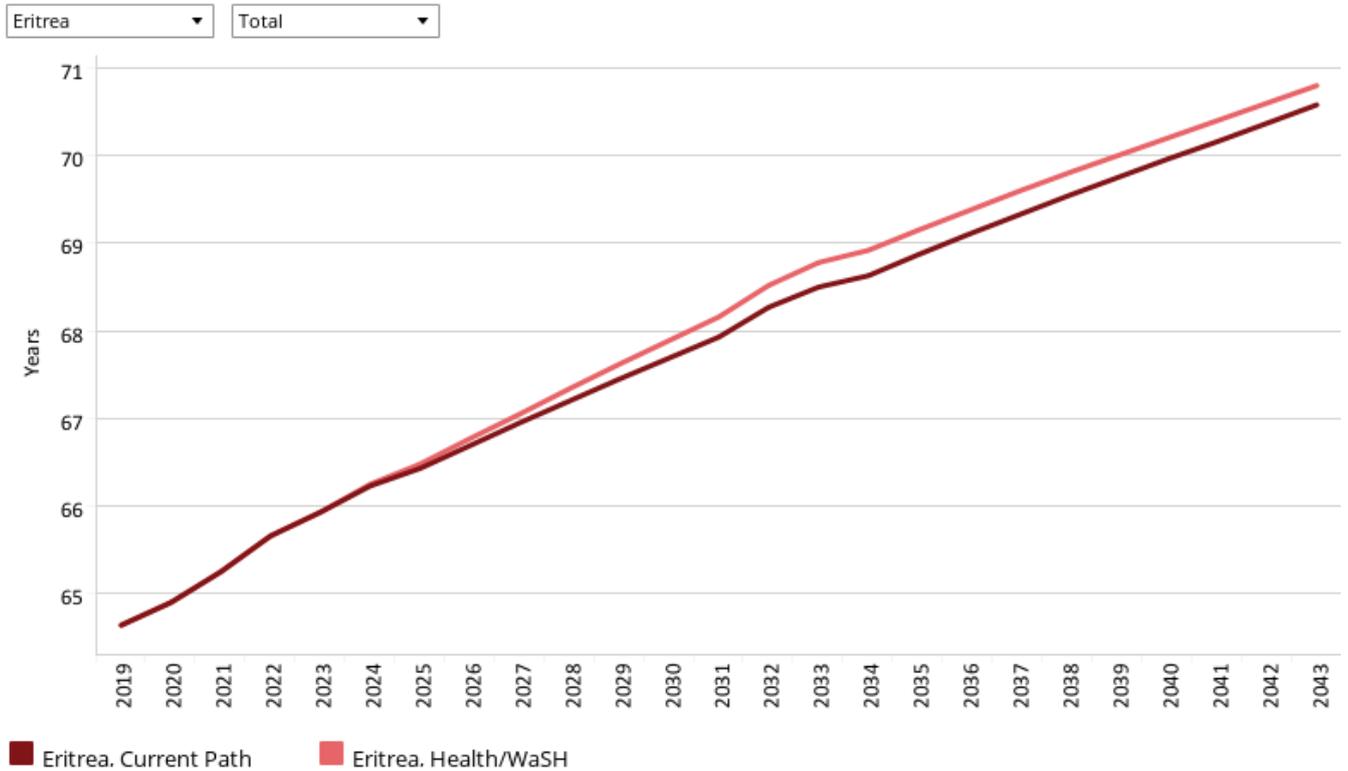
At the threshold of US\$1.90, 1.36 million people in Eritrea (38.9% of the population) were considered to be extremely poor in 2019. In the Demographic scenario, 620 000 people (12.2% of the population) will be living in poverty by 2043, compared with 680 000 (13% of the population) in the Current Path forecast.

The poverty rate in the Demographic scenario in 2043 is almost half of the Current Path’s average (25.1%) forecast for Africa’s low-income countries.

Eritrean authorities should make efforts to accelerate the demographic transition, which can be another source of growth and poverty reduction.



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.

The quality of a nation's health system can be gauged through indicators such as life expectancy, maternal mortality and infant mortality. Healthcare in Eritrea is improving. In 2010, Eritrea published its National Health Policy, which outlined the country's plans to improve its healthcare system. One goal of the policy includes hiring more healthcare workers (especially ones skilled in the treatment of non-communicable diseases). Another is to make technological improvements to allow for distanced training of healthcare workers. Final goals include increasing the quality and quantity of resources and adapting the distribution of healthcare workers to be highly mobile and dispersed.[2] As a result, infant mortality is decreasing and life expectancy is increasing in Eritrea.

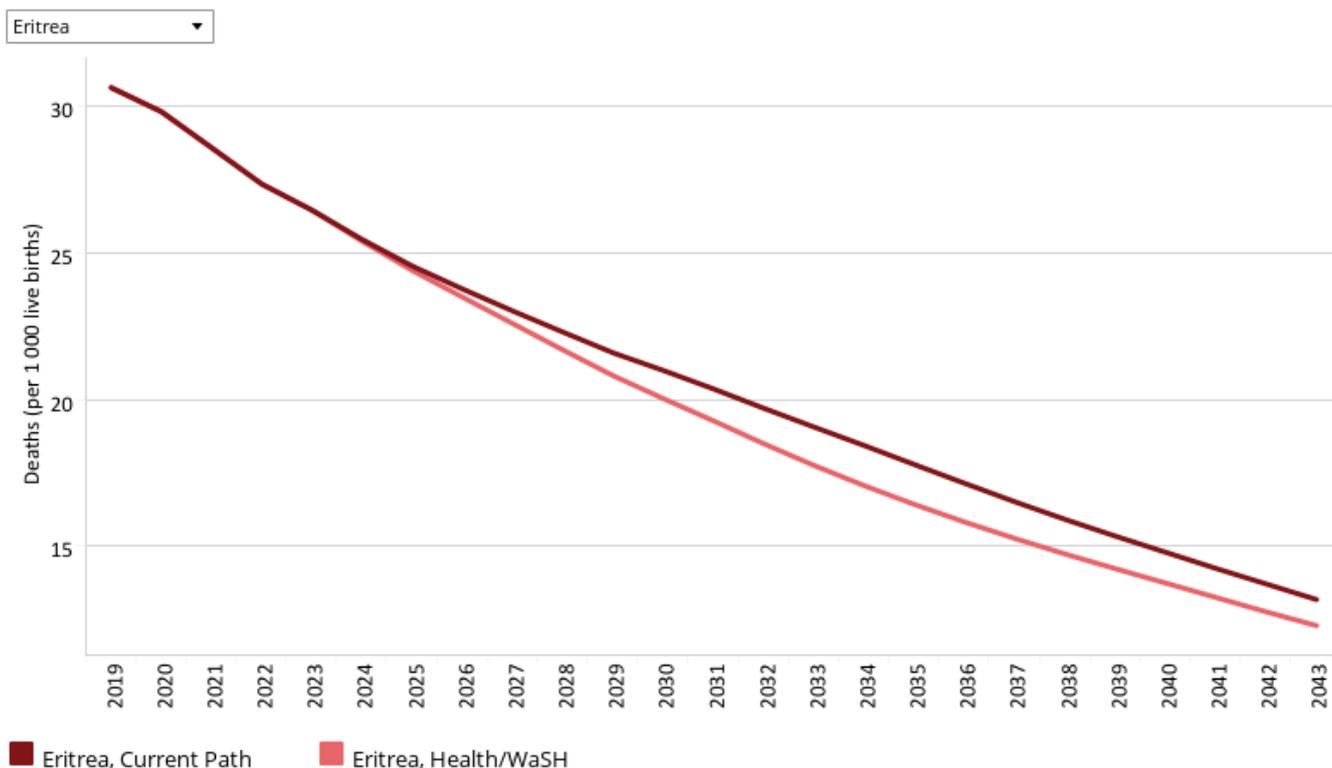
With regard to life expectancy, Eritrea has made incredible strides. Since 1960, the life expectancy in Eritrea has increased by nearly 30 years and the average life expectancy was about 65 years in 2019, above the average of 63.7 years for low-income countries in Africa.

In the Health/WaSH scenario, life expectancy is estimated to increase to 71 years by 2043, compared with 70.6 years in the Current Path forecast. Life expectancy in Eritrea in this scenario is on par with the projected average for low-income countries in Africa.

On average, women had a longer life expectancy at birth (65.5 years) than men (64 years) in 2019. In the Health/WaSH scenario, life expectancy for women is projected to be 71.6 years by 2043, compared with 70 years for men.

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



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

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The infant mortality rate in Eritrea was 30.7 deaths per 1 000 live births in 2019. This is lower than the averages for both sub-Saharan Africa and Africa’s low-income countries.

The Health/WaSH scenario reduces infant mortality to 12.3 deaths per 1 000 live births by 2043, compared with 13.2 in the Current Path forecast. Both these forecasts’ infant mortality rate will be above the projected average of 21.2 for Africa’s low-income countries by 2043.



Agriculture scenario

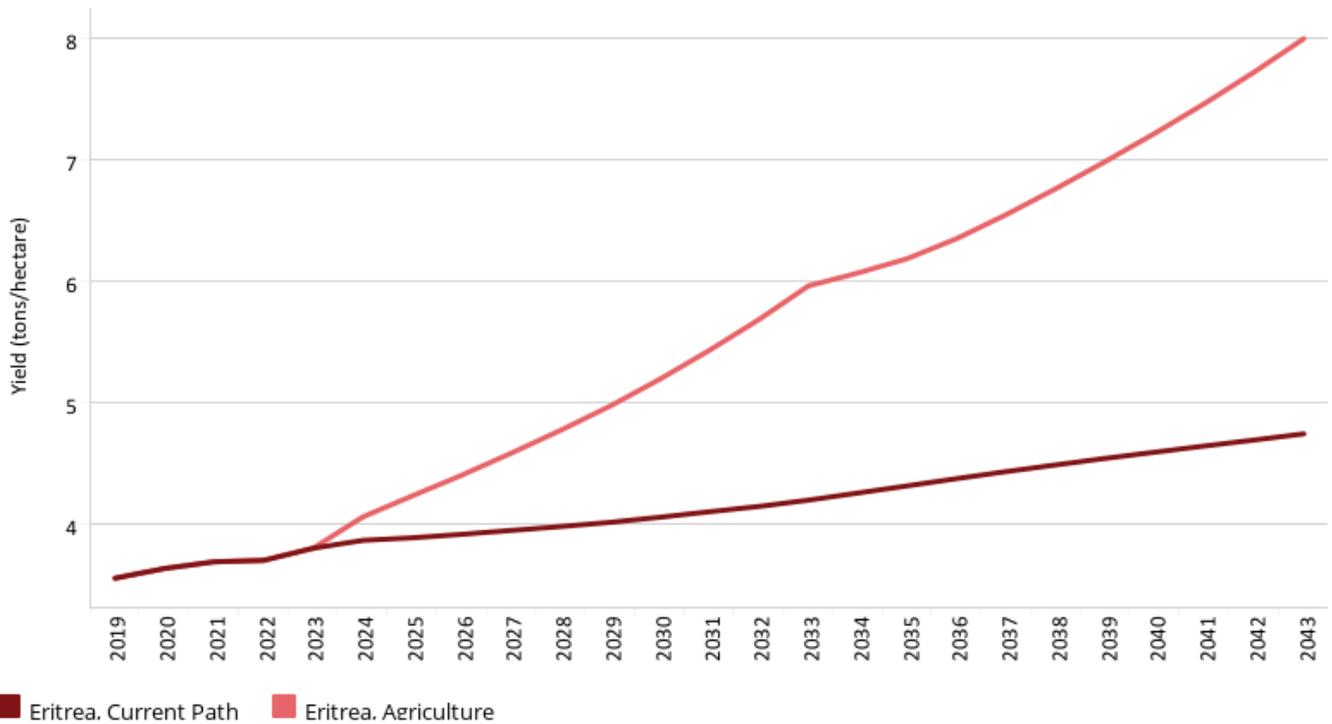
Chart 17 Chart 18 Chart 19 Chart 20 Chart 21 Chart 22 Chart 23 Chart 24 Chart 25 Chart 26 Chart 27

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

Pre-loss levels



Eritrea



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.

Drought and inconsistent rainfall hinder the crop yield of subsistence farming in Eritrea. The labour required to increase crop yields and the growth of farms is unavailable owing to mandatory conscription and emigration.[3] Most young Eritreans believe that fleeing the country is the only option for leading a meaningful life and starting a family, given the extensive demands of the state without any rights or benefits given in return.

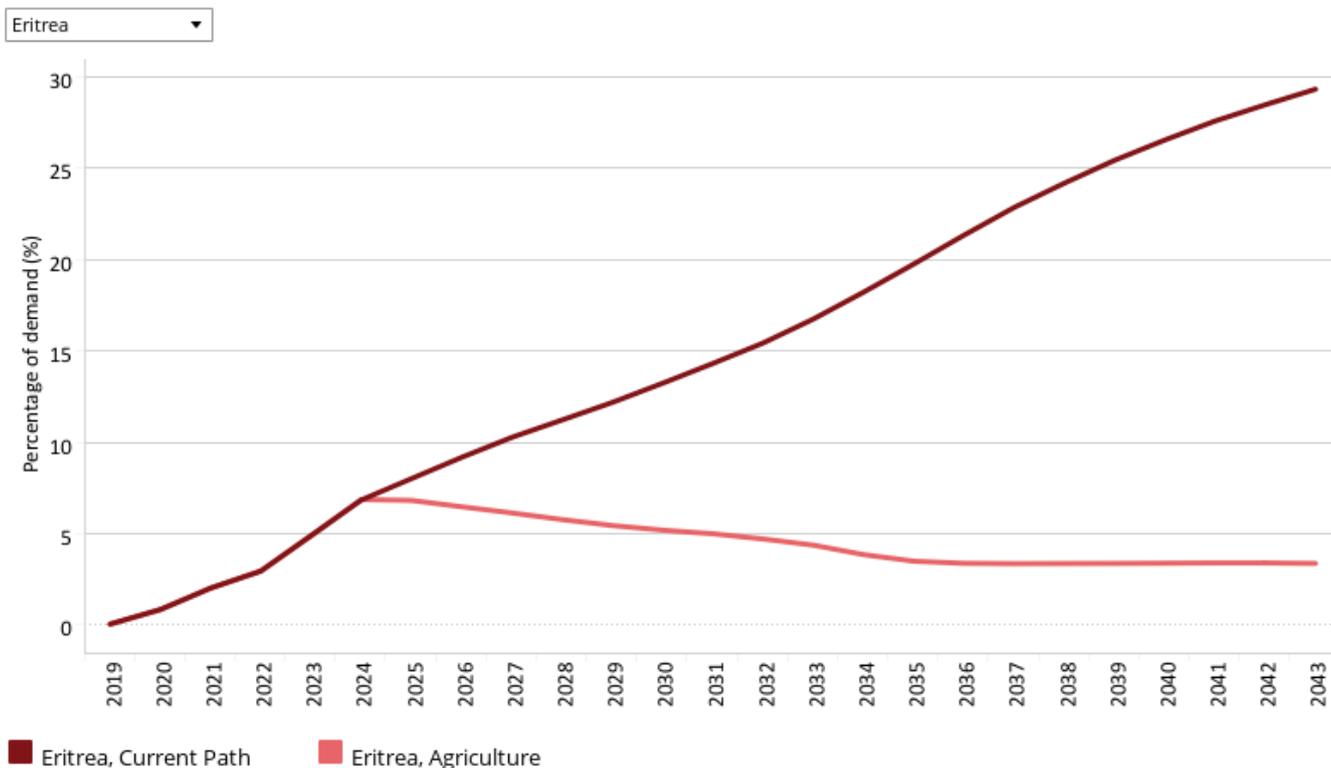
As in many African countries, many Eritreans rely on subsistence agriculture to feed themselves, with about 80% of the population engaged in subsistence agriculture. Moving from subsistence farming to sustainable agriculture in Eritrea will be crucial to the country's development. Both advanced and simple technologies are needed to improve crop yields in the country.

In the Agriculture scenario, average crop yields improve from 3.5 tons per hectare in 2019 to 8 tons per hectare in 2043, compared with 4.7 tons in the Current Path forecast. This is almost twice the average crop yield forecast on the Current Path in 2043. By 2043, average crop yield in the Agriculture scenario is above the projected average for low-income Africa.

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

Chart 23: Agriculture imports in CP and Agric scenario, 2019–2043

Net imports for meat, crops and fish, % of demand



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

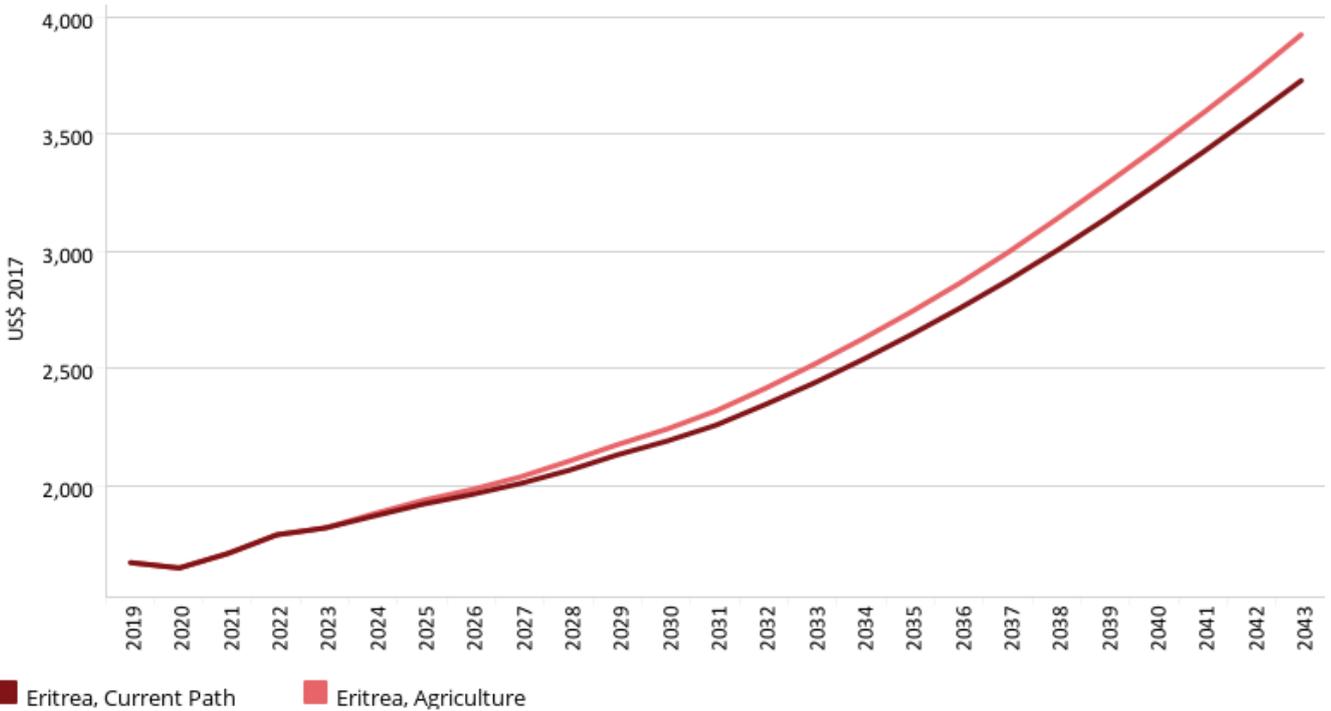
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Without significant efforts to improve agricultural production, Eritrea will remain a net food importer for the foreseeable future because of its low crop yields. On the Current Path, the agricultural import dependence will be about 29.3% of total demand by 2043. However, in the Agriculture scenario, it will be significantly less: only 3.4% of total demand.

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



Eritrea



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

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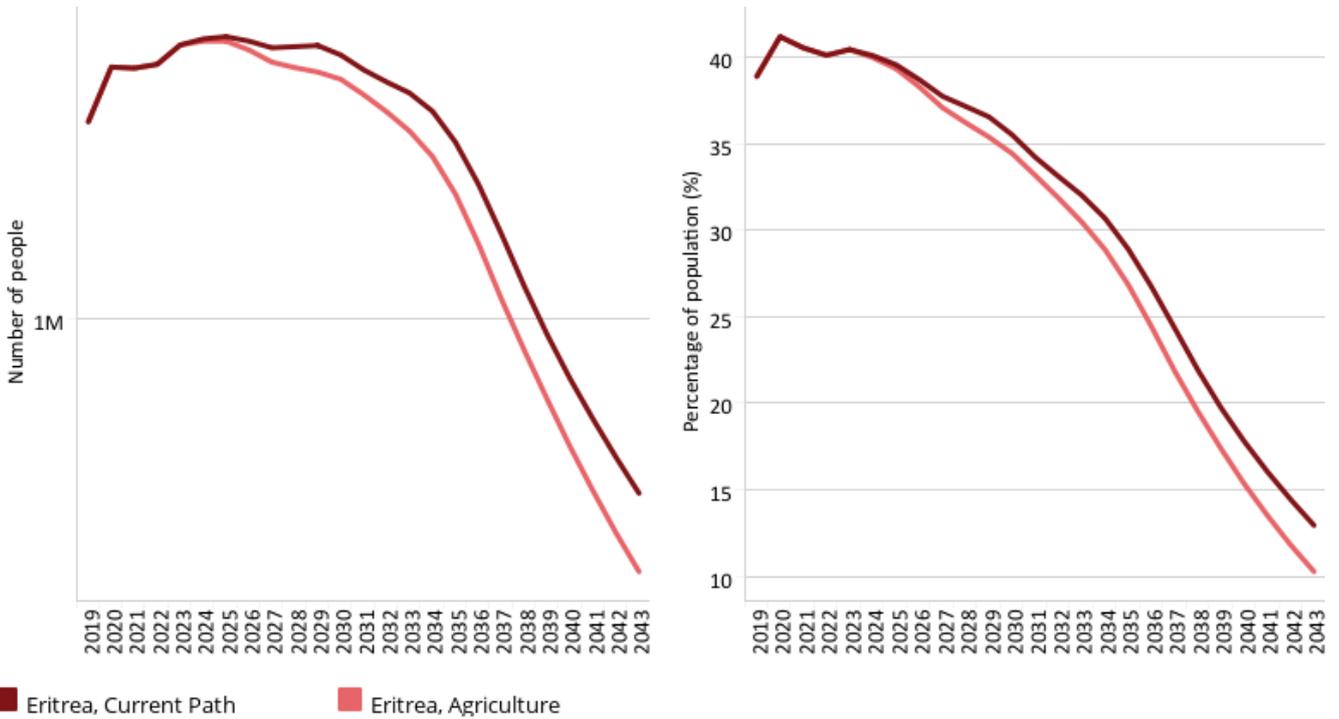
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The Agriculture scenario significantly impacts GDP per capita in Eritrea. By 2043, GDP per capita will have increased about US\$196 over the Current Path forecast, meaning the average Eritrean will be earning US\$3 924 at that stage. However, this is US\$36 lower than the projected average for low-income countries in Africa by 2043.

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



Eritrea \$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 agriculture sector is a lifeline for millions of people in Eritrea, with about 80% of the population engaged in subsistence agriculture.

At the US\$1.90 threshold, the poverty rate in the Agriculture scenario is at 10.3% by 2043, compared with 13% in the Current Path forecast. This is equivalent 140 000 fewer poor people living in poverty than in the Current Path forecast.

Further development in the agriculture sector is a viable option to reduce poverty in Eritrea. More investment in the sector will increase consumption and income, and even pave the way for agro-industry, positively affecting growth and poverty reduction.



Education scenario

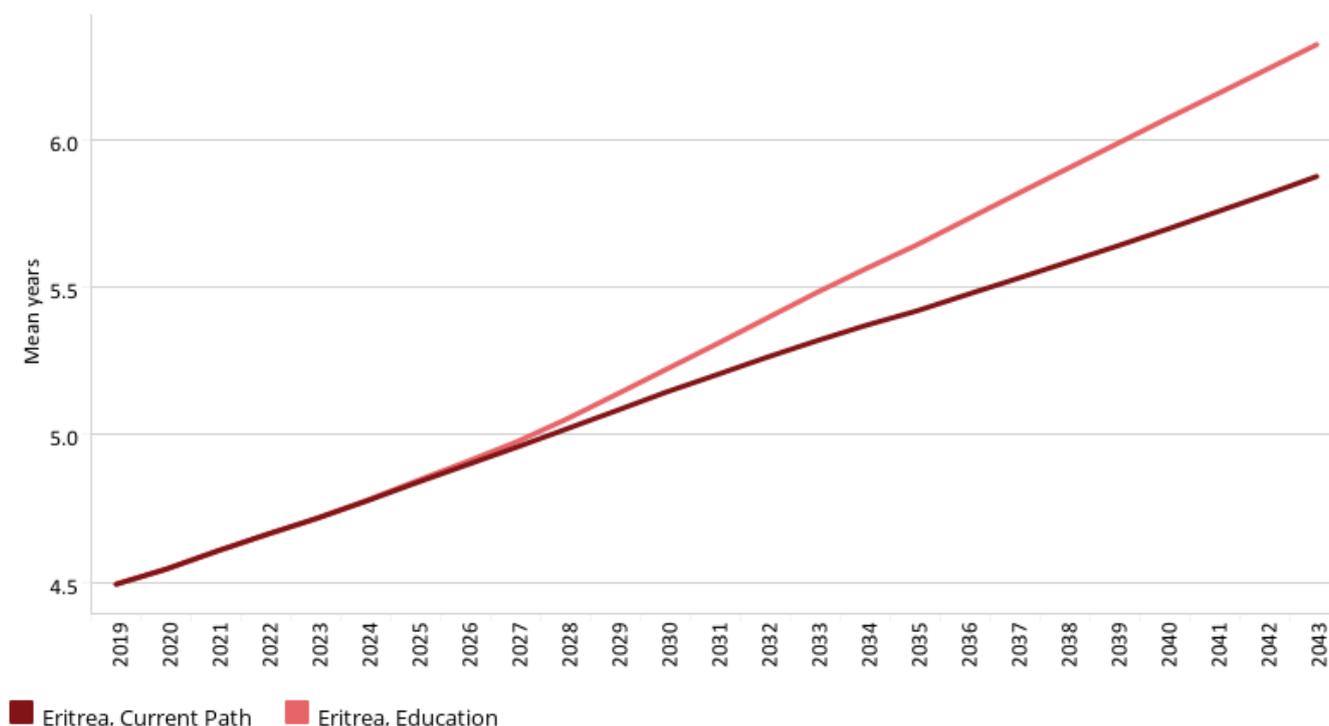
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Chart 26: Mean years of education in CP and Educ scenario, 2019–2043

Mean years of adult (+15) education



Eritrea 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.

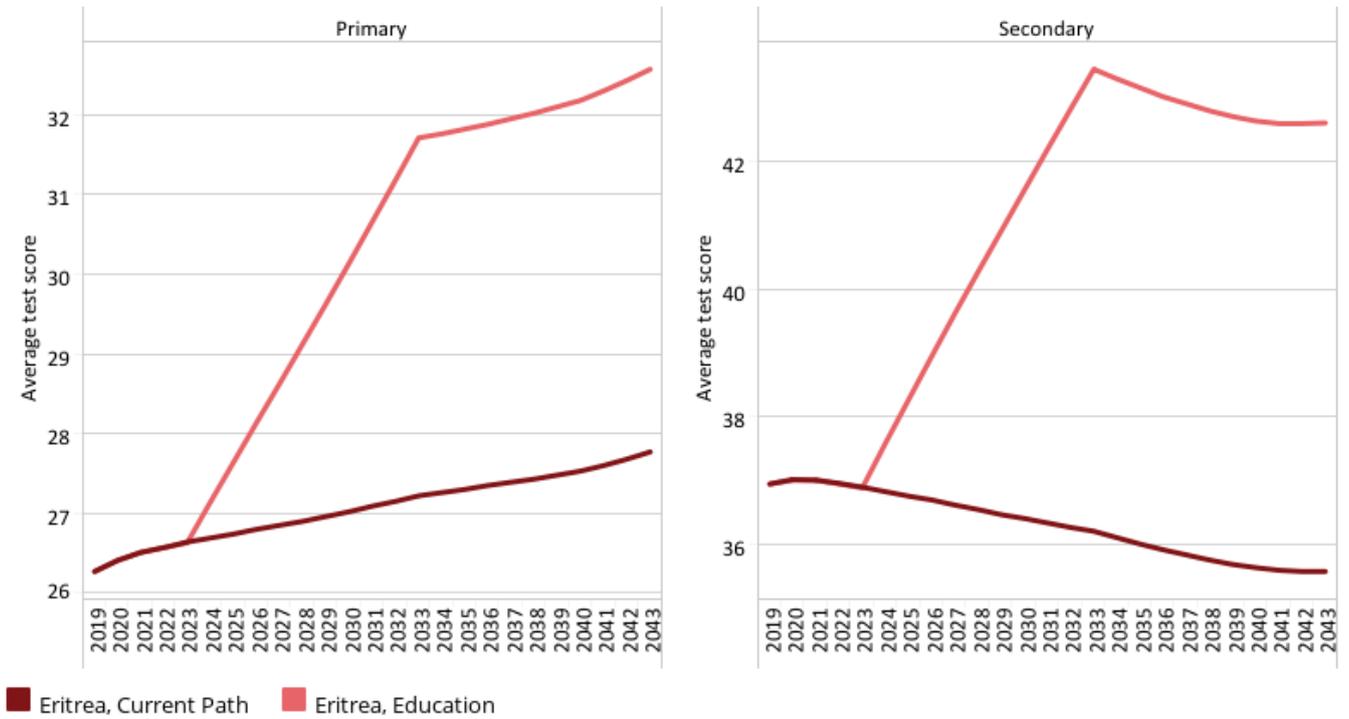
Mean years of education in the adult population (aged 15 years and older) is a good indicator of the stock of education in a country. In 2019, adults in Eritrea had received, on average, 4.5 years of education, which on the Current Path is projected to improve to 5.9 years by 2043. This is about 0.2 years below the projected average for low-income countries in Africa in the same year. Technically, this means that most people in Eritrea will not have completed primary education by 2043. However, in the Education scenario, the length of education improves by about 0.4 years above the Current Path forecast for 2043.

In 2019, men had received about 5.1 years of education, compared with only 3.9 years among women. In the Education scenario, mean years of education reaches 6.6 years for men by 2043, compared with 6 years for women.

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



Eritrea



Source: IFs 7.63 initialising from World Bank EDSTATS

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Education in Eritrea is hindered by quality. Complementary Elementary Education (CEE), a programme supported by UNICEF, has contributed to education for the most disadvantaged students in Eritrea, 'yet there are still not enough desks nor textbooks for every student'.^[4]

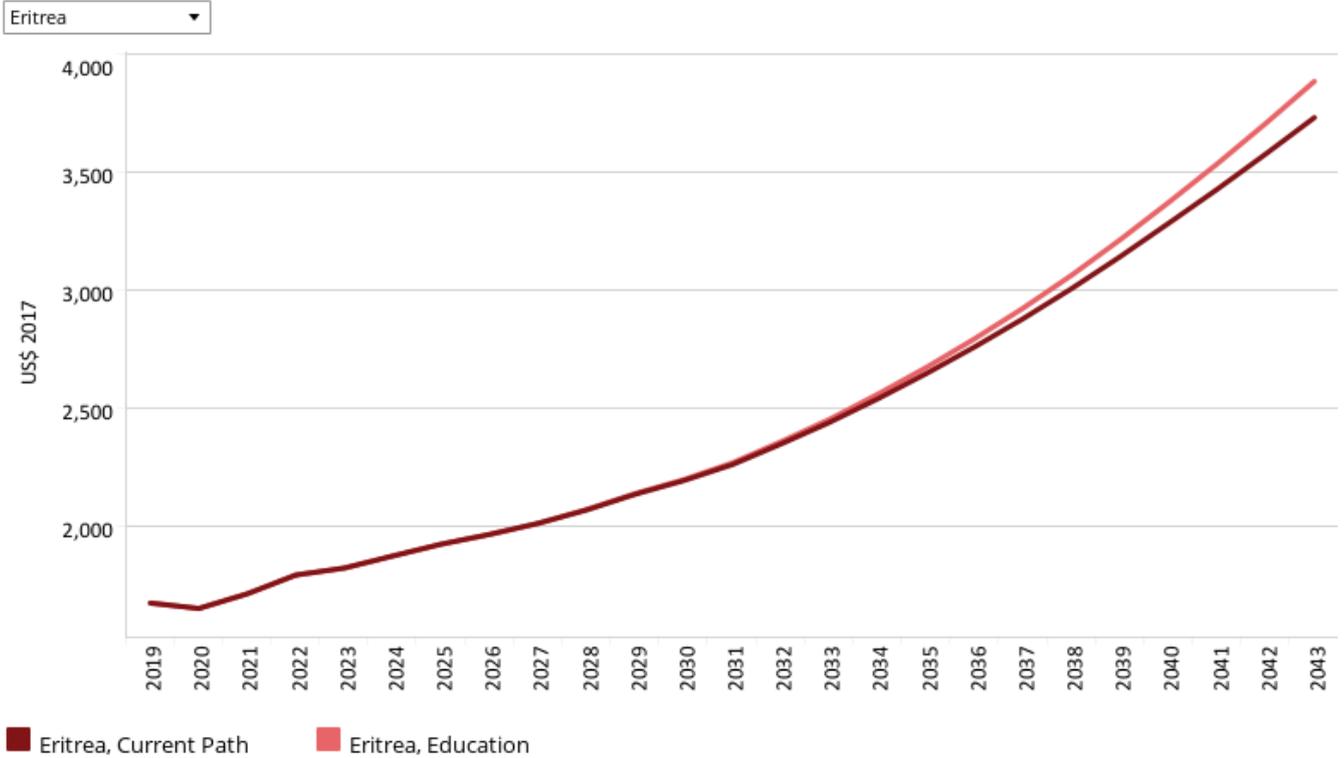
In the Education scenario, the score for the quality of primary education improves from 26.3 in 2019 to 32.6 in 2043, a 17% increase compared with the Current Path forecast of 27.8 by then.

The score for the quality of secondary education goes from 37 in 2019 to 42.6 in 2043 in the Education scenario, an improvement of roughly 20% compared with the Current Path forecast of 35.6.

Quality education is crucial for economic development. It allows a country to increase its current added value and create tomorrow's technological innovations. Thus, authorities in Eritrea should, with the support of development partners, accelerate reforms to improve the quality of education in the country.

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

Purchasing power parity



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

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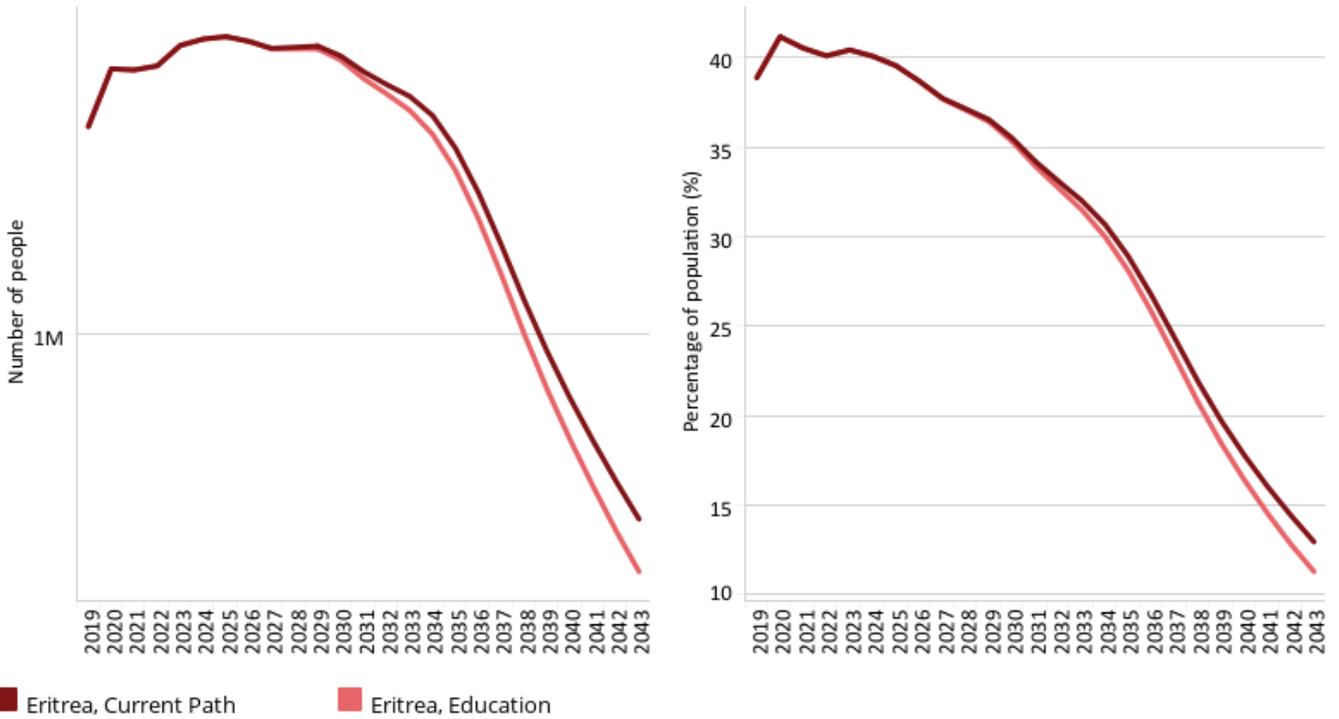
In the Education scenario, GDP per capita will increase by about US\$153 (4.1%) above the Current Path forecast of US\$3 728 for 2043.

Investment in education significantly impacts economic growth, but it takes time to materialise. It will take more than a decade for a child enrolled in primary school today to contribute meaningfully to the economy.

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



Eritrea \$1.90



■ Eritrea, Current Path ■ Eritrea, Education

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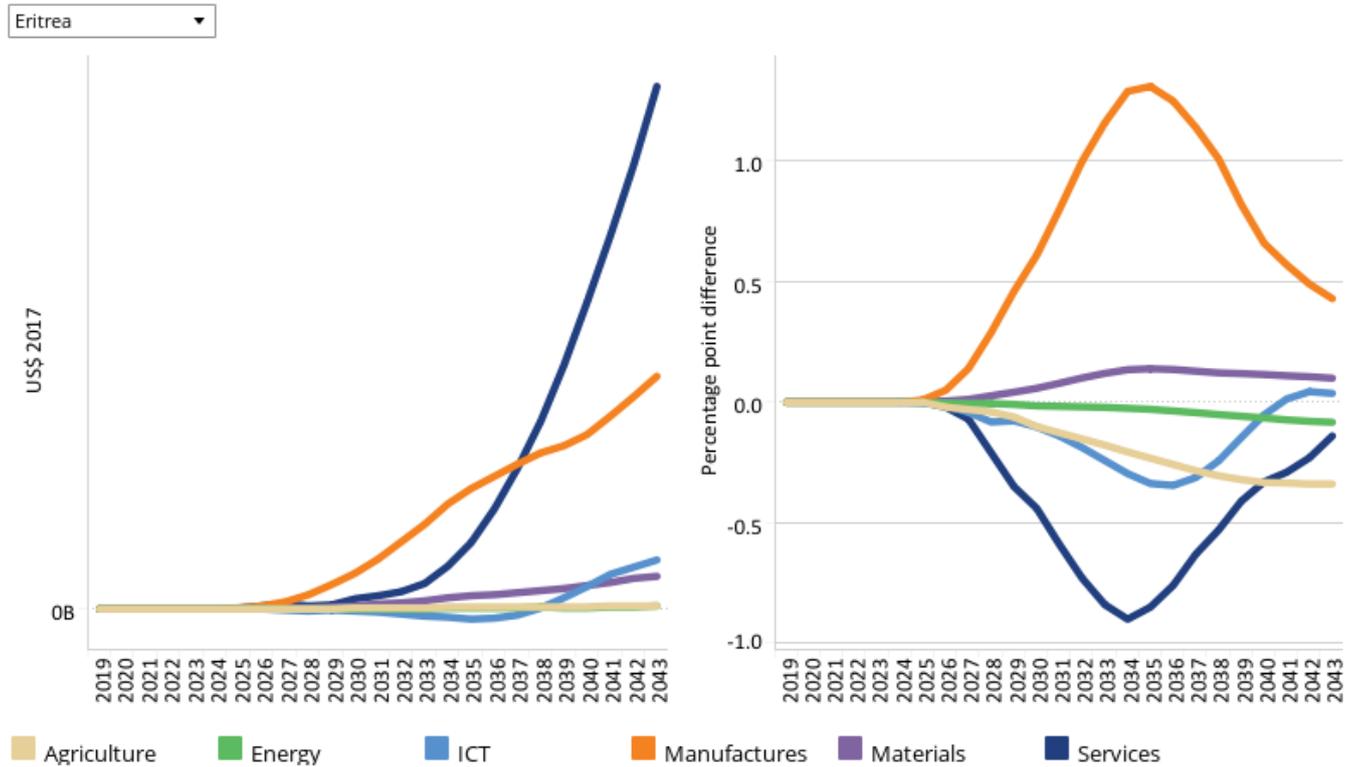
Education is one of the most important tools to reduce poverty as it improves the employment and income prospects of the poor segment of society.

By 2043, Eritrea will record a poverty rate of 11.3% (590 000 people) in the Education scenario, compared with 13% (680 000 people) in the Current Path forecast. This means 90 000 fewer people will be living in poverty in the Education scenario than in the Current Path forecast by 2043.



Manufacturing scenario

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



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.

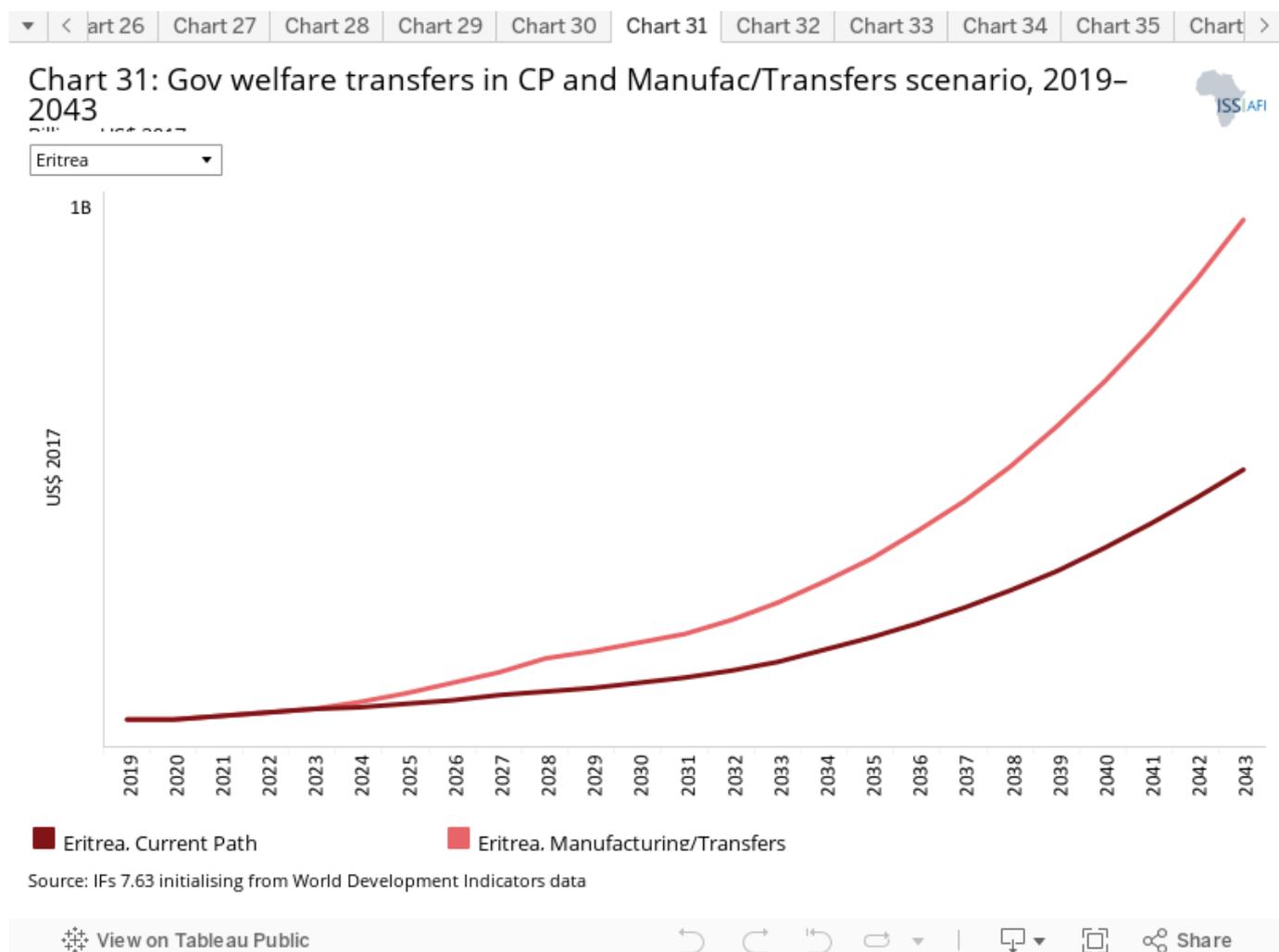
Chart 30 should be read with [Chart 8](#), which presents a stacked area graph on the Contribution to GDP and size, in billion US\$, of the Current Path economy for each of the sectors.

In absolute terms, the service sector's contribution to GDP sees the most significant improvement compared relative to the Current Path forecast by 2043. It is forecast to be US\$600 million larger than the Current Path forecast. The service sector is followed by manufacturing, with its contribution being US\$200 million above the Current Path in 2043.

As a percentage of GDP, the share of manufacturing to GDP is 0.43 percentage points larger in the Manufacturing/Transfers scenario than in the Current Path forecast by 2043. Materials follow, being 0.10 percentage points above the Current Path forecast by then. The share of the agriculture and service sectors declines by 0.34 and 0.14

percentage points, respectively, compared with the Current Path forecast.

Eritrean authorities should make efforts to diversify the economy, focusing on the manufacturing sector, which is vital to creating jobs, improving productivity and ultimately reducing poverty.



Compared with the Current Path forecast, the Manufacturing/Transfers scenario increases welfare transfers to households by 50% by 2043. This represents US\$100 million more than the Current Path's forecast (US\$200 billion). These transfers will be needed to address the initial increase in poverty, which is usually associated with the early stages of industrialisation. Industrialisation is funded by an initial crunch in consumption, thereby increasing poverty in the first few years. However, these efforts stimulate inclusive growth with a greater impact on poverty alleviation in the long term.

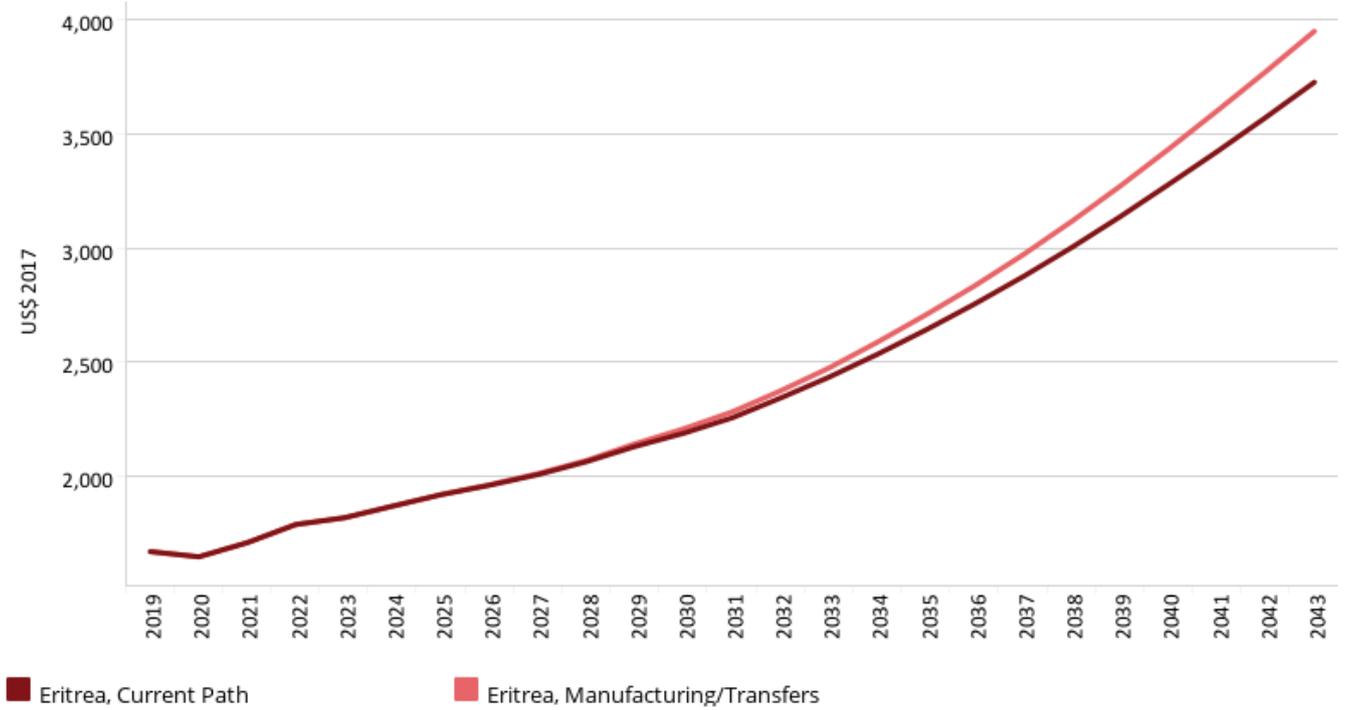
To make the social safety net more effective at reducing poverty, better targeting and efficient approaches are critical.

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

Purchasing power parity



Eritrea



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

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In the Manufacturing/Transfers scenario, GDP per capita is US\$223 higher than the US\$3 728 forecast on the Current Path for 2043, an increase of roughly 6%.

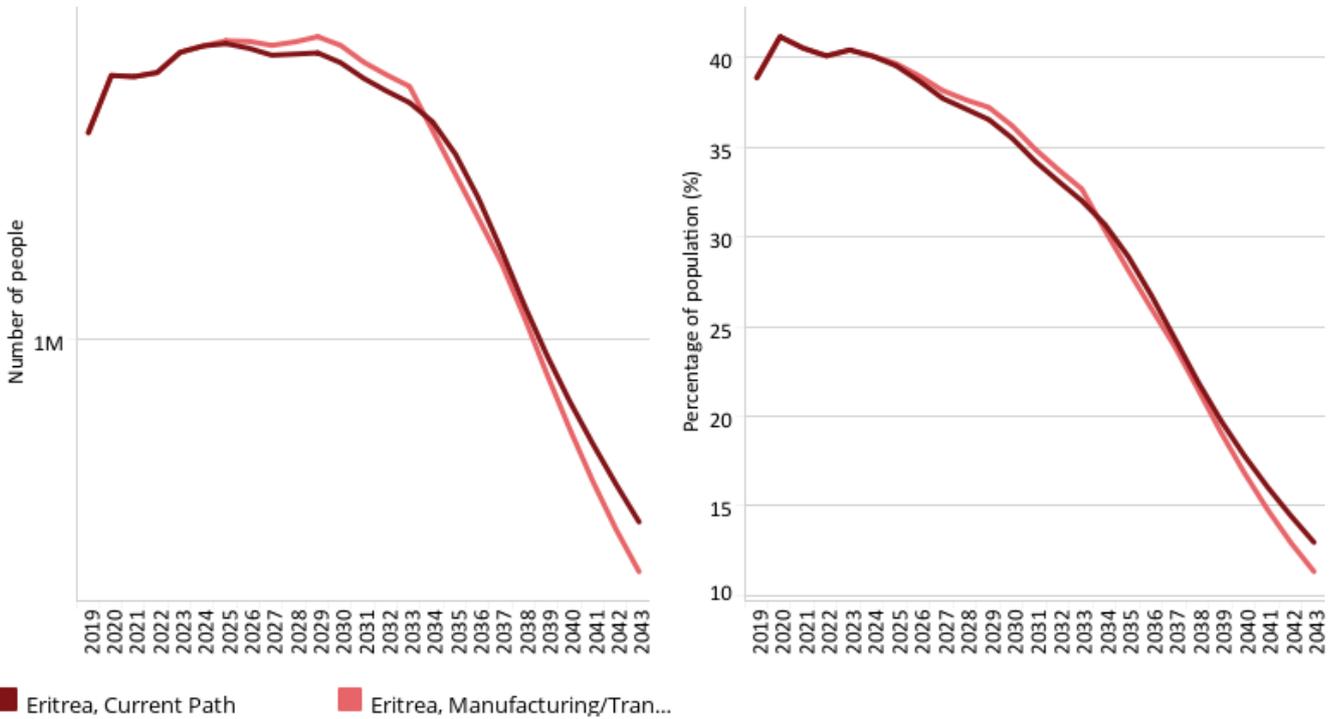
Manufacturing is vital for economic growth owing to its backward and forward linkages with other sectors and its ability to transform the productivity structures across an economy. Thus, a robust manufacturing sector is crucial for sustained growth and significantly improves a population's living standard.

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

Millions of people and % of total population



Eritrea \$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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At the poverty threshold of US\$1.90, 1.36 million people in Eritrea (38.9% of the population) were considered to be extremely poor in 2019. By 2043, the number of poor people will stand at 600 000 (11.3% of the population) in the Manufacturing/Transfers scenario, compared with 680 000 (13% of the population) in the Current Path forecast. The poverty rate in the Manufacturing/Transfers scenario is 13.8 percentage points above the average in the Current Path forecast for African low-income countries by 2043.



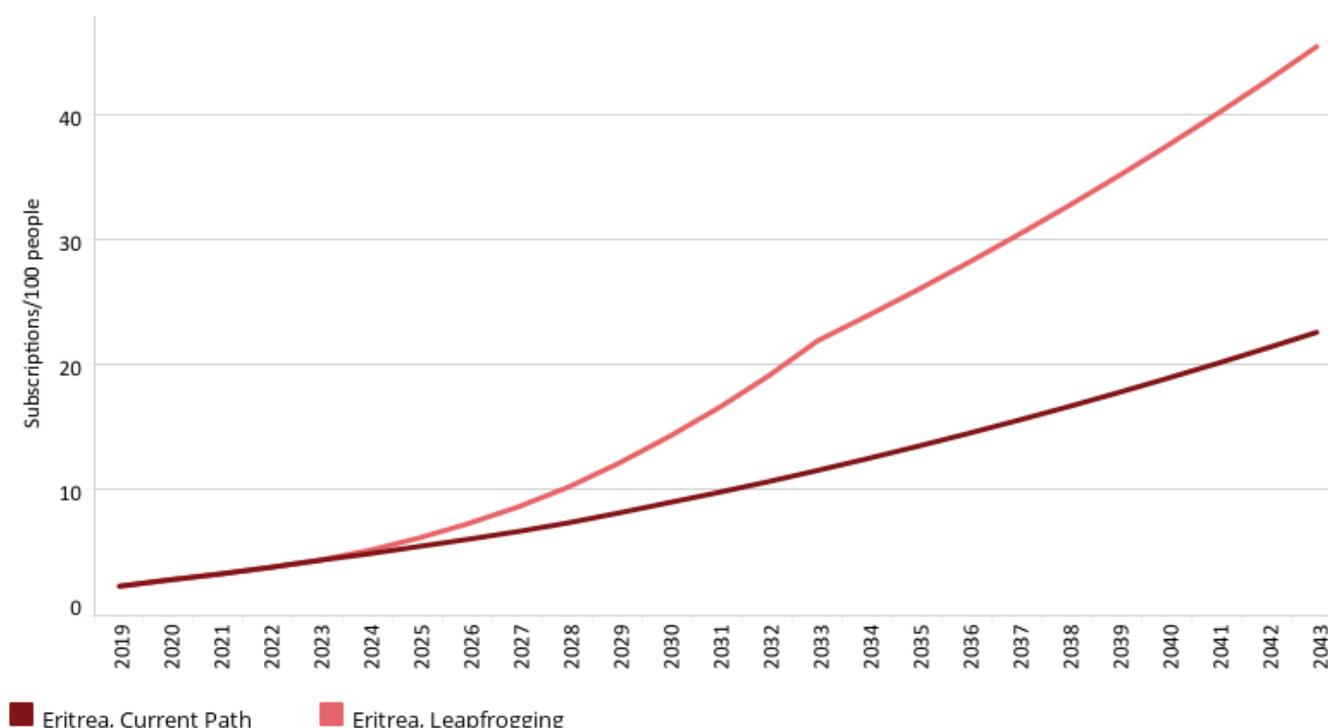
Leapfrogging scenario

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



Eritrea



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.).

Eritrea is one of the few countries in the world that have maintained a state monopoly on all telecommunication, including fixed line and mobile telephony, Internet and broadband services. Consequently, penetration rates have remained low. For example, only about 4.4% of Eritrea's population used the Internet regularly in 2019.

Fixed broadband subscriptions stood at 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 45.4 per 100 people by 2043, twice the Current Path forecast for the same year.

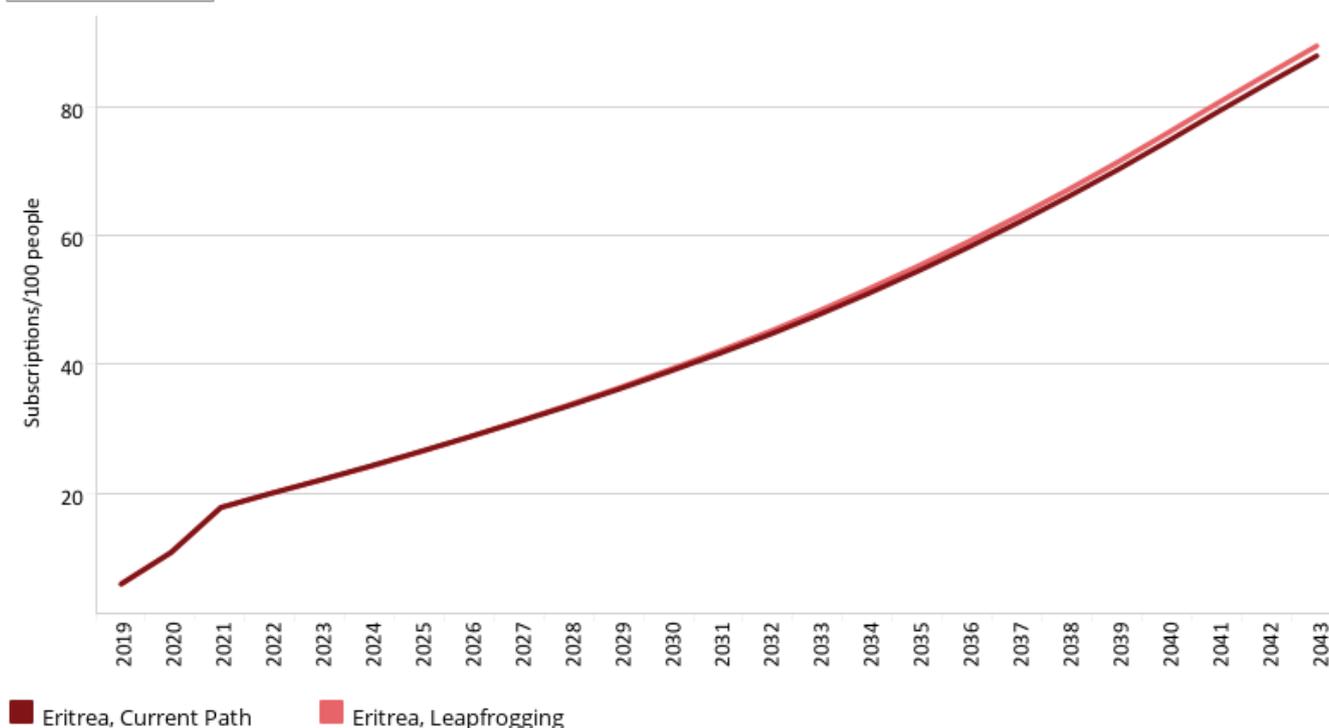
The lack of competition in the ICT sector in Eritrea prevents the market from living up to its potential. Opening the sector to competition and foreign investment would make quality telecommunication services available at affordable prices. It would also allow for a vibrant digital economy by pushing innovations such as mobile money and mobile banking services.

▼ < [art 30](#) [Chart 31](#) [Chart 32](#) [Chart 33](#) [Chart 34](#) **Chart 35** [Chart 36](#) [Chart 37](#) [Chart 38](#) [Chart 39](#) [Chart](#) >

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



Eritrea ▼



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.

Eritrea has the least-developed telecommunications market in Africa. The national telecommunication provider, the Eritrean Telecommunication Services Corporation (EriTel), continues to roll out a 3G network, which provides at least basic Internet access to most Eritreans.

Mobile broadband subscriptions stood at 5.8 per 100 people in Eritrea in 2019, significantly below the average of 22.9 for low-income Africa.

In the Leapfrogging scenario, mobile broadband subscriptions increase to 89.5 per 100 people by 2043, slightly above the Current Path forecast of 87.9.

Considerable investment in telecommunication infrastructure is still required to improve the quality of services in Eritrea. The government has embarked on a work programme to this end, specifically aimed at extending services to remote areas, improving the quality of services and ensuring that more infrastructure is supported by solar power to compensate

for the poor state of the electricity network.[5]

Additional foreign investment in telecommunication infrastructure and the introduction of more competition would help transform what remains a virtually untapped market.

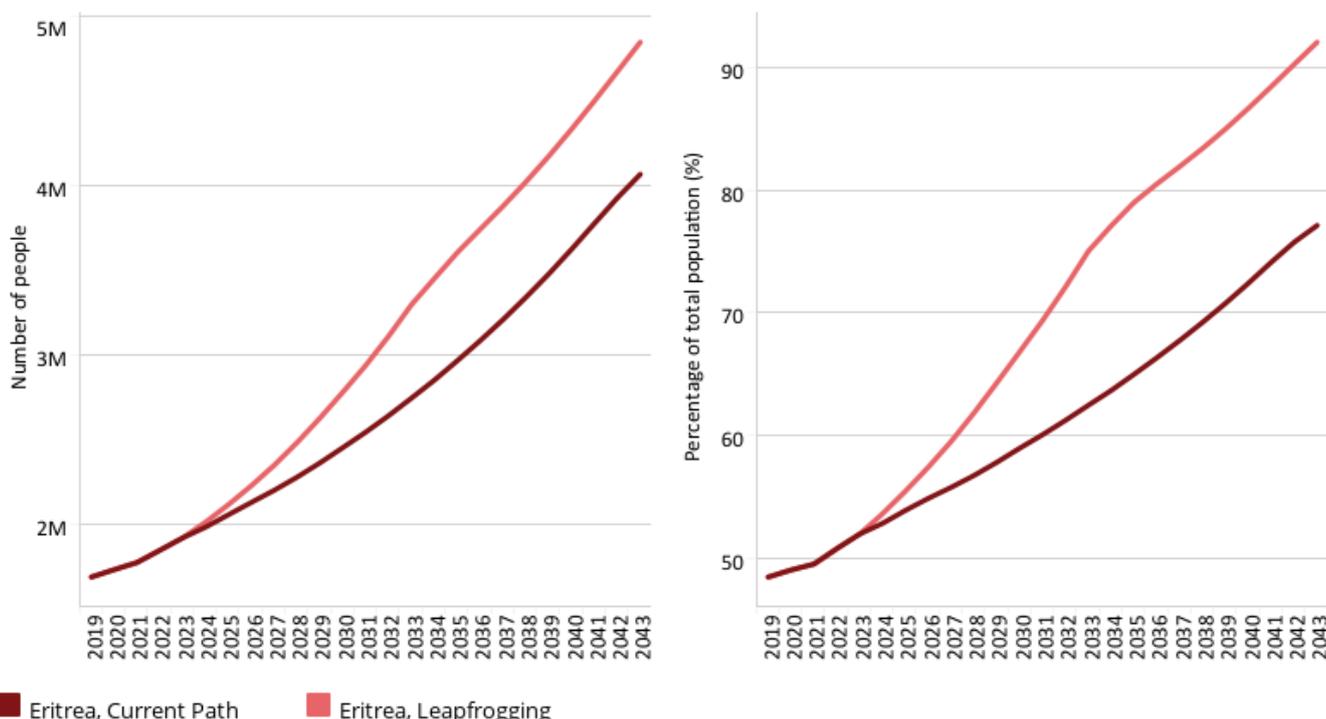
▼ < art 31 Chart 32 Chart 33 Chart 34 Chart 35 Chart 36 Chart 37 Chart 38 Chart 39 Chart 40 Chart >

Chart 36: Electricity access in CP and Leapfrogging scenario, 2019–2043

Millions of people and % of population



Eritrea Total



Source: IFs 7.63 initialising from World Development Indicators data

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In 2019, about 1.7 million Eritreans had access to electricity, representing 48.5% of the total population. This was above the average of 32.2% for low-income countries in Africa.

However, electricity access is skewed towards urban areas. In 2019, 74.4% of the urban population had access to electricity, compared with only 33.4% of people in rural areas.

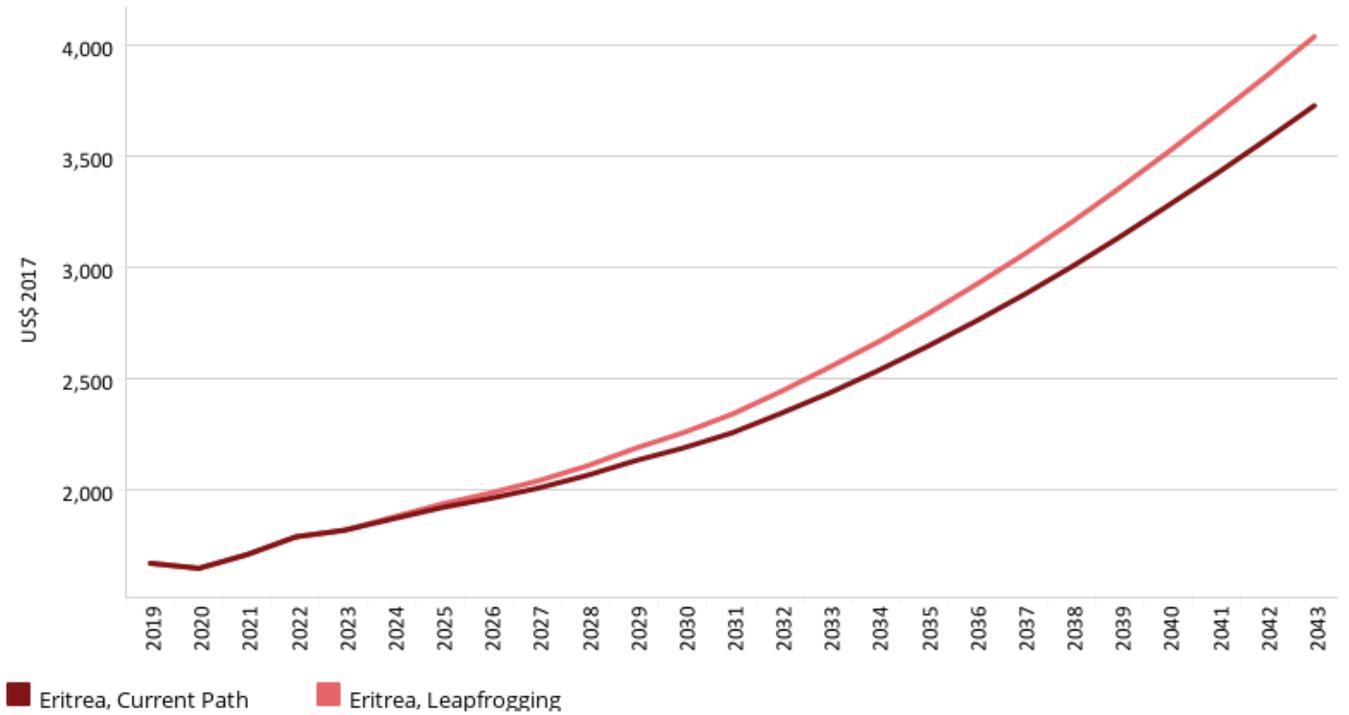
If the Leapfrogging scenario materialises, 92.1% of Eritreans (4.8 million people) will have access to electricity by 2043, above the projected average of 60.5% for low-income African countries by then.

By 2043, all people in urban areas will have access to electricity in the Leapfrogging scenario, compared with 98.4% in the Current Path forecast. In comparison, 84.8% of people in rural areas will have access to electricity by 2043 in the Leapfrogging scenario, whereas only 57.7% of people in the Current Path.

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



Eritrea



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

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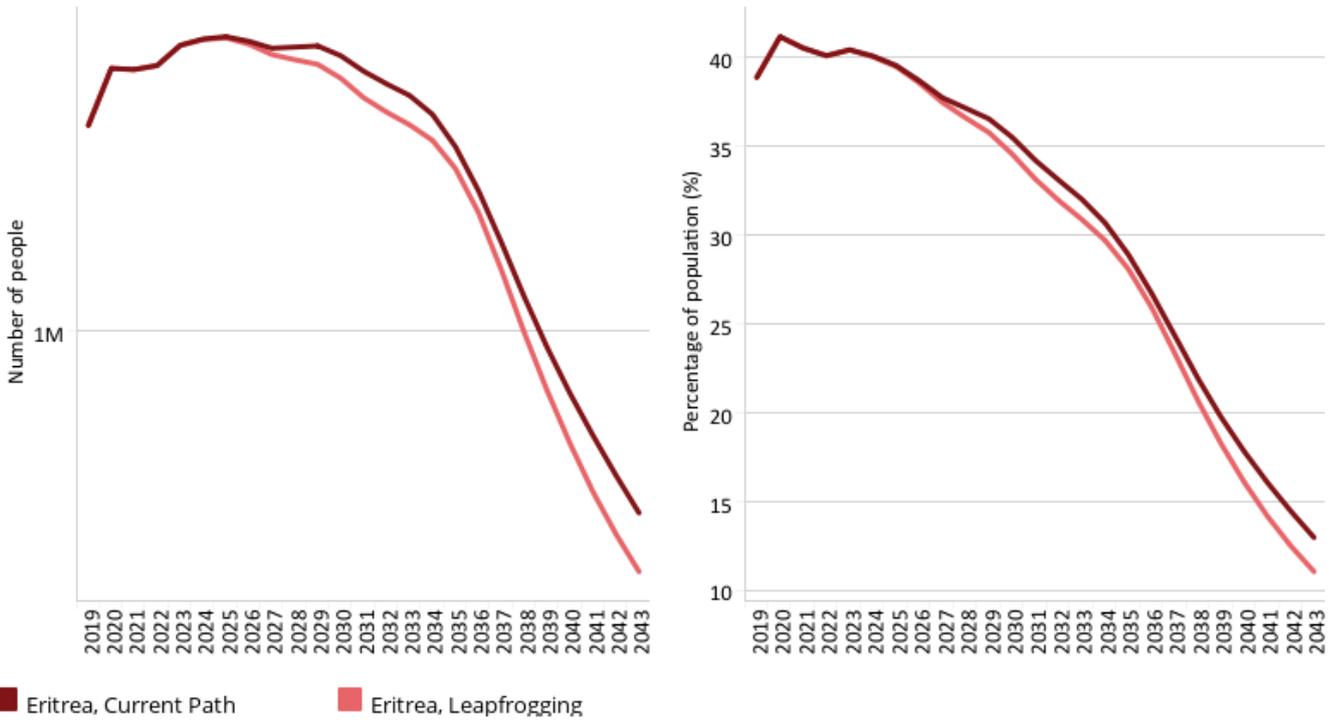
Widespread access to high-speed Internet and electricity can improve a country's socio-economic outcomes. For example, broadband Internet can reduce transaction costs and optimise supply chains, positively affecting productivity and economic growth.

By 2033, GDP per capita will be at US\$2 552 in the Leapfrogging scenario, compared with US\$2 436 in the Current Path forecast, a difference of US\$116. In 2043, this difference will grow to US\$310. The expected GDP per capita of US\$4 038 by 2043 in this scenario will be US\$248 above the projected average for low-income countries in Africa in the same year.

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



Eritrea \$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, 580 000 people are expected to be living in poverty by 2043, representing 11% of the population. This is 100 000 fewer people than in the Current Path forecast. In the Leapfrogging scenario, the poverty rate is 14 percentage points below the average for Africa's low-income countries by 2043.



Free Trade scenario

▼ < | art 34 | Chart 35 | Chart 36 | Chart 37 | Chart 38 | Chart 39 | Chart 40 | Chart 41 | Chart 42 | Chart 43 | Chart >

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

% of GDP



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.

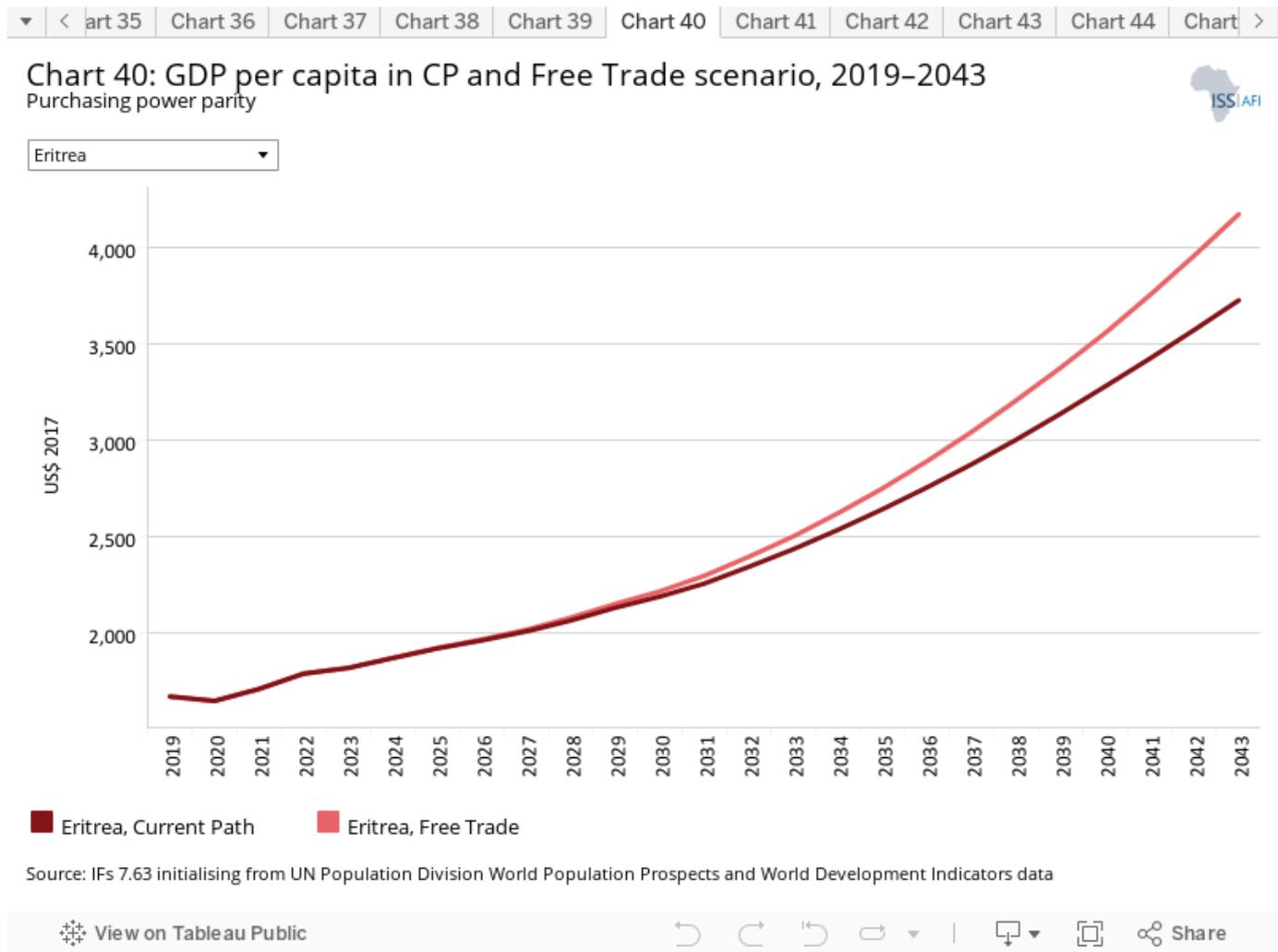
The intervention is explained [here](#) in the thematic part of the website.

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.

Eritrea's export basket is made up of livestock, coffee, cotton, leather, textile products and some minerals (copper and gold). The country imports virtually all of its capital goods, oil/petroleum and food products. Eritrea's main trading partners are China, the Republic of Korea, India, the United Arab Emirates and Myanmar. The peace deal signed with Ethiopia in July 2018 will probably improve Eritrea's trade relations with Ethiopia. However, the government maintains strict control on foreign exchange reserves, which severely limits the freedom of trade.

As for many African countries, Eritrea's trade balance is structurally in deficit. In 2019, the trade deficit amounted to nearly 7.4% of GDP. However, in both the Free Trade scenario and the Current Path forecast, Eritrea records a trade surplus from 2026. The surplus peaks in 2032, at 15.9% of GDP in the Free Trade scenario and at 6% in the Current Path forecast. By

2043, a surplus of 0.09% of GDP is expected in the Free Trade scenario, whereas a deficit of 0.29% is forecast on the Current Path.



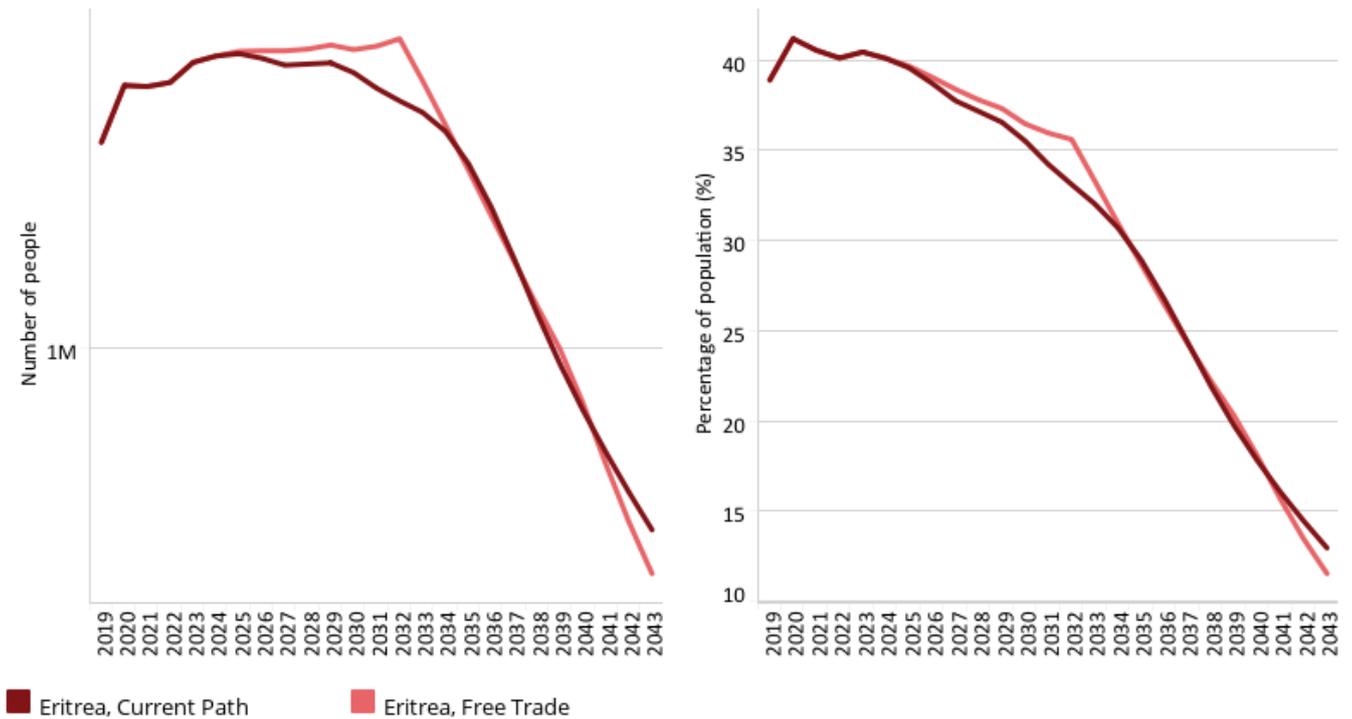
Generally, trade liberalisation improves productivity through competition and technology diffusion, stimulating growth and raising income levels.

In the Current Path forecast, GDP per capita increases from US\$1 671 in 2019 to US\$3 728 in 2043. In contrast it will be US\$4 175 in the Free Trade scenario, an increase of US\$447 above the Current Path forecast. This shows that the full implementation of the AfCFTA will enhance economic growth in Eritrea. However, Eritrea, which has a largely closed economy, is the only country that has not yet signed the AfCFTA.

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



Eritrea \$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 owing to the redistributive effects of trade. Most African countries export primary commodities and low-tech manufacturing products, and therefore a continental free trade agreement 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 goods and services (with lower relative costs), poverty rates will decline.

Between 2025 and 2034, the poverty rate (as measured at the US\$1.90 threshold) in the Free Trade scenario is above the Current Path forecast. However, between 2040 and 2043, the poverty rate in the Free Trade scenario drops below that of the Current Path forecast, such that it will be at 11.5% in the Free Trade scenario by 2043, compared with 13% in the Current Path forecast in 2043. This is equivalent to 70 000 fewer poor people than on the Current Path.

The full implementation of the AfCFTA will improve growth and reduce poverty in Eritrea. However, it will increase the poverty rate in the short- to medium term because of creative destruction, where inefficient firms are pushed out of the market owing to intense competition. This will lead to job losses and poverty unless the government responds with a social safety net. However, in the long term, as efficient firms grow along with trade opportunities, both unemployment and poverty decline.

In 2043, the projected poverty rate in the Free Trade scenario (11.5%) is far below the average of 25.1% in the Current Path forecast for low-income Africa.



Financial Flows scenario

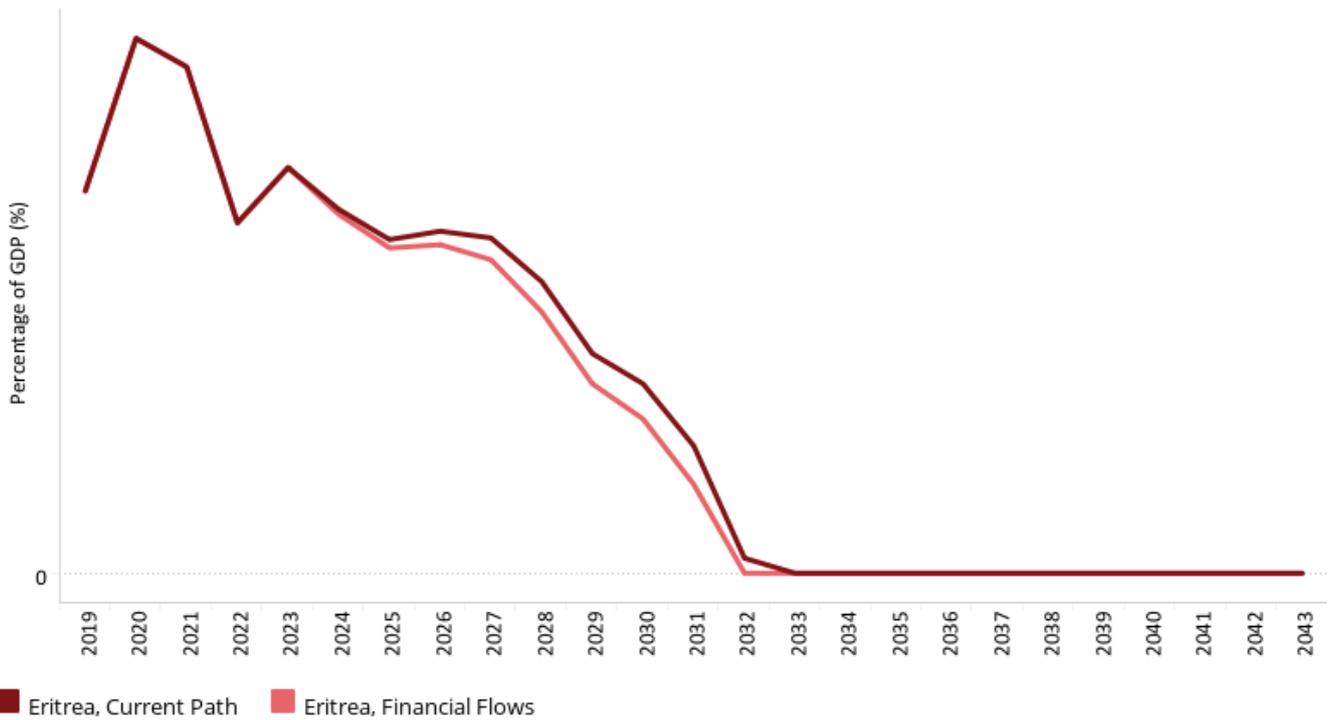
Chart 37 Chart 38 Chart 39 Chart 40 Chart 41 Chart 42 Chart 43 Chart 44 Chart 45 Chart 46 Chart >

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

% of GDP



Eritrea



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.

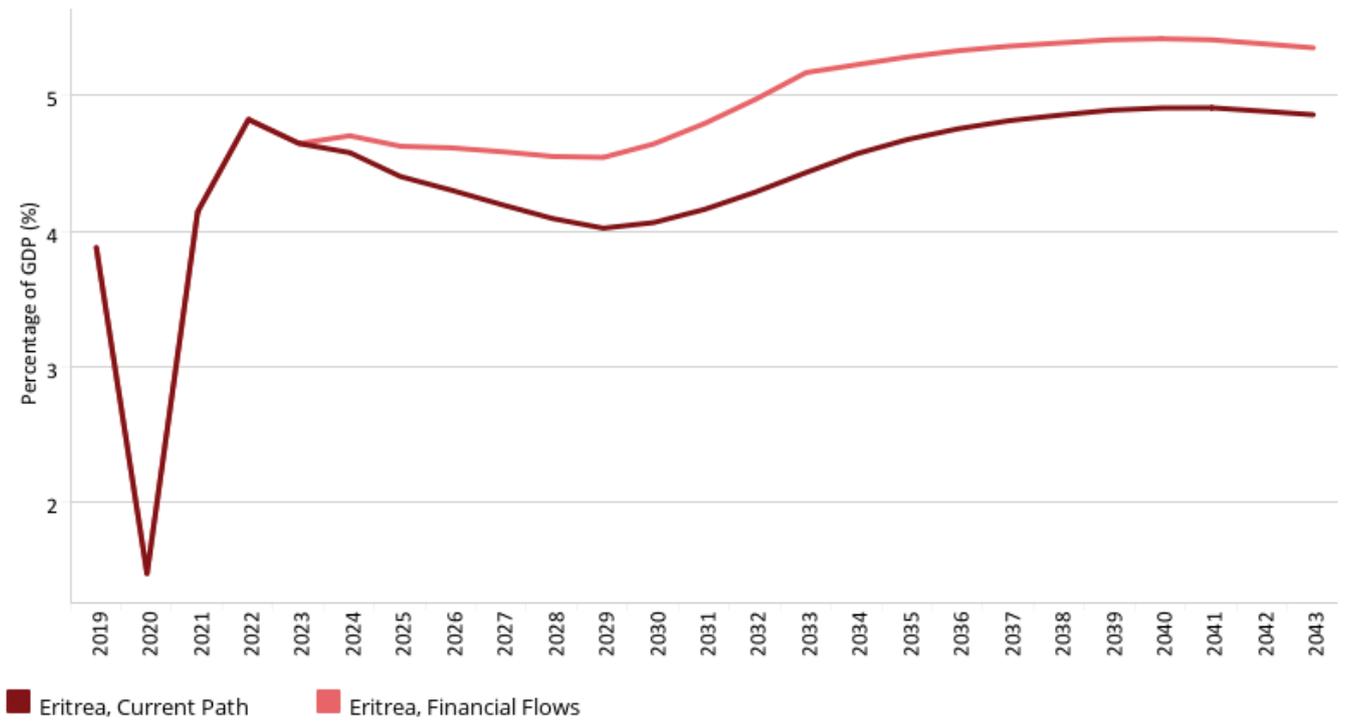
The government of Eritrea's relations with aid-dispensing nations and international institutions have often been complex owing to the authoritarian practices of President Isaias Afwerki. The country has consistently experienced sanctions imposed by the UN, European Union and the US, which significantly limits foreign aid flows to the country.

In 2019, foreign aid flows to Eritrea amounted to only 0.23% of the country's GDP, significantly below the average for low-income Africa (8.5% of GDP). Foreign aid flows to Eritrea are expected to decline over the forecast period and in the Financial Flows scenario will be below the Current Path forecast between 2024 and 2033. After that, aid flows in both the Financial Flows scenario and the Current Path will remain at almost 0% of GDP until 2043.

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



Eritrea



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

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The poor business climate in the country deters foreign investment flows into Eritrea. In the World Bank’s 2020 Doing Business report, Eritrea ranked 189th out of 190 countries, ahead only of Somalia.

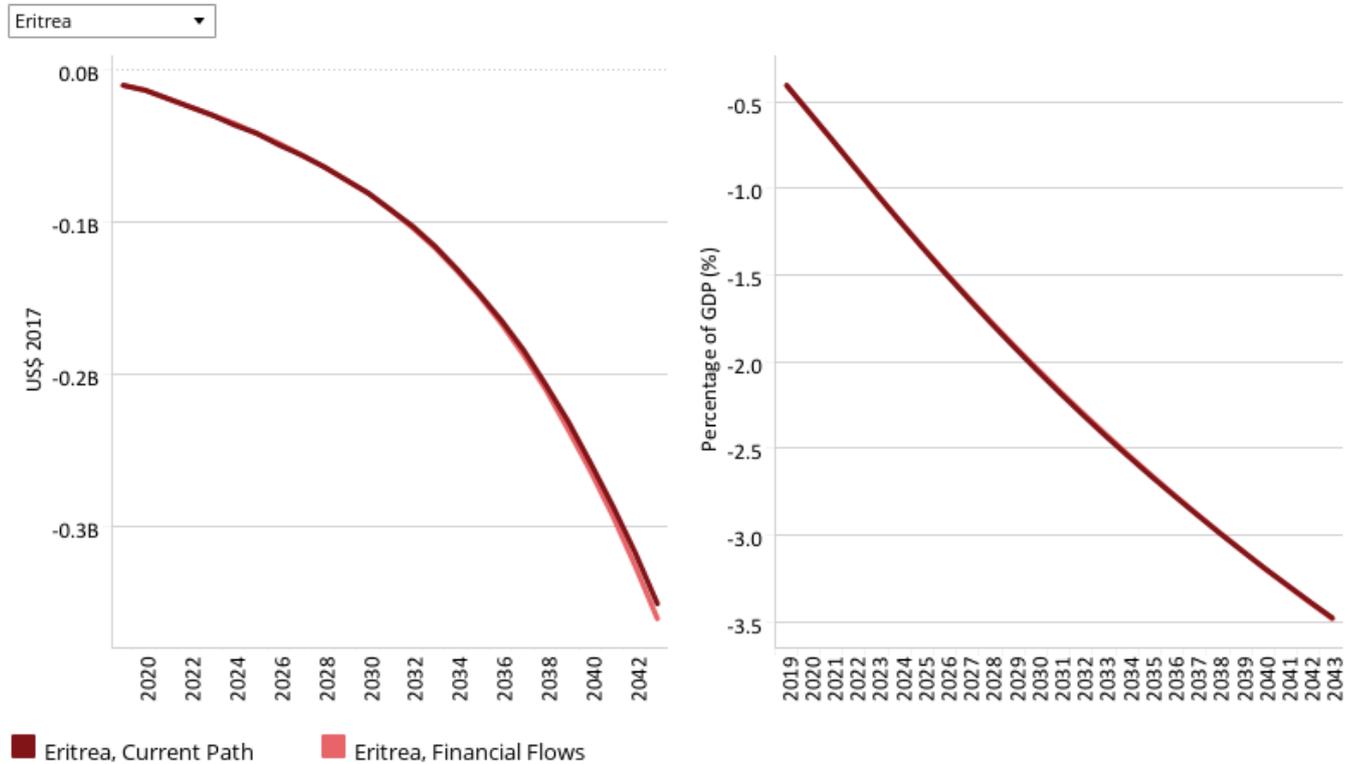
FDI flows to Eritrea amounted to 3.8% of GDP in 2019, dropping to 1.5% in 2020 because of the COVID-19 pandemic and its associated economic crisis. This is below the average of 4.3% for Africa’s low-income countries.

In the Financial Flows scenario, FDI inflows will represent about 5.3% of GDP by 2043, compared with 4.8% on the Current Path.

FDI can act as a catalyst for economic growth and development as it brings much-needed capital and technology to recipient countries. The authorities in Eritrea should make the necessary reforms to attract more FDI, especially target at manufacturing.

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 forecast in IFs put net remittances from Eritrea to the rest of the world at 0.4% of GDP in 2019. In the Financial Flows scenario, the total net remittances to the rest of the world will be US\$400 million (3.8% of GDP) by 2043, on par with the Current Path forecast.

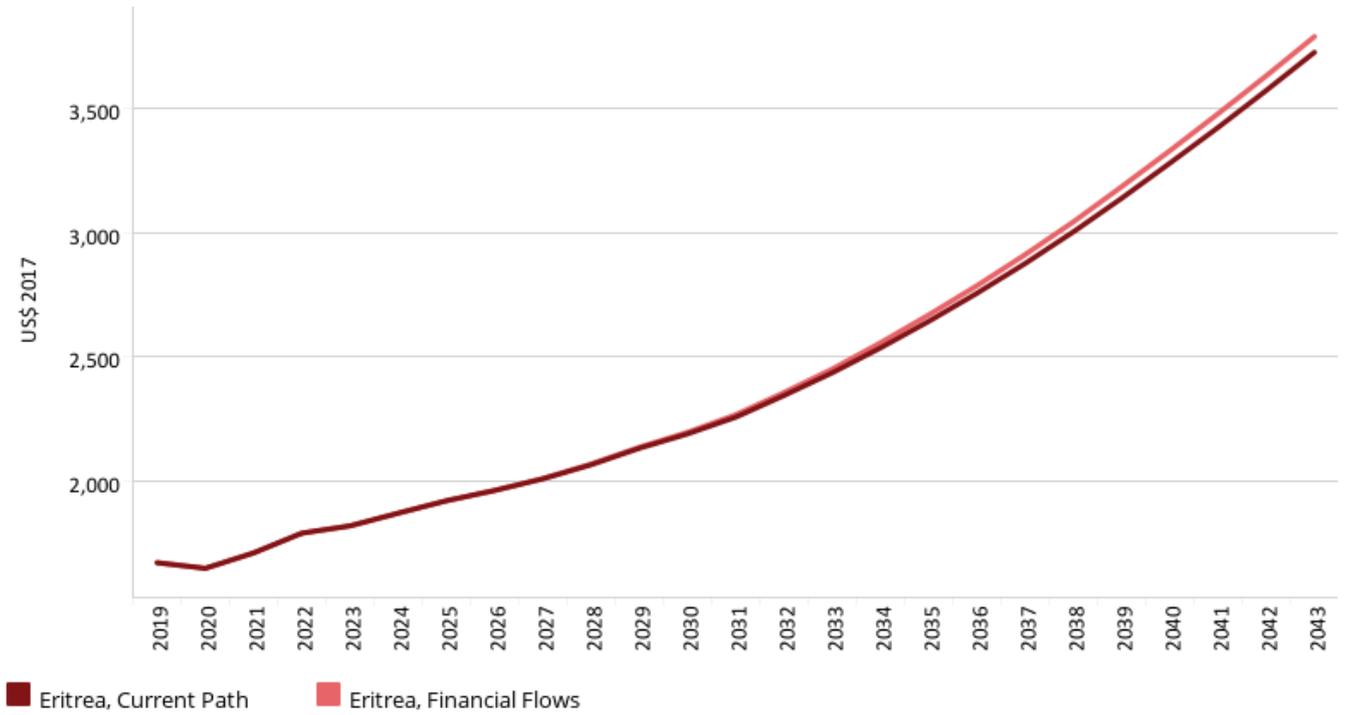
However, as there is no historical data regarding remittance inflows to Eritrea, the IFs model initialises the data from 2015. According to the forecast, Eritrea will be a net supplier of remittances. This is not realistic. Since independence, emigration from Eritrea has continued owing to conflict and a range of socio-political and economic factors. As Eritrean migrants retain strong links with their country and communities of origin,^[6] remittances make up a significant portion of the country's GDP and are an important source of foreign exchange. In 2016, the African Development Bank (AfDB) reported that Eritrean remittances were rising. Although accurate and detailed recent or current national figures are unavailable, it is unlikely that overall trends for remittances in Eritrea have changed significantly. The IFs platform's forecast will improve over time as data becomes available.

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

Purchasing power parity



Eritrea



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

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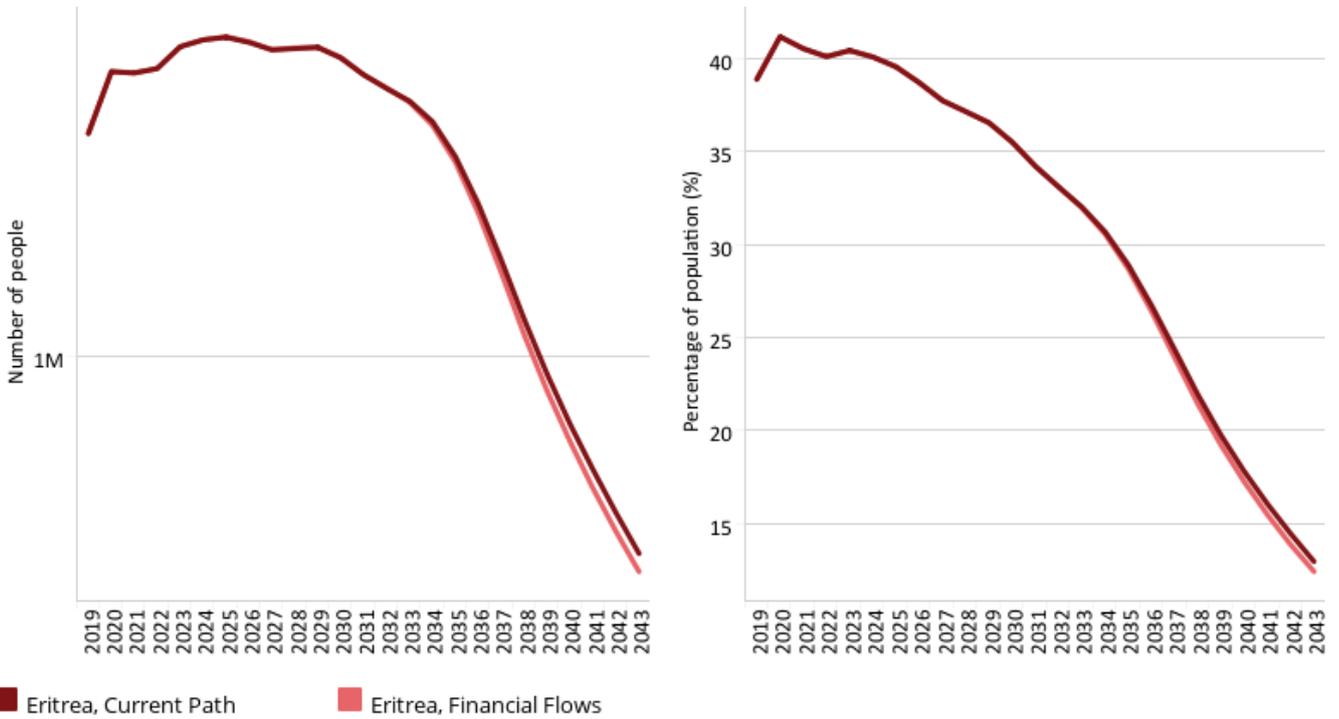
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In the Financial Flows scenario, GDP per capita increases from US\$1 671 in 2019 to US\$3 791 in 2043, which is US\$63 higher than on the Current Path. Overall, the Financial Flows scenario has a marginal impact on GDP per capita in Eritrea. FDI can boost growth and development through capital accumulation and technology transfer but has not yet reached the level that would make it a game-changer in the country.

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



Eritrea \$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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The Financial Flows scenario reduces the number of extremely poor people in Eritrea by only 30 000 by 2043 relative to the Current Path forecast (as measured at the US\$1.90 threshold). Whereas 38.9% of Eritreans lived in extreme poverty in 2019, the rate is expected to be at 12.4% in the Financial Flows scenario by 2043, compared with 13% in the Current Path forecast.



Infrastructure scenario

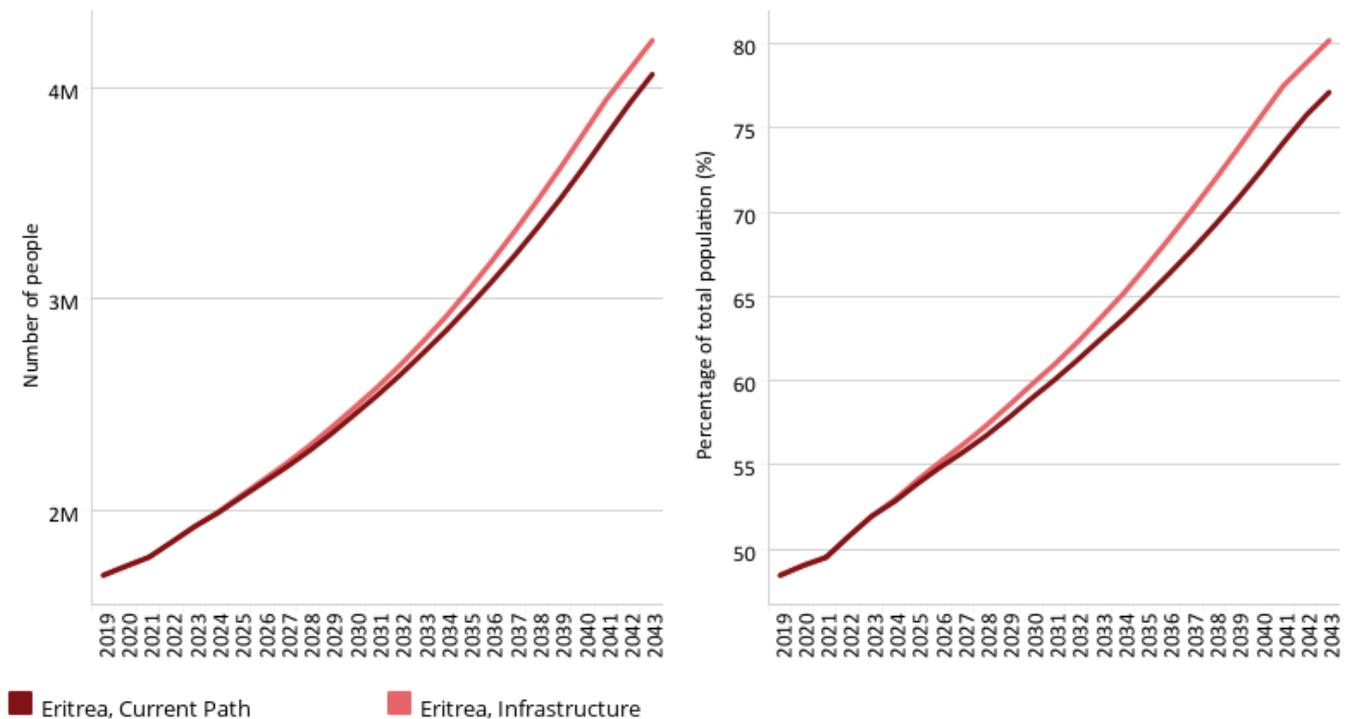
Chart 42 Chart 43 Chart 44 Chart 45 Chart 46 Chart 47 Chart 48 Chart 49 Chart 50 Chart 51 Chart

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

Millions of people and % of population



Eritrea 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 that supporting health, sanitation and ICT.

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

Infrastructure, whether in transportation, telecommunications, electricity or water and sanitation, is lacking in Eritrea. In 2019, only about 1.7 million people (48.5 % of the population) had access to electricity. The Infrastructure scenario increases the rate of electricity access to 80.2% by 2043, translating to 4.2 million people. This is above the projected 4 million people (77.1% of the population) in the Current Path forecast.

In the Infrastructure scenario, it is projected that 100% of the urban population in Eritrea will have access to electricity by

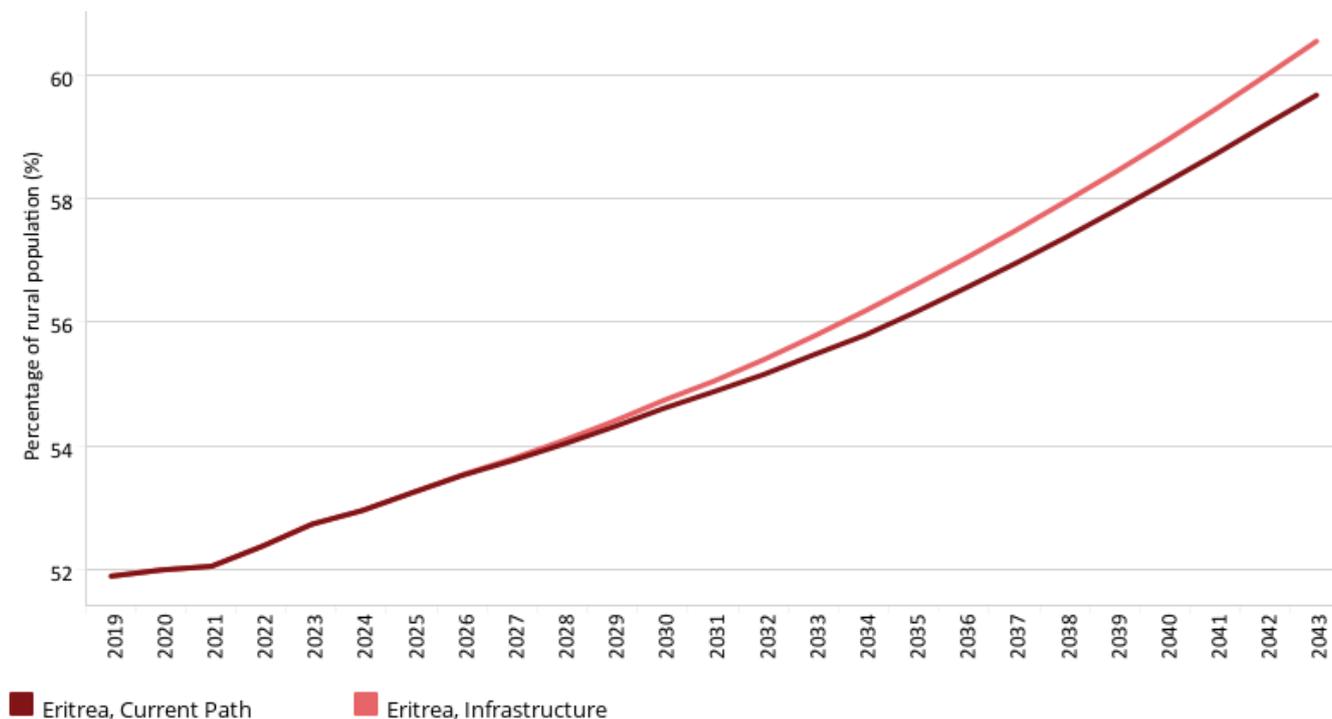
2043, compared with 98.2% in the Current Path forecast. However, only about 60% of the rural population (62.1% in the Infrastructure scenario; 57.7% in the Current Path forecast) will have access to electricity by 2043. This points to a considerable disparity in access to electricity between the urban and rural population in Eritrea.

Chart 48: Rural road access in CP and Infrastructure scenario, 2019–2043

% of rural population within 2 km of an all-weather road



Eritrea



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

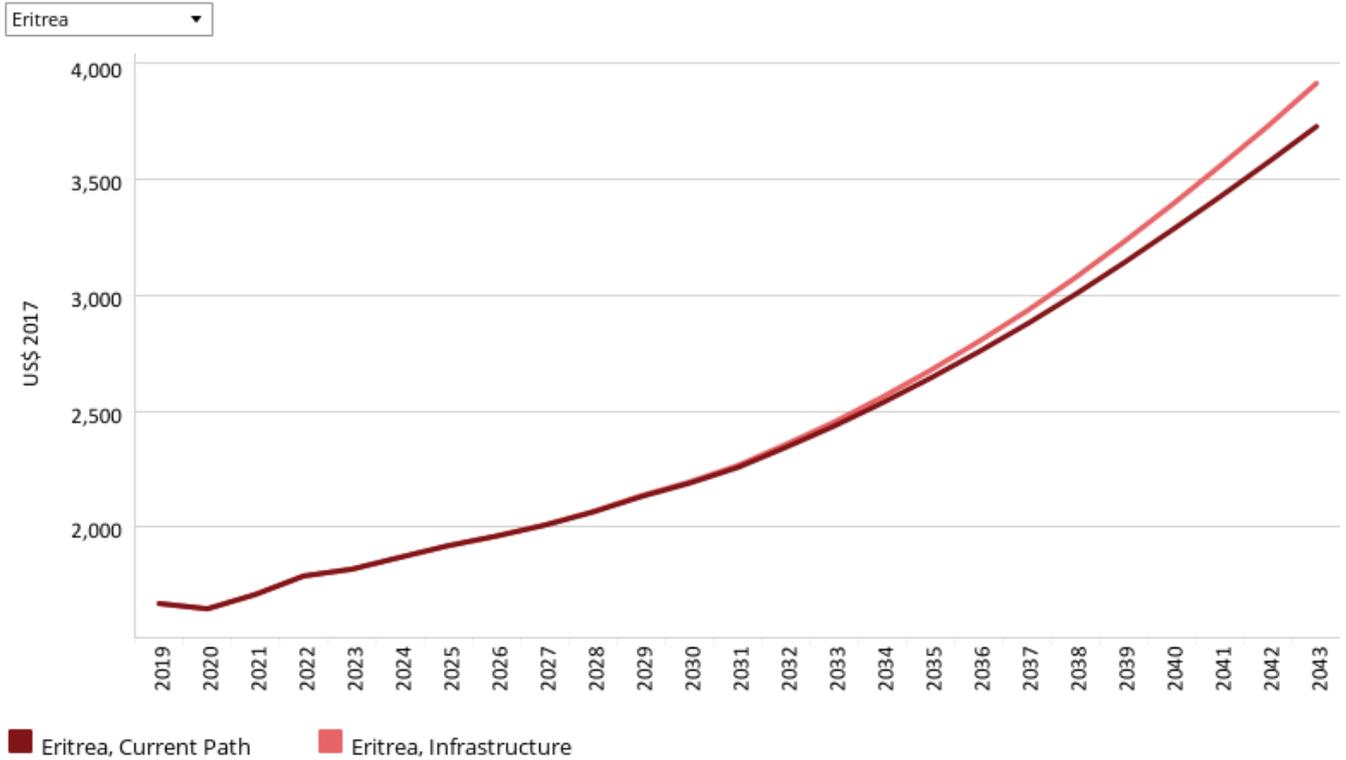
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Indicator 9.1.1 in the Sustainable Development Goals refers to the proportion of the rural population who live within 2 km of an all-season road and is captured in the Rural Access Index.

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

By 2019, 51.9% of the rural population in Eritrea resided within 2 km of an all-weather road, above the average of 43% for low-income countries in Africa. In the Infrastructure scenario, it is projected to increase to 60.5% by 2043, slightly above the Current Path forecast of 59.7% for that year.

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



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

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Quality infrastructure enables business and industry development and increases efficiency in the delivery of social services. Critical basic infrastructure such as roads and electricity plays a vital role in achieving sustainable and inclusive economic growth. Infrastructure shortage impedes higher productivity and growth.

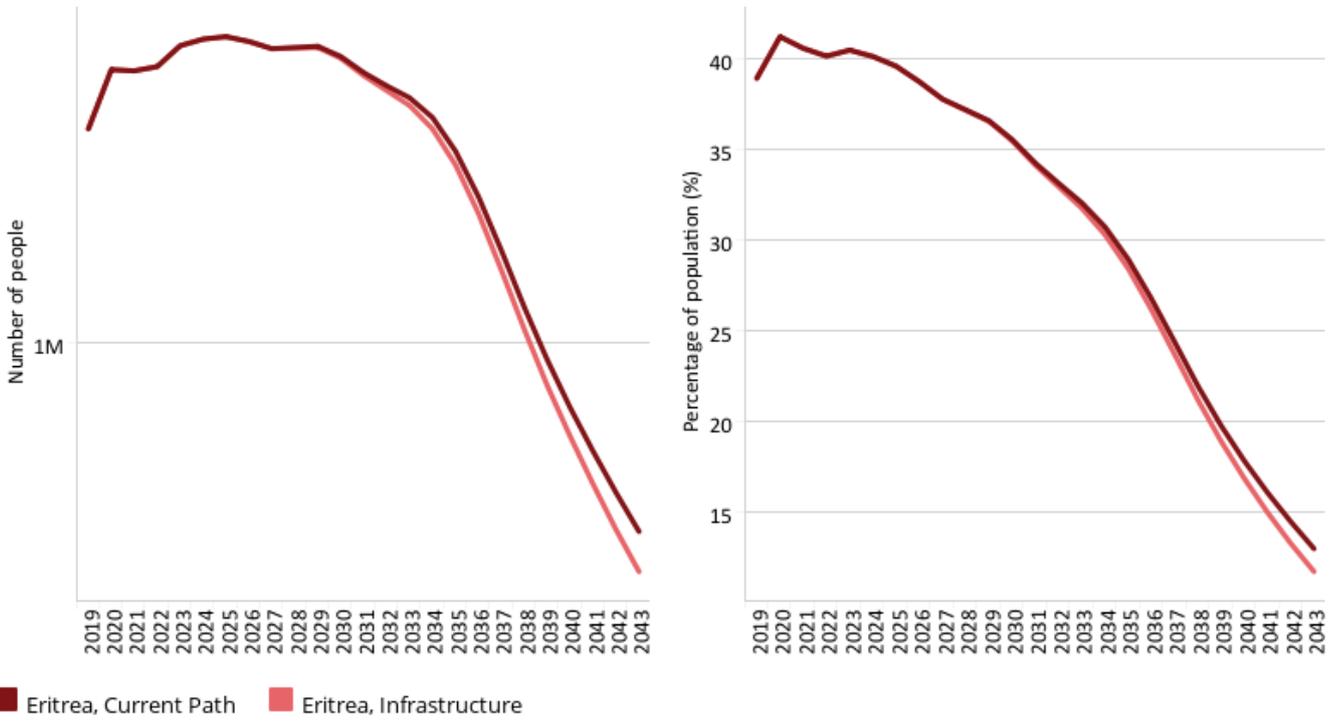
In the Infrastructure scenario, Eritrea's GDP per capita is forecast to rise to US\$3 914 by 2043. This is US\$186 more than in the Current Path forecast and above the Current Path forecast of US\$3 790 for low-income African countries.

Chart 50: Poverty in CP and Infrastructure scenario, 2019–2043

Millions of people and % of total population



Eritrea \$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 infrastructure scenario, the extreme poverty rate is projected to decline from 38.9% in 2019 to 11.7% in 2043. This is equivalent to 620 000 poor people in 2043, compared with 680 000 in the Current Path forecast. The Infrastructure scenario's poverty rate of 11.7% by 2043 is far below the Current Path forecast of 25.1% for Africa's low-income countries.

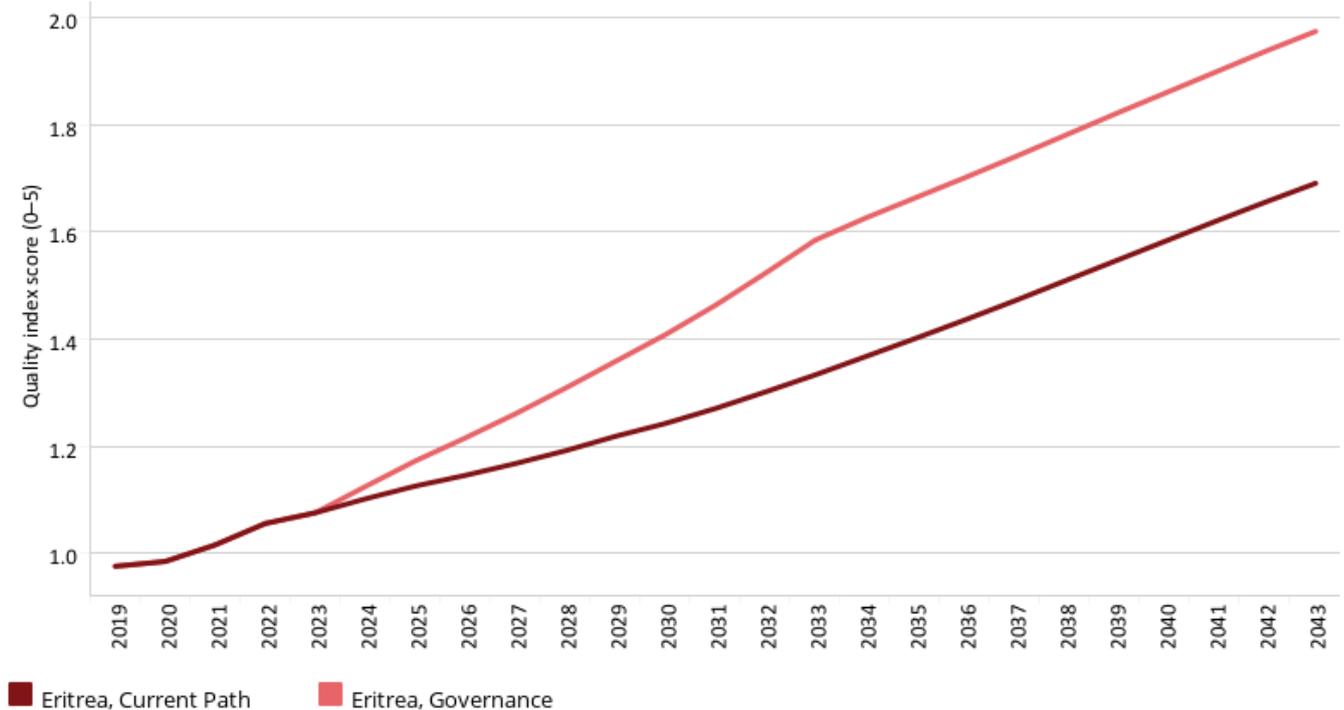


Chart 51: Gov effectiveness in CP and Governance scenario, 2019–2043

World Bank quality index score for government effectiveness



Eritrea



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.

Weak government effectiveness and the absence of strong institutional and legal mechanisms to ensure accountability hamper economic progress in Eritrea.

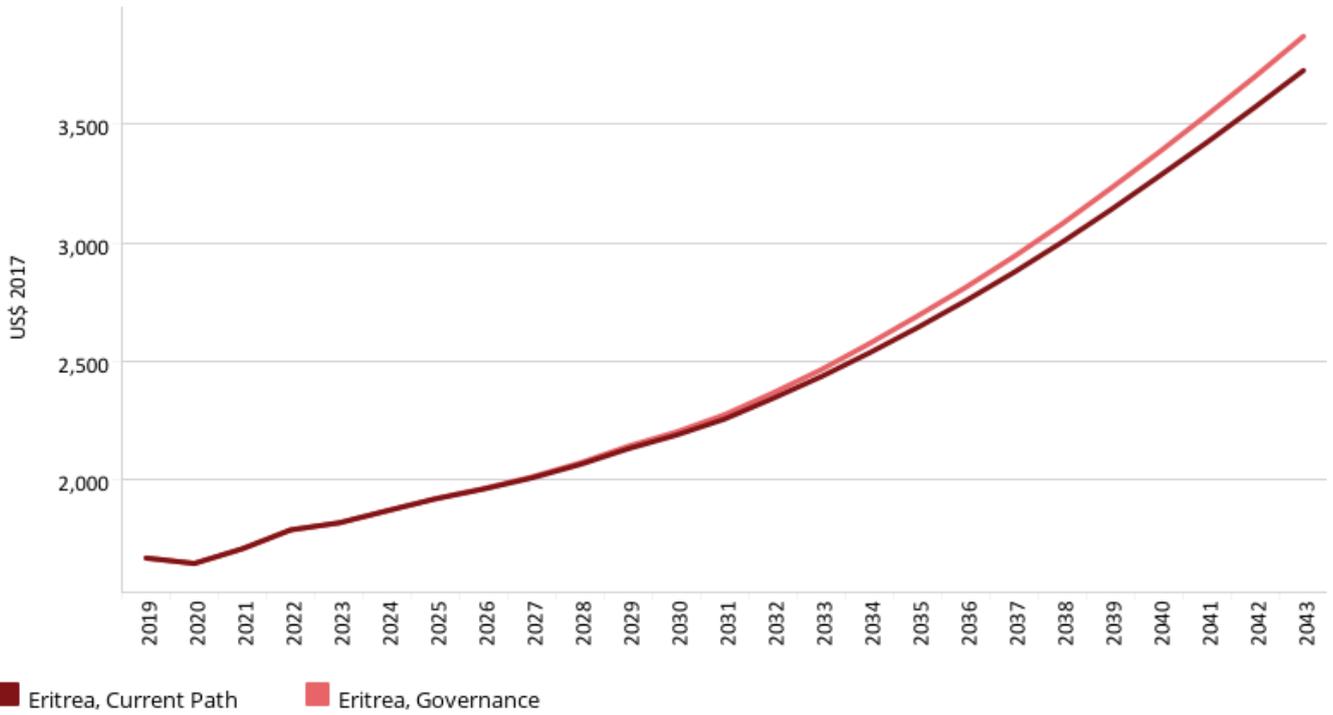
Eritrea's score on the government effectiveness index was 0.98 (out of a maximum of 5) in 2019. It is projected to increase in both the Current Path forecast and the Governance scenario by 2043, to 1.69 and 1.98, respectively. The score in the Governance scenario is 0.29 points higher than in the Current Path forecast, and it will also be slightly above the Current Path forecast of 1.9 for Africa's low-income countries.

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

Purchasing power parity



Eritrea



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

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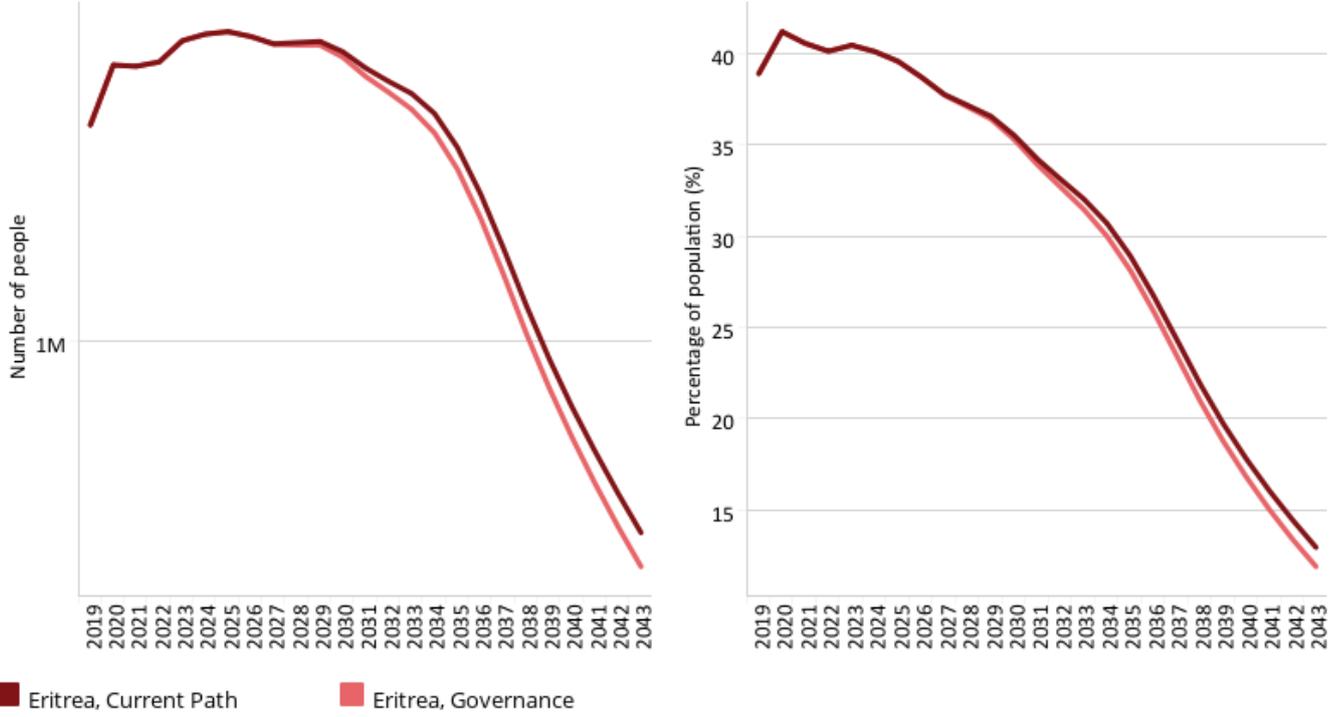
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Critical determinants of growth depend on governance and the institutional settings in a country. In the Governance scenario, Eritrea's GDP per capita is projected to increase to US\$3 872 by 2043, which is US\$144 more than in the Current Path forecast for the same year. It will also be higher than the Current Path forecast for low-income countries in Africa (US\$3 790) by then.

Chart 53: Poverty in CP and Governance scenario, 2019–2043
Millions of people and % of total population



Eritrea \$1.90



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

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Measured at the US\$1.90 poverty line for low-income countries, the poverty rate in Eritrea is projected to decline to 11.9% by 2043 in the Governance scenario, compared with 13% in the Current Path forecast. The scenario's poverty rate equates to 50 000 fewer people living in poverty by 2043 than on the Current Path.



Impact of scenarios on carbon emissions

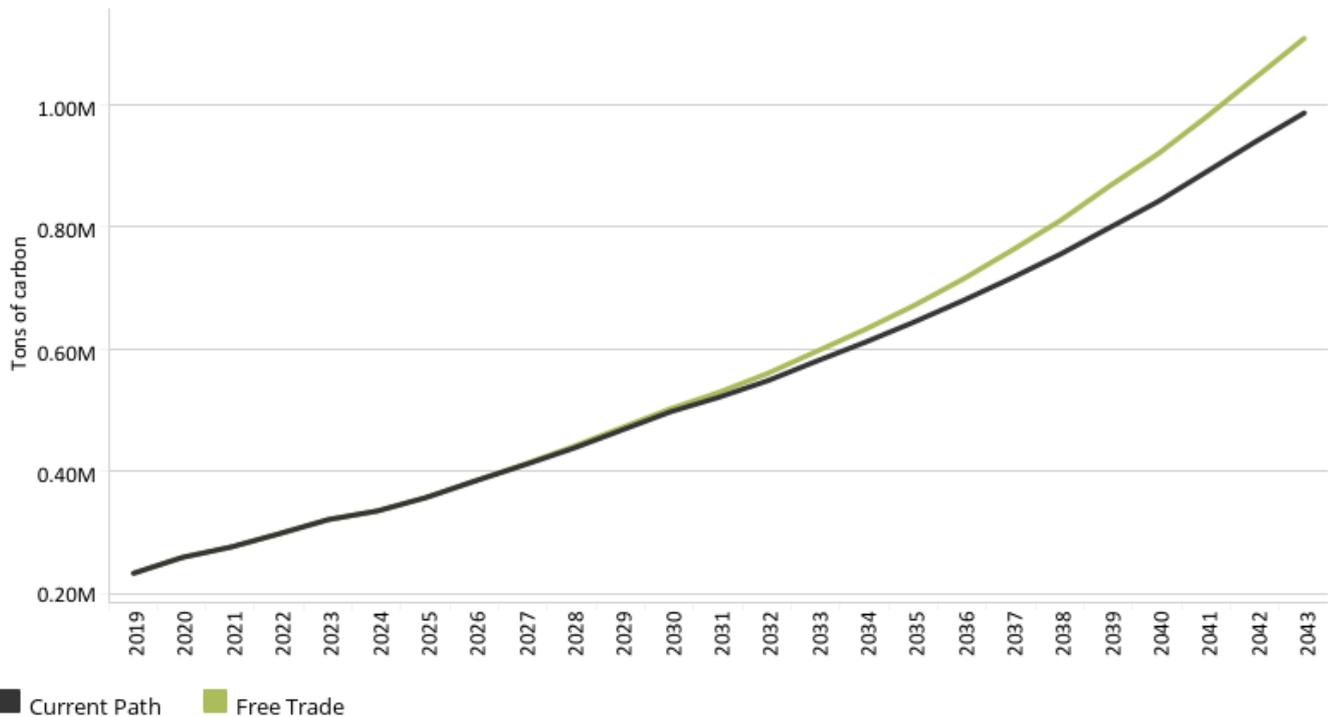
Chart 49 Chart 50 Chart 51 Chart 52 Chart 53 Chart 54 Chart 55 Chart 56 Chart 57 Chart 58 Chart 59

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

Million tons of carbon (note, not CO₂ equivalent)



Eritrea (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 Eritrea and the 11 scenarios. Note that IFs uses carbon equivalents rather than CO₂ equivalents.

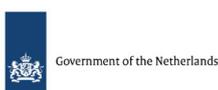
In 2019, Eritrea released about 200 000 tons of carbon. This will increase to 1 million tons by 2043 in the Current Path forecast, which represents an increase of 400% (but coming from a very low base). Like many developing countries, the country will suffer disproportionately from climate change, which it has contributed very little to. Nonetheless, the country must reduce its carbon emissions and move towards renewable energy for sustainable growth to help mitigate the impact of climate change.

The Free Trade and the Manufacturing/Transfers scenarios have the most significant impact on carbon emissions. Emissions are least in the Demographic scenario. The reduction in population growth curtails population pressure on the utilisation of resources and hence minimises environmental degradation. Except for the Demographic scenario, the amount of carbon emissions is higher in all the scenarios compared with the Current Path forecast. By 2043, carbon emissions are between 1 million (Demographic scenario) and 1.1 million tons (Free Trade scenario).

Endnotes

1. World Bank, [Eritrea overview](#).
2. H Daniel, [5 things everyone should know about healthcare in Eritrea](#), The Borgen Project, 16 September 2020.
3. N DeMARco, [Sustainable agriculture in Eritrea](#), The Borgen Project, 16 January 2018.
4. S Babb, [The hurdles and challenges of education in Eritrea](#), 22 July 2018.
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6. F Amahazion, [Understanding remittances in Eritrea: An exploratory study](#), International Journal of African Development, 5:2, article 3.

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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.