

# Eritrea

## Geographic Futures

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In this entry, we first describe the Current Path forecast for Eritrea as it is expected to unfold to 2043, the end of the third ten-year implementation plan of the African Union's Agenda 2063 long-term vision for Africa. The Current Path in the [International Futures \(IFs\) forecasting model](#) initialises from country-level data that is drawn from a range of data providers. We prioritise data from national sources.

The Current Path forecast is divided into summaries on demographics, economics, poverty, health/WaSH and climate change/energy. A second section then presents a single positive scenario for potential improvements in stability, demographics, health/WaSH, agriculture, education, manufacturing/transfers, leapfrogging, free trade, financial flows, infrastructure, governance and the impact of various scenarios on carbon emissions. With the individual impact of these sectors and dimensions having been considered, a final section presents the impact of the Combined Agenda 2063 scenario.

We generally review the impact of each scenario and the Combined Agenda 2063 scenario on gross domestic product per person and extreme poverty except for Health/WaSH that uses life expectancy and infant mortality.

The information is presented graphically and supported by brief interpretive text.

All US\$ numbers are in 2017 values.

## Summary

- Current Path forecast
  - Eritrea is a low-income country strategically located in the Horn of Africa in East Africa. [Jump to forecast: Current Path](#)
  - It had a population of 3.5 million in 2019, projected to reach 5.3 million by 2043 on the Current Path. [Jump to Demographics: Current Path](#)
  - In 2019, the size of Eritrea's economy was US\$2.4 billion. By 2043, the economy is projected to have grown to US\$10.1 billion, which will make it the 44th largest in Africa under the Current Path assumptions. GDP per capita in Eritrea was US\$1 671 in 2019. By 2043, it is projected to be US\$3 728, US\$62 lower than the projected average for low-income countries in Africa. [Jump to Economics: Current Path](#)
  - At the US\$1.90 threshold, the poverty rate in Eritrea was 38.9 % in 2019, equivalent to 1.36 million people. It is forecast to decline to 13% (680 000 people) by 2043 on the Current Path, far below the projected average of 25.1% for low-income countries in Africa by then. [Jump to Poverty: Current Path](#)
  - In 2019, Eritrea produced 230 000 tons of carbon, which is set to increase to 990 000 tons by 2043. This represents an increase of 330%, although coming from a very low base. [Jump to Carbon emissions/Energy: Current Path](#)
- Sectoral scenarios
  - By 2043, Eritrea scores 0.82 on the IFs platform's governance security index in the Stability scenario, about 12% higher than in the Current Path forecast and 15.5% higher than the projected average (0.71) for Africa's low-income countries. [Jump to Stability scenario](#)
  - In 2019, Eritrea's ratio of working-age population to dependants stood at 1.15. On the Current Path, it is forecast to reach 1.7 (the minimum ratio required for the demographic dividend to materialise) by 2037. This is six years earlier than expected on the Current Path. In the Demographic scenario, the ratio is at 1.85 by 2043, compared with the average of 1.53 for low-income African countries. [Jump to Demographic Scenario](#)
  - Based on the assumptions of the Health/WaSH scenario, life expectancy is estimated to be 70.8 years by 2043, compared with 70.6 years in the Current Path forecast. The scenario's forecast is on par with the projected average of 70.8 years for low-income countries in Africa by then. [Jump to Health/WaSH scenario](#)
  - In the Agriculture scenario, average crop yields in Eritrea improve from 3.5 tons per hectare in 2019 to 8 tons in 2043, compared with 4.7 tons in the Current Path forecast. [Jump to Agriculture scenario](#)
  - In 2019, adults (persons aged 15 years and older) had received, on average, 4.5 years of education. In the Education scenario, it is projected to improve to 5.9 years by 2043, compared with 5.2 years in the Current Path forecast. [Jump to Education scenario](#)
  - In the Manufacturing/Transfers scenario, approximately 600 000 Eritreans (11.3% of the population) will be living in extreme poverty by 2043 (measured at the US\$1.90 threshold). This contrasts with the 680 000 people (13% of the population) expected to then be living in poverty in the Current Path forecast. [Jump to Manufacturing/Transfers scenario](#)
  - Eritrea had only 2.3 fixed broadband subscriptions per 100 people in 2019. In the Leapfrogging scenario, the number is set to increase to 45 per 100 people by 2043, twice the Current Path forecast for that year. [Jump to Leapfrogging scenario](#)
  - Eritrea records a trade surplus after 2026 in both the Free Trade scenario and the Current Path forecast. The surplus is expected to peak at 15.9% of GDP in 2032 in the Free Trade scenario and then declining to 0.09% by 2043. In the Current Path forecast, the surplus will peak at 6% in 2032, but reach a deficit of 0.29% by 2043. [Jump to Free Trade scenario](#)
  - In the Financial Flows scenario, FDI flows to Eritrea represent about 5.3% of GDP by 2043, compared with 4.8% on the Current Path. [Jump to Financial Flows scenario](#)
  - 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 African countries. In the Infrastructure scenario, it is projected to increase to

60.5% by 2043, slightly above the forecast of 59.7% on the Current Path. [Jump to Infrastructure scenario](#)

- The projected score for government effectiveness in the Governance scenario is 1.98 (out of a maximum of 5) by 2043. This is 0.29 points higher than the projected score of 1.69 in the Current Path forecast for the same year. [Jump to Governance scenario](#)
- The Free Trade and Manufacturing/Transfers scenarios have the most significant impact on carbon emissions by 2043. [Jump to Impact of scenarios on carbon emissions](#)
- Combined Agenda 2063 scenario
  - In the Combined Agenda 2063 scenario, Eritrea's GDP is expected to be US\$20.4 billion by 2043, more than double the Current Path Forecast of US\$10.1 billion. GDP per capita is forecast to be US\$6 630 in this scenario, US\$2 900 more than on the Current Path. By 2043, carbon emissions in the Combined Agenda 2063 scenario is set to be 1.5 million tons, compared with about 1 million ton in the Current Path forecast. [Jump to Combined Agenda 2063 scenario](#)

## Eritrea: Current Path

- [Eritrea: Current Path forecast](#)
- [Demographics: Current Path](#)
- [Economics: Current Path](#)
- [Poverty: Current Path](#)
- [Carbon Emissions/Energy: Current Path](#)

## Eritrea: Current Path forecast

### Chart 1: Political map of Eritrea

This page provides an overview of the key characteristics of Eritrea along its likely (or Current Path) development trajectory. The Current Path forecast from the International Futures forecasting (IFs) platform is a dynamic scenario that imitates the continuation of current policies and environmental conditions. The Current Path is therefore in congruence with historical patterns and produces a series of dynamic forecasts endogenised in relationships across crucial global systems. We use 2019 as a standard reference year. The forecasts generally extend to 2043 to coincide with the end of the third ten-year implementation plan of the African Union's Agenda 2063 long-term development vision.

Eritrea is a low-income country in the Horn of Africa in East Africa. Its coastline on the Red Sea gives it a strategically beneficial location. Eritrea is bordered by Djibouti in the south-east, by Ethiopia in the south, and by Sudan in the west. The country also shares maritime borders with Saudi Arabia and Yemen.

Eritrea became an independent state from Ethiopia in 1993, after a war of independence that lasted nearly three decades.

It has a surface area of 117 000 km<sup>2</sup> and a population of about 3.5 million as of 2019. The country is also a member of the Intergovernmental Authority on Development (IGAD), an eight-country regional bloc in Africa with ambitions to embark on regional integration.

Eritrea is known as Africa's most secretive state. The ruling People's Front for Democracy and Justice is the only political party allowed to exist in the country. The president and a small ruling elite appear to steer political and economic affairs according to their specific interests. These realities, including the mandatory military training and national service, have depopulated the country as young people seek to emigrate. President Isaias Afwerki has been in office since independence in 1993.

By mid 2018, Eritrea experienced a turnaround in its external environment with a peace treaty being signed with Ethiopia in July, which began to normalise that country's relations with its neighbours. In November 2018, the UN Security Council lifted its sanctions on Eritrea. This raised expectations of a reorientation of Eritrean political and economic arrangements.

## Demographics: Current Path

The characteristics of a country's population can shape its long-term social, economic, and political foundations; thus, understanding a nation's demographic profile indicates its development prospects.

The population of Eritrea was about 3.5 million in 2019, and on the Current Path, it is forecast to be roughly 5.3 million by 2043, an increase of 51% over the next 24 years.

The population of Eritrea is young, with about 42% under the age of 15 and 26.4% under the age of 30 in 2019. Eritrea's population growth rate is slightly lower than the world average. Although the country's fertility rate is much higher than the world average, Eritrea's population growth rate is among the lowest globally because it is affected by its net migration rate (more people emigrate from the country than immigrate to it). Many people have fled the country under the increasingly repressive regime of President Afwerki, who has been in power since independence was obtained in 1993.

On the Current Path, the population younger than 15 years is expected to decline, but will constitute about 32.8% of the population by 2043. The elderly share (people 65 years and older) has been stable at 4% over time, and it is projected to remain around 4% across the forecast horizon.

Also, the youth bulge, defined as the ratio between the population aged 15–29 years and the total adult population, is currently about 45% for Eritrea, and it will remain above 40% across the Current Path forecast horizon. Although this large youth bulge can usher in youth activism and positive political changes in the country, it can also increase the likelihood of criminal violence, conflicts and instability, mainly when the needs of the youth, such as employment, cannot be met.

By 2019, most Eritreans lived in rural areas, with only 37.4% of the population living in urban areas. This makes Eritrea the 19th most rural country in Africa and the 4th most rural in the Horn of Africa.

On the Current Path, Eritrea's urbanisation rate is projected to increase to 48.1% by 2043, while the rural population will have dropped to 51.9% (from 62.6% in 2019). The country's population will therefore remain largely rural across the Current Path forecast horizon. Rural-to-urban migration is driven by the search for employment opportunities and education and 'push factors' such as poverty and food security.

If not well managed, urbanisation could lead to problems such as unemployment, poverty, inadequate health, poor sanitation, urban slums and environmental degradation. Good urban planning could foster an inclusive economy by improving service delivery and reducing urban poverty. In addition, adequate and appropriate urban planning is essential to mitigate the impacts of climate change, such as flooding.

### Chart 4: Population density map for 2019

The environment is a determining factor in the distribution of Eritrea's population. Although the plateau represents only a quarter of the total land area, it is home to approximately half of the population, most of them sedentary agriculturalists. The lowlands on the east and west support a population of mainly pastoralists, although most also cultivate crops if

weather conditions permit. As a rule, pastoralists follow seasonal movement patterns.

The population density in Eritrea was 0.34 inhabitants per hectare in 2019, below the average of 0.41 for low-income countries in Africa. The population density is forecast to increase to 0.5 inhabitants per hectare by 2043, still below the average for Africa and low-income Africa.



## Economics: Current Path

Mining and agriculture constitute the main drivers of economic growth in Eritrea. The country's recent growth performance has been marked by significant volatility owing to its dependence on a predominantly rain-fed agriculture sector, accounting for about a third of the economy, and on a mining sector that accounts for 20% of the economy. Real GDP growth recovered to around 12% in 2018, while averaging -2.7% between 2015 and 2018 due to frequent droughts and a decline in mining production.

Increased investment in mining is expected to drive growth. However, Eritrea is already at high risk of debt distress. Although the large share of this debt is domestic, external debt represents 64.4% of GDP. This difficult macroeconomic situation limits the country's growth prospects.

In 2019, the size of Eritrea's economy was US\$2.4 billion. By 2043, the economy is projected to have grown to US\$10.1 billion, which would make it the 44th largest economy in Africa under the Current Path assumptions.

Without significant structural transformation of the economy, growth will continue to be at the mercy of commodity price shocks and hazards associated with climatic change.

Although many of the charts in the sectoral scenarios also include GDP per capita, this overview is an essential point of departure for interpreting the general economic outlook of Eritrea.

The trends in Eritrea's GDP per capita reflect the volatility in the country's economic growth performance. For example, in 2017, GDP per capita was about 36% lower than in 2011 owing to the economic slowdown between 2015 and 2018 (triggered by frequent droughts and a decline in mining production).

In 2019, GDP per capita was US\$1 671, forecast to increase to US\$3 728 by 2043 on the Current Path. This will be US\$62 lower than the projected average of US\$3 790 for low-income countries in Africa in the same year.

The informal economy comprises activities that have market value and would add to tax revenue and GDP if they were recorded. The informal sector is a lifeline for many people in Eritrea.

In 2019, the size of the informal economy represented 36.6% of the country's GDP, and it is projected to decline modestly, to 30.7%, by 2043. This will be above the average of 25.8% for low-income countries in Africa.

Although the informal economy provides a safety net for the country's large and growing working-age population, it impedes economic growth and hinders improved economic policies. Reducing informality will allow more people to benefit from better wages and redistributive measures. Therefore, Eritrea needs to reduce the size of its informal economy with the least friction possible by lowering the hurdles to registering a business, tackling corruption and improving access to education and finance.

The IFs platform uses data from the Global Trade and Analysis Project (GTAP) to classify economic activity into six sectors: agriculture, energy, materials (including mining), manufactures, services and information and communications technology (ICT). Most other sources use a threefold distinction between only agriculture, industry and services, with the result that data may differ.

Like in many African countries, the service sector makes up the largest share of Eritrea's GDP, accounting for 68.8% of GDP (US\$1.7 billion) in 2019. The agriculture sector is the second largest contributor to GDP, and represented 13.7% (US\$300 million) in 2019. Manufacturing makes the third largest contribution and accounted for 10.6% of GDP in 2019.

A generation of war damaged Eritrea's modest manufacturing sector, which developed during the Italian colonial period and provided many Eritrean workers with skills that later enabled them to find work abroad.[1] Today, as it was in the colonial era, the industry is mainly based on the processing of agricultural products; goods produced include food products, beer, tobacco products, textiles and leather. Asmara, the capital city, is the main industrial centre, although light manufacturing enterprises are found in and around Massawa (which has cement works), Keren and other urban areas.[2]

On the Current Path, the service sector will continue to dominate and is expected to account for 63.7% of GDP by 2043. The manufacturing industry will overtake the agriculture sector to become the second most significant contributor to GDP by 2023. Thus, the share of the manufacturing industry in GDP is projected to reach 22.4% (US\$2.3 billion) by 2043 compared with 4.5% (US\$500 million) from the agriculture sector.

The ICT, materials and energy sectors contribute marginally to Eritrea's GDP.

The data on agricultural production and demand in the IFs forecasting platform initialises from data provided on food balances by the Food and Agriculture Organization (FAO). IFs contains data on numerous types of agriculture but aggregates its forecast into crops, meat and fish, presented in million metric tons. Chart 9 shows agricultural production and demand as a total of all three categories.

Agriculture is a crucial sector for Eritreans, providing a livelihood for about four-fifths of the population and accounting for a large portion of the country's exports. Small-scale cultivation and traditional pastoralism are the main forms of agricultural activity. Both cultivators and pastoralists produce primarily for their own subsistence, and only small surpluses are available for trade.[3] The area of cultivation is limited by climate, soil erosion and the uneven surface of the plateau. Approximately 70% of the land is classified as hot and arid and receives less than 350 mm of rainfall each year.[4]

Agricultural production in 2019 stood at 2.4 million metric tons. This was slightly lower than the demand of 2.44 million tons for the year. Going forward, demand will significantly increase: by 2043, agricultural production and demand are forecast to be 3.4 million metric tons and 4.8 million metric tons, respectively. This is equivalent to excess demand of 1.4 million metric tons, which will likely have to be met through imports.

## Poverty: Current Path

There are numerous methodologies and approaches to defining poverty. We measure income poverty and use GDP per capita as a proxy. In 2015, the World Bank adopted the measure of US\$1.90 per person a day (in 2011 international prices), also used to measure progress towards the achievement of Sustainable Development Goal 1 of eradicating extreme poverty. To account for extreme poverty in richer countries occurring at slightly higher levels of income than in poor countries, the World Bank introduced three additional poverty lines in 2017:

- US\$3.20 for lower middle-income countries
- US\$5.50 for upper middle-income countries
- US\$22.70 for high-income countries.

Eritrea is among the world's poorest countries, but the lack of data limits available quantitative evidence. At the \$1.90 threshold, the forecast in IFs put the poverty rate in Eritrea at 38.9 % in 2019, equivalent to 1.36 million people. The rate is above the average of 47.7% for low-income countries in Africa.

Poverty is widespread and deep in Eritrea and is also highly gendered, as female-headed households tend to be the poorest. Women are generally excluded from economic participation and have no access to capital. This has led to high levels of unemployment and lower incomes.[5]

In the Current Path forecast, the extreme poverty rate (measured at US\$1.90) is projected to decline steadily to 13% (0.68 million people) by 2043, far below the projected average of 25.1% for low-income countries in Africa in the same year.

Policymakers in Eritrea should make growth more inclusive by integrating the most vulnerable segments of the population, especially women, into the economy and enhancing human capital formation to meet the needs of the labour market and hence create more gainful jobs and accelerate poverty reduction.

## Carbon Emissions/Energy: Current Path

The IFs platform forecasts six types of energy, namely oil, gas, coal, hydro, nuclear and other renewables. To allow comparisons between different types of energy, the data is converted into billion barrels of oil equivalent (BOE). The energy contained in a barrel of oil is approximately 5.8 million British thermal units (MBTUs) or 1 700 kilowatt-hours (kWh) of energy.

Energy production is very low in Eritrea. Other renewable energies accounted for 63% (1 million barrels of oil) of the total energy produced in Eritrea in 2019. Nuclear and hydro accounted for 25% and 13%, respectively. Over the Current Path forecast, other renewable energies will account for the country's largest share of energy production. Thus, by 2043, 79% of energy production (3 million BOE) is forecast to come from other renewable energies. Nuclear, hydro and gas will account for 16%, 16% and 3% of total energy production, respectively.

Carbon is released in many ways, but the three most important contributors to greenhouse gases are carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO) and methane (CH<sub>4</sub>). Since each has a different molecular weight, IFs uses carbon. Many other sites and calculations use CO<sub>2</sub> equivalent.

Carbon emissions are very low in Eritrea. In 2019, annual carbon emissions amounted to 200 000 tons and are forecast to reach 1 million tons by 2043, representing an increase of 450% over this period. However, this increase comes from a very low base. Developed economies must help developing countries in Africa deal with the impact of climate change, which will disproportionately affect them.

## Sectoral Scenarios for Eritrea

- 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 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.[6]

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.

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.

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

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.

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.

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.

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.



## Health/WaSH scenario

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.[7] 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.

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

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.[8] 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.

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.

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.

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

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.

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'.<sup>[9]</sup>

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.

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.

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

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.

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.

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

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.

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.<sup>[10]</sup>



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

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.

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.

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

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.

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

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.

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.

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,<sup>[11]</sup> 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.

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.

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

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.

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.

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.

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.

## Governance scenario

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.

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.

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

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).

## Combined Agenda 2063 scenario

The Combined Agenda 2063 scenario consists of the combination of all 11 sectoral scenarios presented above, namely the Stability, Demographic, Health/WaSH, Agriculture, Education, Manufacturing/Transfers, Leapfrogging, Free Trade, Financial Flows, Infrastructure and Governance scenarios. The cumulative impact of better education, health, infrastructure, etc. means that countries get an additional benefit in the integrated IFs forecasting platform, which we refer to as the synergistic effect. Chart 55 presents the contribution of each of these 12 components to GDP per capita in the Combined Agenda 2063 scenario as a stacked area graph.

The synergistic effect of all the scenarios on GDP per capita is US\$906.8 in 2043.

The scenario with the most significant impact on GDP per capita by 2043 is Free Trade, followed by Leapfrogging. The Demographic scenario has the least impact on GDP per capita. This suggests that opening the country to trade and improving access to electricity and broadband Internet will improve human and economic development the most in Eritrea.

Whereas Chart 55 presents a stacked area graph on the contribution of each scenario to GDP per capita as well as the additional benefit or synergistic effect, Chart 56 presents only the GDP per capita in the Current Path forecast and the Combined Agenda 2063 scenario.

In the Combined Agenda Scenario, the government of Eritrea makes a concerted effort to remove the binding constraints on inclusive growth and development. This scenario has a much greater impact on GDP per capita than the individual thematic scenarios.

By 2033, GDP per capita in the Combined Agenda 2063 scenario is US\$552 larger than in the Current Path forecast, and by 2043 it is expected to reach US\$6 630, US\$2 900 more than in the Current Path forecast for that year.

The Combined Agenda 2063 scenario shows that a policy push across all the development sectors is necessary to achieve sustained growth and development in Eritrea.

In the Combined Agenda 2063 scenario, 23.1% of the Eritrean population will be living in extreme poverty by 2033, compared with 32% in the Current Path forecast. This represents about 270 000 fewer poor people than in the Current Path forecast. By 2043, the extreme poverty rate (at US\$1.90) declines to 2.8% (140 000 people) compared with 13% (680 000 people) in the Current Path forecast. This represents a reduction of 10.2 percentage points, or 540 000 people, compared with the Current Path forecast. The Combined Agenda 2063 scenario shows that a concerted policy push across all the development sectors could significantly reduce poverty in Eritrea.

See [Chart 8](#) to view the Current Path forecast of the sectoral composition of the economy.

As a percentage of GDP, the contribution of the service sector records the largest improvement compared with the Current Path forecast by 2043. Its contribution in the Combined Agenda 2063 scenario is forecast to be 11.5 percentage points larger than on the Current Path, while the contribution of the manufacturing sector is 11.3 percentage points below the Current Path forecast.

In absolute value, the service sector improves the most compared with the Current Path. Its value in the Combined Agenda 2063 scenario is US\$8.9 billion larger than in the Current Path forecast for 2043. The service sector is followed by ICT, with its value in the Combined Agenda 2063 scenario US\$900 million larger than in the Current Path forecast. The respective contributions of agriculture and energy to GDP are US\$400 million and US\$100 million larger in the Combined Agenda 2063 scenario than in the Current Path forecast by 2043. Going forward, the service sector will continue to dominate the Eritrean economy.

The Combined Agenda 2063 scenario dramatically impacts Eritrea's economic (GDP) expansion, with the size of the economy projected to expand from US\$2.4 billion in 2019 to US\$20.4 billion by 2043. This translates to an increase of 750% compared with 321% in the Current Path forecast.

By 2043, the GDP of Eritrea is US\$10.3 billion larger in the Combined Agenda 2063 scenario than in the Current Path forecast. This shows that a policy push across all development sectors is a viable approach to achieving sustained growth in Eritrea.

The Combined Agenda 2063 scenario significantly impacts carbon emissions, albeit from a very low base, owing to the increased economic activity it stimulates.

In this scenario, carbon emissions increase from 200 000 tons in 2019 to 1.5 million tons by 2043, an increase of 650% compared with 400% in the Current Path forecast for the period.

By 2043, carbon emissions in the Combined Agenda 2063 scenario are at 500 000 tons, higher than on the Current Path.

If the Combined Agenda 2063 scenario were to materialise, it would stimulate high economic growth and significantly reduce poverty in Eritrea, but the cost in terms of environmental degradation will be relatively high.

To mitigate the environmental impact of the Combined Agenda 2063 scenario, its implementation should be accompanied by concrete steps to accelerate the green energy transition.

## Endnotes

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