# **Côte d'Ivoire** Geographic Futures

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In this entry, we first describe the Current Path forecast for Côte d'Ivoire 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 (GDP) 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

- Côte d'Ivoire is a lower middle-income country in West Africa. It is a member of the Economic Community of West African States (ECOWAS) and the West African Economic and Monetary Union (WAEMU/UEMOA). Jump to forecast: Current Path
- The population of Côte d'Ivoire was 25.7 million in 2019, and on the Current Path it is forecast to be 45.6 million by 2043, about a 77% increase over the next 24 years. Jump to Demographics: Current Path
- Côte d'Ivoire has become one of the fastest-growing economies globally, with an average growth rate of 8% between 2012 and 2019. In 2019, the size of Côte d'Ivoire's economy was US\$51.9 billion, up from US\$20.7 billion in 1990. By 2043, the economy is projected to grow to US\$176.3 billion. Jump to Economics:
- Using US\$3.20 as the poverty threshold, Côte d'Ivoire had 41.7% of its population, equivalent to about 10.8 million people, living in extreme poverty in 2019. The extreme poverty level at US\$3.20 is forecast to decline to 33.7% (15.4 million people) by 2043, above the average for lower middle-income countries in Africa, which will then be at 38.3%. Jump to Poverty: Current Path
- Côte d'Ivoire accounts for about 0.2% of global carbon emissions. In 2019, according to IFs, Côte d'Ivoire produced 4.5 million tons of carbon, and by 2043 will be producing 18.6 million tons of carbon an increase of 313%. Jump to Carbon emissions/Energy: Current Path

#### Sectoral Scenarios

- The Stability scenario makes Côte d'Ivoire more stable. By 2043, the score on the government security index is about 12.2% higher than the Current Path forecast and 9.2% higher than the projected average for Africa lower middle-income countries. Jump to Stability scenario
- In 2019, the ratio of working-age persons to dependants stood at 1.3, meaning that there were 1.3 people of the working-age population for each dependant. On the Current Path, it is forecast to be 1.6 by 2043. In the Demographic scenario, the working-age persons to dependants ratio of 1.7 is reached in 2041. Jump to Demographic scenario
- The Health/WaSH scenario improves life expectancy at birth to 70.3 years compared to 69.7 years in the Current Path forecast by 2043. In this scenario, life expectancy in Côte d'Ivoire is three years lower than the average for lower middle-income countries in Africa. Jump to Health/WaSH scenario
- The Agriculture scenario improves crop yields from about 3.7 tons per hectare in 2019 to 6.9 tons per hectare in 2043, compared to 4.7 tons in the Current Path forecast. This is equivalent to 47.8% higher than in the Current Path forecast. Jump to Agriculture scenario
- In the Education scenario, the mean years of education improves by about four months to 7.6 years above the Current Path forecast in 2043. Jump to Education scenario
- When using the lower middle-income extreme poverty threshold of US\$3.20, the number of poor people stands at 13.9 million, or 30.6% of the population, by 2043 in the Manufacturing/Transfers scenario compared to 15.4 million, or 33.7%, in the Current Path forecast for that year. Jump to Manufacturing/Transfers scenario
- Fixed broadband subscriptions are very low in Côte d'Ivoire at 1.9 subscriptions per 100 people in 2019. In the Leapfrogging scenario, fixed broadband subscriptions increase to 46.8 subscriptions per 100 people by 2043, which is 103.7% higher than the Current Path forecast in the same year. Jump to Leapfrogging scenario
- In the Free Trade scenario, between 2023 and 2031, Côte d'Ivoire records a trade deficit (% of GDP) lower than in the Current Path forecast. However, the country becomes a net exporter from 2032, which peaks at 8.6% of GDP in 2038 before declining gradually to 2.6% by 2043 against 7% of GDP in the Current Path forecast in the same year. Jump to Free Trade scenario
- In the Financial Flows, foreign direct investment flows to Côte d'Ivoire in 2043 represent about 3.4% of GDP compared with 3% in the Current Path forecast. Jump to Financial Flows scenario

- The Infrastructure scenario increases the rural population within a 2 km access to an all-weather road to 71.1% of the population compared to 69.2% in the Current Path forecast in 2043. Jump to Infrastructure scenario
- The projected score for government effectiveness in the Governance scenario by 2043 is 2.5 (out of a maximum of 5). This is 0.13, or 5%, higher than the projected score in the Current Path forecast in the same year. Jump to Governance scenario
- The Free Trade and Manufacturing/Transfers scenarios will be the leading causes of increased carbon emissions in Côte d'Ivoire throughout the forecast horizon. Jump to Impact of scenario on carbon emissions
- Combined Agenda 2063 scenario Jump to Combined Agenda 2063 scenario
  - By 2043, the GDP of Côte d'Ivoire in the Combined Agenda 2063 scenario is about 92.5 %, or US\$163 billion, larger than in the Current Path forecast.

## Côte d'Ivoire: Current Path

• Côte d'Ivoire: Current Path forecast

Demographics: Current PathEconomics: Current Path

Poverty: Current Path

Carbon Emissions/Energy: Current Path

Côte d'Ivoire: Current Path forecast

Chart 1: Political map of Côte d'Ivoire

This page provides an overview of the key characteristics of Côte d'Ivoire 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 and 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.

Côte d'Ivoire is a lower middle-income country located in West Africa, bordered to the north by Mali and Burkina Faso, to the east by Ghana, to the south by the Gulf of Guinea, to the west by Liberia and Guinea.

The country is a member of the Economic Community of West African States (ECOWAS) and the West African Economic and Monetary Union (WAEMU/UEMOA). It is the world leading exporter of cocoa, the economic hub of francophone West Africa and exerts significant influence in the region. It has the third largest economy in ECOWAS after Nigeria and Ghana and accounts for more than 30% of WAEMU's GDP.

Côte d'Ivoire suffered an unstable socio-political environment from the late 1990s to the first decade of this century. In 2010, elections plunged the country into deep chaos, which ended with the inauguration of Alassane Ouattara, a former IMF Economist, as Côte d'Ivoire's president in May 2011. He was first re-elected in October 2015 and won the recent elections held in October 2020, which were boycotted by the major political parties.

Due to considerable public investment in infrastructure, education and health, and domestic reforms in the administration and key economic sectors under the auspices of President Ouattara, the overall macroeconomic performance of the country has enormously improved since 2011. However, high levels of corruption and unemployment threaten the country's development prospects. The main challenge remains the implementation of a reform that fosters inclusive growth by encouraging the private sector to create better jobs, build capacity in the agricultural sector, and develop human capital for the sustainable improvement of development indices.

# **Demographics: Current Path**

During the latter half of the 20th century, Côte d'Ivoire had one of the highest population growth rates in sub-Saharan Africa. Its high rate of natural increase, together with the massive influx of immigrants from neighbouring countries, attracted by its comparatively strong economy, were the main reasons for its rapid growth. Migrants account for between 10% and 25% of the Ivorian population. [1] On the entire continent, only South Africa, which has more than double Côte d'Ivoire's population and a much bigger economy, has more migrants. [2] However, the country's population growth rate declined from about 4.9% in 1980 to 2.7% in 2019, slightly above the average of 2.5% for lower middle-income countries in Africa. The population of Côte d'Ivoire was 25.7 million in 2019, and on the Current Path, it is forecast to be 45.6 million by 2043, about a 77% increase over the next 24 years.

The structure of Côte d'Ivoire's population is typical of countries with a low life expectancy and high fertility rates. The total fertility (TFR) rate declined from 6.8 births per woman in 1990 to 4.7 births per woman in 2020, slightly above the average for Africa lower middle-income countries at 4.3. In the Current Path forecast, TFR will slowly decline to 3 births per woman by 2043.

As of 2019, 41.4% of the population was in the below 15 years of age dependency age group, while 3% were in the 65 and above dependency age group. In the Current Path forecast, the share of these two dependency age groups is projected to be 34% and 4.2% respectively by 2043. About 55.6% of the Ivorian population is in the 15–64 working-age group, which is forecast to increase to 61.8% by 2043.

The working-age group, 15 to 64 years of age, is the largest share of the population, and this can be a potential source of growth provided the labour force is well trained and sufficient jobs are created.

Like many African countries, Côte d'Ivoire is experiencing rapid urbanisation. In 2019, about half (50.7%) of the population lived in urban areas, up from 39.3% in 1990. Côte d'Ivoire's urbanisation rate is above that of Africa and of lower middle-income Africa by 7.9 and 1.5 percentage points respectively. On the current development trajectory, the rate of urbanisation in Côte d'Ivoire is projected to increase to 57.2% by 2043, while the rural population dropped to 42.8% from 60.7% in 1990 and 49.4% in 2019.

This rapid urbanisation will undoubtedly place enormous pressure on the delivery of housing and basic services. If not well managed and planned for, this will lead to inadequate healthcare, poor sanitation, urban slums, and environmental degradation, especially in the main cities such as Abidjan (the largest city), which is the home to more than 5 million people. [3] 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 which is recurrent in Abidjan during the rainy season.

#### Chart 4: Population density map for 2019

The population of Côte d'Ivoire is concentrated in the central and the wetter south-east regions, dominated by Abidjan, the largest city and the country's main maritime outlet. The drier north is, in comparison, much less populated, while the

south-western forest zone (specifically the Tai National Park) is almost completely empty.

The density of Côte d'Ivoire's population amounted to 0.8 inhabitant per hectare in 2019, 0.2 above the average for lower middle-income countries in Africa and almost double the average for Africa. The population density is forecast to increase to 1.4 inhabitants per hectare in 2043, still above the average for Africa and lower middle-income Africa.

## **Economics: Current Path**

From 1960 to 1979, Côte d'Ivoire had a strong economy, though this began to change in the late 1980s when the country experienced almost seven straight years of recession from 1987 to 1993 due to a significant fall in cocoa and coffee prices and high indebtedness. During that time, the country could not meet its foreign debt obligations, but new financial arrangements by creditor banks and a 50% devaluation of its currency (the CFA franc) helped the country toward economic recovery by the mid-1990s. However, political instability from the late 1990s and during the first decade of this century significantly stunted economic growth. Macroeconomic stability, business environment, and public investment in infrastructure have improved markedly since 2012. As a result, Côte d'Ivoire has become one of the fastest-growing economies globally, with an average growth rate of 8% between 2012 and 2019.

The country's vibrant, robust and stable economic growth since 2012 experienced a slowdown and reached 1.8% in 2020 owing to the COVID-19 pandemic. Yet it is one of the few countries that recorded positive GDP growth in 2020. The resilience of the Ivorian economy can be explained in part by the relative diversification of its productive fabric and the monetary stability conferred by its membership to the WAEMU.

In 2019, the size of Côte d'Ivoire's economy was US\$51.9 billion, up from US\$20.7 billion in 1990. Between 2012 and 2019, the size of GDP increased by nearly 70%. By 2043, the economy is projected to grow to US\$176.3 billion, making it the 14th largest economy in Africa in the Current Path forecast for other countries

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 Côte d'Ivoire.

Over the period 1960–1977, the GDP per capita of Côte d'Ivoire was higher than that of South Korea as a result of high economic growth underpinned by massive public investment and high prices of cocoa and coffee on the international markets. The GDP per capita grew about 90% between 1960 and 1979.

However, after years of steady growth, the GDP per capita started to decline in the late 1980s due to deep recessions following both adverse external shocks and subsequent inappropriate domestic policy responses. The GDP per capita shrank by 54.1% between 1980 and 1994 before slightly improving by 5.5% between 1995 and 1999. GDP per capita growth again started to decline from 2000 due to socio-political instability that undermined economic growth.

Since 2012, the country has experienced a steady increase in GDP per capita: it increased by 44.2% between 2012 and 2019. The GDP per capita (PPP) was US\$4 238 in 2019 and is forecast to increase to US\$6 595 in 2043. This will be about 38.5% lower than the average for lower middle-income countries in Africa in the same year. The GDP per capita of Côte d'Ivoire peaked in 1979 at US\$5 645. This level will only be recovered on the current development trajectory in 2036.

The informal sector is a crucial lifeline for many people in Côte d'Ivoire. Informal employment has grown by more than 90% since the process of liberalisation of the economy in the 1980s; it accounts for 93.6% of jobs in the country. [4]

In 2019, the size of the informal economy represented about 38% of the country's GDP, and by 2043 it is projected to

modestly decline to 31.4%, above the average of 26.4% for lower middle-income countries in Africa.

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

The service sector is the dominant sector in Côte d'Ivoire's economy. In 2019, it accounted for 46.4% of its GDP (US\$24.1 billion). On the Current Path, the share of the service sector in GDP will slightly increase to 48.4% (US\$85.3 billion) by 2043.

The service sector was followed by the manufacturing sector at 25.9% of GDP (US\$13.4 billion) in 2019 and will increase to 35.3% of GDP (US\$62.2 billion) by 2043. ICT accounted for 6.3% of GDP in 2019, and by 2043 it is projected to decline slightly to 5.5% of GDP. Energy and materials contributed 1.7% and 2.3%, respectively, and their contribution to GDP is forecast to be 0.9% and 3.3%, respectively, in 2043.

The agriculture sector remains one of the pillars of Côte d'Ivoire's economy, although its contribution to GDP has declined over time. It accounts for about 60% of export receipts and employs two-thirds of the population. [5] It also has the third largest contribution to GDP currently. The contribution of the agriculture sector to GDP was 17.5% in 2019 and is projected to steadily decline to 6.6% (US\$11.7 billion) by 2043, indicating the structural transformation of the economy.

In the Current Path forecast horizon, the manufacturing sector's contribution to GDP will experience the most significant improvement (9.5 percentage points increase between 2019 and 2043). This holds great potential for economic growth, economic transformation, jobs creation and poverty reduction.

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.

Côte d'Ivoire has considerable agriculture potential. Its geographical position contributes to about 75% of the national territory being suitable for agriculture. The country is a net exporter of major cash crops such as cocoa, coffee, rubber, cotton, palm oil and cashew nuts. It is also self-sufficient in foodstuffs such as cassava, yam and bananas but depends heavily on imports of rice, wheat and dairy products, among others.

Low agricultural productivity, low purchasing prices, high input costs, considerable post-harvest losses and inefficient use of modern farming techniques have contributed to a decline in agricultural production and kept farmers' incomes low. [6]

Agricultural crop production in 2019 stood at 27.4 million metric tons, compared to demand at 26.8 million metric tons. This agricultural surplus is forecast to end by 2022. By 2043, agricultural crop production and demand are forecast to be 35.3 and 47.3 million metric tons repectively. This is equivalent to excess demand for crops of nearly 12 million metric tons that will likely be met through imports.

# **Poverty: Current Path**

There are numerous methodologies for 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 per 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.

The economic crisis in the 1980s and the socio-political instability from the late 1990s and during the first decade of this century significantly increased poverty in Côte d'Ivoire. The extreme poverty rate at US\$1.90, which was about 4.4% in 1981, reached its peak in 2011 at 38.6%.

However, since 2012, the poverty rate has exhibited a downward trend underpinned by robust economic growth. In 2019, the extreme poverty rate stood nearly at 22% (5.7 million people), about five percentage points below the average of 27.1% for other lower middle-income countries in Africa.

In the current development trajectory, the extreme poverty rate at US\$1.90 is projected to decline to 16.5% by 2043, below the average of 18% for lower middle-income countries in Africa. However, using US\$3.20 as the poverty threshold, Côte d'Ivoire had 41.7% of its population, about 10.8 million people, living in extreme poverty in 2019. This is about eight percentage points lower than the projected average for lower middle-income countries in Africa.

The poverty level at US\$3.20 is forecast to decline to 33.7% (15.4 million people) by 2043, below the average for lower middle-income countries in Africa, which will then be at 38.3%. To sustain economic growth over the long term, it must be inclusive. Policymakers in Côte d'Ivoire should make growth more inclusive by integrating the most vulnerable segments of the population, including women, into the economy and enhancing the human capital formation to meet the needs of the labour market and hence create more gainful employment 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 (BBOE). 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.

Strong economic growth in recent years has driven demand for energy in Côte d'Ivoire. Currently, oil and gas are the dominant energy sources in the country. In 2019, gas production was estimated at 17 million BOE, or 70% of total energy production, while oil production stood at 6 million barrels, or 24.7% of total energy production.

In the Current Path forecast, gas production will significantly increase to reach 35 million BOE by 2043, while oil production will decline to 2 million barrels in the same year. By 2043, gas will account for 79.5% of total energy production, while oil will account for only 4.5%.

Hydro and other renewable energy will account for 2.3% and 13.6% of total energy production by 2043. The energy production from other renewable sources is currently at the embryonic stage. However, several projects are now underway to boost renewable energy production and accelerate the energy transition.

Côte d'Ivoire has vast potential for renewable energy. The country's solar potential is estimated at 2–6 kWh/m<sup>2</sup> per day [7]. The country's drier northern regions have the highest potential for solar power, and it also has the potential to generate energy from biomass as it possesses plentiful cocoa, palm oil, cotton, coffee and sugar plantations.

Carbon is released in many ways, but the three most important contributors to greenhouse gases are carbon dioxide ( $CO_2$ ), carbon monoxide ( $CO_3$ ) and methane ( $CH_4$ ). Since each has a different molecular weight, IFs uses carbon. Many other sites and calculations use  $CO_2$  equivalent.

Annual carbon emissions, which were barely 2 million tons until 2011, have increased due to increased economic activity in recent years. Carbon emissions increased from 2 million tons in 2011 to 4.5 million tons in 2019 and are forecast to reach 18.6 million tons by 2043, an increase of 313% between 2019 and 2043, although coming from a very low base. However, this will only constitute about 0.2% of global carbon emissions.

Developed economies must help the country and the many other developing countries deal with the impact of climate change which will disproportionately affect them.

## Sectoral Scenarios for Côte d'Ivoire

- 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 more than a decade of political instability, stability has recently improved with a unified army. However, the country still faces threats from regional instability in Mali and Burkina Faso due to the Jihadism insurgency. The IFs governance security index ranges from 0 (low security) to 1 (high security). The Current Path forecast shows lower stability than the average for lower middle-income Africa. Specifically, the score for Côte d'Ivoire on the government security index was 0.67, 4.5% lower than the average for lower middle-income Africa in 2019. The Stability scenario improves security and stability in Côte d'Ivoire. By 2043, the score in the Stability scenario is 0.83, about 12.2% higher than the Current Path forecast and 9.2% higher than the projected average of 0.76 for Africa lower middle-income countries.

The war in Ethiopia has shown how instability can imperil an impressive economic growth record. Ethiopia's case demonstrates that a state's capacity to maintain order is the most important and elusive condition for development. The government and policymakers in Côte d'Ivoire should take proactive measures towards more social and political stability.

By 2033, Côte d'Ivoire's GDP per capita will be US\$92 higher in the Stability scenario compared to the Current Path forecast for that year. In 2043, the difference would increase to about US\$256. Hence, by 2043, Côte d'Ivoire would record a GDP per capita of US\$6 852, a 3.9% increase above the Current Path forecast at US\$6 596. In the Current Path assumptions for other countries, the GDP per capita of Côte d'Ivoire in the Stability scenario is below the projected average for Africa lower middle-income countries in 2043.

More stability would promote peace and political consensus in the country and encourage greater domestic and foreign investment, positively affecting income per capita growth.

Stability in a country is an important condition for economic growth and poverty reduction. When using the lower middle-income extreme poverty threshold of US\$3.20, 10.8 million Ivorians (41.7% of the population) were considered to be extremely poor in 2019. The number of poor people stands at 14.3 million (31.3%) by 2043 in the Stability scenario, compared to 15.4 million (33.7%) in the Current Path forecast for that year, a difference of 1.1 million fewer people in extreme poverty. The poverty rate in the Stability scenario (at \$3.20 per day) in 2043 is 8.2 percentage points below the projected average for Africa lower middle-income countries.

# 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 1.3, meaning that there were 1.3 people of working-age for each dependant. On the Current Path, it is forecast to be 1.6 by 2043. The minimum ratio of 1.7 will only be reached in 2047, six years earlier than the average for Africa lower middle-income countries. In the Demographic scenario, the working-age persons to dependants ratio reaches the 1.7 value in 2041.

The increasing working-age population in Côte d'Ivoire can be a catalyst for growth if sufficient education and employment are generated to successfully harness their productive power. Otherwise, it could turn into a demographic 'bomb' 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.

As of 2019, the infant mortality rate in Côte d'Ivoire was 55.1 deaths per 1 000 live births, above the average of 46.4 for Africa lower middle-income countries. By 2030, the infant mortality rate is projected to slightly decline to 41.1. The Demographic scenario reduces infant mortality to 33.1 per 1 000 live births compared to 37.9 in the Current Path forecast by 2033. By 2043, the infant mortality rate is 23.8 deaths per 1 000 live births, compared to 29.2 in the Current Path forecast. In 2043, the infant mortality rate in the scenario is about five percentage points above the average for lower middle-income countries in Africa.

The Demographic scenario's impact on per capita income is marginal at approximately US\$45 more than the Current Path forecast of US\$5 293 in 2033. By 2043, the difference more than triples so that the average Ivorian has about US\$174 more income than the Current Path forecast of US\$6 595, a 2.6% improvement over the Current Path forecast in that year.

Moreover, this would be about 40% lower than the projected average for lower middle-income countries in Africa at US\$9 142 by 2043.

When using the lower middle-income extreme poverty threshold of US\$3.20, 10.8 million Ivorians (41.7% of the population) were considered to be extremely poor in 2019. The number of poor people stands at 14.1 million, or 32% of the population, by 2043 in the Demographic scenario compared to 15.4 million, or 33.7%, in the Current Path forecast for that year, a difference of 1.3 million fewer people in extreme poverty. The poverty rate in the Demographic scenario in 2043 is about 6.2 percentage points below the projected average for Africa lower middle-income countries. Ivorian authorities should make an effort 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.

Despite the dynamic economy, Côte d'Ivoire lags on several health indicators. The health sector was severely affected by years of underinvestment due to political and military conflict. However, the Ivorian government has made a concerted effort in recent years to improve access to services, rehabilitate and build facilities, and develop technical platforms aligned with international standards. There remains room for improvement in terms of quality, especially as the country rolls out universal health coverage.

As of 2019, life expectancy in Côte d'Ivoire was 61.3 years. The Health/WaSH scenario improves life expectancy at birth to 70.3 years compared to 69.7 years in the Current Path forecast by 2043. In this scenario, life expectancy in Côte d'Ivoire is three years lower than the average for lower middle-income countries in Africa, at 73.3 years in 2043.

The Health/WaSH scenario reduces infant mortality to 33.3 per 1 000 live births compared to 37.9 in the Current Path forecast by 2033. By 2043, the infant mortality rate is 25.7, compared to 29.2 in the Current Path forecast.

The infant mortality rate in the scenario is below the average for lower middle-income countries in Africa, at 29.6 deaths per 1 000 live births.

# 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.

Côte d'Ivoire's agriculture sector is both a key driver of the national economy and a primary player in global markets for goods such as cocoa and rubber. In the Agriculture scenario, crop yields improve from 3.7 tons per hectare in 2019 to 6.9 tons per hectare in 2043, compared to 4.7 tons in the Current Path forecast. This is equivalent to 47.8% higher than the Current Path forecast and 9.7% above the average for lower middle-income countries in Africa at 6.1 tons per hectare in that year.

The use of higher-quality seeds, fertiliser and agricultural machinery generally remains low for staple crop production. An estimated 50% of farms in Côte d'Ivoire persist with traditional farming methods, and only 10% use intensive systems. [x] Owing to low yields, population growth and diet preferences, Côte d'Ivoire's import bill for foodstuffs is increasing. Improvements in the agriculture sector would help reverse this trend.

While in 2019, agriculture surplus was about 1.2% of demand, agriculture imports are forecast to reach 28.8% of demand by 2043 on the Current Path. However, in the Agriculture scenario, the country records agricultural surplus from 2033 to reach 3.7% of demand in 2043. This reduction in imports could release funds for other productive investments in the economy and ensure food security. It would also improve the country's current account balance and make it less vulnerable to international food prices shocks.

The agriculture sector is one of the main pillars of the Ivorian economy. The sector accounts for around half of national employment and almost 40% of all exports. Given its importance to the Ivorian economy, particularly for the rural population, the Agriculture scenario significantly impacts GDP per capita in the country. By 2043, the Agriculture scenario improves GDP per capita by US\$358 so that Ivorians are earning on average US\$6 954. However, this is US\$2 188 lower than the average for lower middle-income countries in Africa.

Using the US\$3.20 per person per day extreme poverty threshold, the poverty rate in the Agriculture scenario by 2043 is 20.8%, compared to 33.7% relative to the Current Path forecast. This is equivalent to 5.9 million fewer people in extreme poverty.

Due to more than 60% of Ivorians relying on crops to feed their families and earn an income, further development in the

agriculture sector is a viable option to reduce poverty in Côte d'Ivoire by a significant margin.	

#### 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.

Recent political instability and conflict severely affected the educational outcomes in Côte d'Ivoire. However, since 2011, Côte d'Ivoire's education system has been improving. The average years of education in the adult population (aged 15 years and older) is a good indicator of the stock of education in a country. The average years of education for adults aged 15 years and over stood at 5.5 years in 2019, and in the Current Path forecast, it is projected to improve to 7.6 years by 2043. This is almost a year below the average for lower middle-income countries in Africa. Technically, this means that most Ivorians will have at least primary education by 2043. In the Education scenario, the mean years of education improves by about four months above the Current Path forecast in 2043.

The quality of education in Côte d'Ivoire has deteriorated. Studies have shown that less than half of Ivorian learners have the required reading or mathematics skills at the end of the primary school cycle. In the Education scenario, the score for the quality of primary education improves from 27.7 out of a possible 100 in 2019 to 35.6 in 2043, a 16% increase compared to the Current Path forecast. In addition, the score for the quality of secondary education increases from 37.9 in 2019 to 46.1 in 2043 in the scenario, an almost 19% improvement compared to the Current Path forecast in 2043.

Quality education is crucial for economic development. Countries such as South Korea and Malaysia have succeeded in transitioning to emerging market status thanks to their investments in building some of the best education systems in the world. According to the Nobel Prize winner in economics, Robert Lucas and the former World Bank's chief economist, Paul Romer, economic development depends above all on a country's ability to value its human capital. It allows not only the country to increase its current added value but also to create tomorrow's technological innovations. Hence, Ivorian authorities should accelerate reforms to improve the quality of education in Côte d'Ivoire.

By 2043, the Education scenario will increase the GDP per capita by US\$250 above the US\$6 596 in the Current Path forecast. In other words, in 2043, the GDP per capita in the Education scenario is 3.8% larger than the Current Path forecast. 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 to contribute meaningfully to the economy.

Using the US\$3.20 lower middle-income extreme poverty line, by 2043, the Education scenario will record a poverty rate of 30.8% (14 million people) compared to 33.7% (15.4 million people) in the Current Path forecast.

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

of society. The Ivorian government's ambitious objectives for the education sector, such as the provision of free education until the age of 16, are a great opportunity for children from poor households to receive a quality education, with a positive effect on poverty reduction in the country.

# 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 that presents a stacked area graph on the contribution to GDP and size, in billion US\$, of the Current Path economy for each of the sectors.

In the Manufacturing/Transfers scenario, the contribution of manufacturing is projected to make the greatest increase in GDP until 2037; thereafter, services make the most significant contribution. By 2043, the manufacturing sector is US\$8.1 billion larger in the Manufacturing/Transfers scenario compared to the Current Path forecast, coming in second after the service sector at a value of roughly US\$144.2 billion. The manufacturing sector is vital to creating jobs, improving productivity, changing the structure of an economy and ultimately reducing poverty.

Compared to the Current Path forecast, the Manufacturing/Transfers scenario increases household transfers and welfare by 51% in 2043. This represents US\$3.7 billion more than the Current Path forecast of US\$7.3 billion. To make the social safety net programmes more effective at reducing poverty, better targeting and efficient approaches are critical.

As the economist Nicolas Kaldor indicates, manufacturing is the engine of economic growth (Kaldor's engine of growth hypothesis). It has back and forward linkages with other sectors and transforms the productivity structures across the economy. Thus, a robust manufacturing sector is crucial to achieve sustained growth and significantly improve the population's living standard.

In the Manufacturing/Transfers scenario, GDP per capita is US\$208 more than in the Current Path forecast at US\$5 293 in 2033. By 2043, the average Ivorian will earn US\$7 085 in this scenario compared to US\$6 596, a 7.4% (US\$489) increase above the Current Path forecast for that year.

When using the lower middle-income extreme poverty threshold of US\$3.20, 10.8 million Ivorians (41.7% of the population) were considered to be extremely poor in 2019. The number of poor people stands at 13.9 million, or 30.6%, of the population by 2043 in the Manufacturing/Transfers scenario compared to 15.4 million, or 33.7%, in the Current Path forecast for that year, a difference of 1.5 million fewer people in extreme poverty. The poverty rate in the Manufacturing/Transfers scenario in 2043 is about 5.3 percentage points below the projected average for Africa lower middle-income countries.

# 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.).

Fixed broadband subscription is very low in Côte d'Ivoire; it was 1.9 subscriptions per 100 people in 2019, compared to the average of 3.7 for lower middle-income countries in Africa and below the average for Africa at 3.2. In the Leapfrogging scenario, fixed broadband subscriptions increase to 46.8 subscriptions per 100 people by 2043, which is 103.7% higher than the Current Path forecast in the same year.

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

Mobile broadband subscriptions per 100 people in Côte d'Ivoire in 2019 (at 71.6) were significantly above the average for lower middle-income Africa at 49 subscriptions. In the Leapfrogging scenario, mobile broadband subscriptions per 100 people increase to 155.7 by 2043 against 153.7 in the Current Path forecast. In other words, mobile broadband subscriptions in the scenario are only two subscriptions higher than the Current Path forecast in 2043.

Widespread access to high-speed internet has the potential to improve a country's socio-economic outcomes. Broadband can increase productivity, reduce transaction costs, and optimise supply chains, positively affecting economic growth. Ivorian authorities should make reforms to increase broadband penetration.

The number of Ivorians who had access to electricity in 2019 was 17.2 million people, representing 66.3% of the total population. This is on par with the average for lower middle-income countries in Africa. However, access to electricity is skewed toward urban areas. In 2019, about 96.3% of the urban population had access to electricity, compared to only 35.9% in rural areas. In the Leapfrogging scenario, about 93.4% of the Ivorian population (42.5 million people) will have access to electricity by 2043. This is above the projected average of 81.7% for Africa lower middle-income countries. It is also 9.5 percentage points higher than the Current Path forecast of 83.6% (38.3 million people).

By 2043, 99.9% of the urban population will have access to electricity in the Leapfrogging scenario compared to 98.8% in the Current Path forecast. Regarding the population in the rural areas, 84.7% will have access to electricity by 2043 in the Leapfrogging scenario compared to 64.1% in the Current Path forecast in the same year.

By 2033, GDP per capita in the Leapfrogging scenario will be at US\$5 485, compared to US\$5 293 in the Current Path forecast, a difference of US\$192. In 2043, this difference is slightly more significant at US\$373 more than the Current Path forecast at US\$6 596. The GDP per capita in the scenario is US\$2 172 lower than the average for lower middle-income countries in Africa.

In the Leapfrogging scenario, the number of poor people in 2043 is 14.1 million, representing 31% of the population. This is 1.3 million fewer poor people than the Current Path forecast in the same year. In the Leapfrogging scenario, the poverty rate is 7.2 percentage points lower than the average for Africa lower middle-income countries.

## 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.

Between 2023 and 2031, the country records a trade deficit (% of GDP) lower than in the Current Path forecast. In the scenario, Côte d'Ivoire experiences a trade surplus from 2032 that peaks at 8.6% of GDP in 2038 before declining gradually to 2.6% of GDP by 2043 against 7% of GDP in the Current Path forecast the same year.

From 2040, the trade surplus recorded (% of GDP) in the scenario is lower than in the Current Path forecast because of the large size of GDP due to the high economic growth generated by the trade liberalisation. The GDP of Côte d'Ivoire in the Free Trade scenario is about US\$25 billion larger than on the Current Path in 2043. In absolute value, the trade balance of Côte d'Ivoire in the scenario after the full implementation of the AfCFTA is better than on the Current Path, implying that Côte d'Ivoire will gain from the full implementation of the trade agreement.

In the Current Path forecast, the GDP per capita increases from US\$4 238 in 2019 to US\$6 596 in 2043 but would be US\$7 229 in the Free Trade scenario, a significant increase of US\$633 above the Current Path forecast. This shows that the full implementation of the AfCFTA will significantly enhance economic growth in Côte d'Ivoire. Trade openness increases technology diffusion and competition with a positive effect on productivity growth.

Trade openness will reduce poverty in the long term after initially increasing it due to the redistributive effects of trade. Most African countries export primary commodities and low-tech manufacturing products, and therefore a continental free trade agreement (AfCFTA) that reduces tariffs and non-tariff barriers across Africa will increase competition among countries in primary commodities and low-tech manufacturing exports. Countries with inefficient, high-cost manufacturing sectors might be displaced as the AfCFTA is implemented, thereby pushing up poverty rates. In the long term, as the economy adjusts and produces and exports its comparatively advantaged (lower relative cost) goods and services, poverty rates will decline.

The poverty rate at \$3.20 in the Free Trade scenario is 27.8% compared to 33.7% in the Current Path forecast in 2043; this is equivalent to about 2.7 million fewer poor people than on the Current Path. The full implementation of the AfCFTA improves growth and income and reduces poverty in Côte d'Ivoire.

#### 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.

Many countries in sub-Saharan Africa are still heavily dependent on foreign aid to provide basic services like education and healthcare. In Côte d'Ivoire, aid constituted 1.5% of GDP in 2019, which is below the average of 2.4% of GDP for Africa. In the Financial Flows scenario, foreign aid flows to Côte d'Ivoire increase slightly above the Current Path forecast between 2024 and 2031 before declining to below the Current Path. In the scenario and the Current Path forecast, aid (% of GDP) in 2043 is lower than in 2019. This is because donors prioritise low-income countries. By 2043, foreign aid will only represent 0.14% of GDP in the scenario and 0.2% of GDP on the Current Path, below the average of 0.5% of GDP for Africa lower middle-income countries.

FDI flows to Côte d'Ivoire were about 3.1% of GDP in 2019 before dropping to 1.8% in 2020 due to the COVID-19 pandemic and its associated economic crisis. This is slightly about the average for Africa lower middle-income, which was 2.6% of GDP in 2019 and 1.1% in 2020. In the Financial Flows scenario, FDI flows to Côte d'Ivoire in 2043 represent about 3.4% of GDP compared with 3% on the Current Path.

FDI can act as a catalyst for economic development as it brings much-needed capital and technology to the recipient countries. The Ivorian government should continue its reforms to attract more FDI, especially in manufacturing. In 2018, Côte d'Ivoire improved in the World Bank's Doing Business ranking of 190 countries, moving from 139 to 122. Improvements in the business environment include establishing a one-stop shop for registering businesses, implementing a single tax user identification number for business creation, and creating an online tax payment for businesses. [8]

As the largest economy in francophone West Africa, Côte d'Ivoire's attracts migrants from countries such as Burkina Faso, Mali, Niger and Guinea. This makes the country a net supplier of remittances to the rest of the world. Net remittances to the rest of the world amounted to US\$0.6 billion in 2019, or 1.2% of GDP. Across the forecast horizon, Côte d'Ivoire remains a net supplier of remittances. In the Financial Flows scenario, the total net remittances to the rest of the world is US\$1.4 billion (0.8% of GDP) by 2043, on par with the Current Path forecast.

In the Financial Flows scenario, the GDP per capita of Côte d'Ivoire increases from US\$4 238 in 2019 to US\$6 709 in 2043, which is a 58% increase between 2019 and 2043 compared with 55% on the Current Path over the same period. In 2043, the GDP per capita in the scenario is US\$113 higher than on the Current Path. Overall, the Financial Flows scenario has a modest impact on GDP per capita in Côte d'Ivoire.

External financial flows such as remittances, aid and FDI are still low in the country.

Also, the impact of FDI on economic growth is not straightforward. Studies have shown that the impact of FDI on economic growth is conditional on the recipient countries' absorptive capacities (domestic conditions) such as the level of human capital stock, infrastructure development, financial development, and institutional development, among others. Ivorian authorities should not only implement measures to attract FDI, they should also improve the domestic conditions to harness the growth enhancing effect of FDI, and other external financial flows.

The Financial Flows scenario reduces the number of extremely poor Ivorians by only 700 000 in 2043, compared to the Current Path forecast, using the US\$3.20 poverty threshold. This is because FDI is concentrated in the extractives sector, which does not have strong forward and backward linkages with other sectors of the economy. As a result, it does not substantially impact job creation and employment. Whereas 41.7% of Côte d'Ivoire's population lived in extreme poverty in 2019, by 2043, it would be 32.1% in the Financial Flows scenario compared to 33.7% 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.

In 2019, the total number of people with access to electricity in Côte d'Ivoire was about 17.2 million, representing 66.3% of the population. The Infrastructure scenario increases this figure to 40.9 million in 2043, constituting 89.8% of the population. This is above the projected value of 38.3 million, representing 83.6% of the population in the Current Path forecast.

By 2027, it is projected that the entire urban population in Côte d'Ivoire will have access to electricity in the Infrastructure scenario compared to 99.6% in the Current Path forecast. However, only 76.2% (14.8 million people) and 64.1% (12.5 million people) of rural population in the Infrastructure scenario and the Current Path forecast respectively will have access to electricity in 2043, indicating a disparity in access to electricity between urban and rural populations in both the Current Path and the Infrastructure scenario.

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 is important in spurring the socio-economic development of a country and improving the living standards of the rural population. Better rural roads facilitate trade between rural and urban areas. For instance, they enable the rural population to enjoy amenities from nearby urban areas while allowing the urban population to benefit more easily from the agricultural products supplied by rural areas.

In 2019, 65.5% of the rural population in Côte d'Ivoire resided within 2 km of all-weather roads, higher than the average of 61.4% for lower middle-income African countries and above the average for Africa at 53%. In the Infrastructure scenario, it is projected to increase to 71.1% by 2043, higher than the 69.2% projected in the Current Path forecast and the average of 67.8% for lower middle-income countries in Africa.

Côte d'Ivoire's GDP per capita is forecast to rise to US\$7 010 by 2043 in the Infrastructure scenario. This is US\$414 more than the Current Path forecast in the same year but below the average of US\$9 142 for Africa lower middle-income countries. Increased investment in infrastructure improves connectivity and reduces transaction costs, positively affecting

productivity and growth.

In the infrastructure scenario, the extreme poverty rate at US\$3.20 is projected to decline from 41.7% in 2019 to 30.2% in 2043. This is equivalent to 13.8 million fewer poor people in 2043, compared to 15.4 million in the Current Path forecast. This suggests 1.6 million fewer poor people in the Infrastructure scenario than the Current Path forecast for the same year. The extreme poverty rate of 30.2% in the scenario by 2043 is lower than the projected average of 38.3% for Africa lower middle-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.

In the Current Path forecast and in the Governance scenario, the government effectiveness score for Côte d'Ivoire is projected to increase across the forecast horizon. The projected score for government effectiveness in the Governance scenario by 2043 is 2.5 (out of a maximum of 5). This is 0.13, or 5%, higher than the projected score in the Current Path forecast in the same year. Also, Côte d'Ivoire has a higher government effectiveness score than the projected average of 2.3 for Africa lower middle-income countries in 2043.

In the Governance scenario, Côte d'Ivoire's GDP per capita is projected to increase to US\$6 782 in 2043, which is US\$186 more than the Current Path forecast in the same year. The GDP per capita of US\$6 782 in the scenario in 2043 is, however, lower than the projected average of US\$9 141 for lower middle-income countries in Africa in the same year. Critical determinants of growth depend on governance and institutional setting in a country. Authorities in Côte d'Ivoire should improve governance to enhance economic growth and income levels.

Using the US\$3.20 poverty threshold for lower middle-income countries, the poverty rate in Côte d'Ivoire is projected to decline to 32% in 2043 in the Governance scenario, which is lower than the average of 38.3% for lower middle-income countries in Africa. The poverty rate of 32% in 2043 is equivalent to 800 000 fewer poor people than the 15.4 million poor people projected in the Current Path forecast for 2043.

# Impact of scenarios on carbon emissions

This section presents projections for carbon emissions in the Current Path for Côte d'Ivoire and the 11 scenarios. Note that IFs uses carbon equivalents rather than  $CO_2$  equivalents.

In 2019, Côte d'Ivoire released about 4.5 million tons of carbon, and in the Current Path, it is forecast to release 18.6 million tons by 2043, an increase of 313%. Although carbon emissions are set to increase with increased economic activity, Côte d'Ivoire's carbon emissions come from a very low base. Like many developing countries, Côte d'Ivoire will disproportionately suffer the impact of 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 and mitigate climate change.

The Free Trade scenario has the most significant impact on carbon emissions, followed closely by the Manufacturing/Transfers scenario. The Demographic scenario has the lowest level of carbon emission. The reduction of population growth reduces population pressure on the utilisation of resources and hence minimises environmental degradation. Except for the Demographic scenario, the quantity of carbon emissions in all the scenarios is higher than the Current Path forecast in 2043. By 2043, the carbon emissions range from 20 million tons for the Free Trade scenario to 18.3 million tons of carbon for the Demographic 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 that 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 about US\$1 017 in 2043. The scenario with the most significant impact on GDP per capita by 2043 is the Free Trade scenario followed by the Manufacturing/Transfers scenario, while the Demographic scenario has the least impact on GDP per capita. This suggests that in the long terms, a robust manufacturing sector associated with trade liberalisation will have the greatest potential to improve human and economic development in Côte d'Ivoire.

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 makes a concerted effort to remove the binding constraints on growth and development. The Combined Agenda 2063 scenario has a much greater impact on GDP per capita compared to the individual thematic scenarios. By 2033, the GDP per capita of Côte d'Ivoire is US\$1 213 larger than in the Current Path forecast, and by 2043 it would come to US\$10 944, i.e. US\$4 348 more than in the Current Path forecast in 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 Côte d'Ivoire.

In the Combined Agenda 2063 scenario, by 2033, 26% of Ivorians will be living in extreme poverty compared to 34.6% in the Current Path forecast. This represents about 3.3 million fewer people living in extreme poverty compared to the 12.8 million in the Current Path forecast. By 2043, the extreme poverty rate at US\$3.20 poverty threshold declines to roughly 7.4% (3.2 million people) compared to 33.7% in the Current Path forecast with at least 15 million people in extreme poverty.

See Chart 8 to view the Current Path forecast of the sectoral composition of the economy.

Initially, the share of agriculture in GDP (%) will record the highest improvement compared to the Current Path. However, after 2030, it will be outpaced by the service and manufacturing sectors. In absolute value, the contribution of the service and the manufacturing sectors to GDP will experience the largest improvement compared to the Current Path forecast in 2043. Compared with the Current Path, the service sector gets the most significant improvement, with its value in the

Combined Agenda 2063 scenario US\$93.4 billion larger than the value forecast on the Current Path in 2043. The service sector is followed by the manufacturing industry, with its value in the scenario US\$42.4 billion larger than the value forecast on the Current Path in 2043.

The contributions of ICT, agriculture, material, and energy sectors to GDP in the combined scenario are respectively US\$16.4 billion, US\$5.9 billion, US\$4.6 billion, and US\$0.3 billion larger than the Current Path forecast in 2043. The service sector will continue to be the dominant sector of the Ivorian economy.

The Combined Agenda 2063 scenario dramatically impacts the expansion of the Ivorian economy. In the combined scenario, the size of GDP is projected to expand from US\$51.9 billion in 2019 to US\$339.2 billion in 2043, which is a 554% increase over the period compared with 239.7% on the Current Path over the same period.

In 2043, the GDP of Côte d'Ivoire in the Combined Agenda 2063 scenario is 92.5 % or US\$163 billion, larger than the Current Path forecast. The Agenda 2063 scenario shows that a policy push across all the development sectors is necessary to achieve sustained growth in Côte d'Ivoire.

The Combined Agenda 2063 scenario has a pronounced impact on carbon emissions. In this scenario, carbon emissions increase from about 4.5 million tons of carbon in 2019 to 26.4 million tons by 2043, which is a 487% increase between 2019 and 2043 compared with 313% on the Current Path over the same period. In 2043, the carbon emissions in the Combined Agenda 2063 scenario are 7.8 million tons higher than the Current Path forecast.

The materialisation of the Combined Agenda 2063 scenario would stimulate high economic growth in Côte d'Ivoire, but the cost in terms of environmental degradation is high. To mitigate the environmental impact of the Combined Agenda 2063 scenario, its implementation should be accompanied by concrete steps to accelerate the energy transition.

#### **Endnotes**

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Kouassi Yeboua (2024) Côte d'Ivoire. Published online at futures.issafrica.org. Retrieved from https://futures.issafrica.org/geographic/countries/cote-divoire/ [Online Resource] Updated 13 December 2023.

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