



# Tanzania

## Scenario comparisons

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## Scenario comparisons

Chart 29: GDP per capita in Current Path and scenarios, 2019-2043

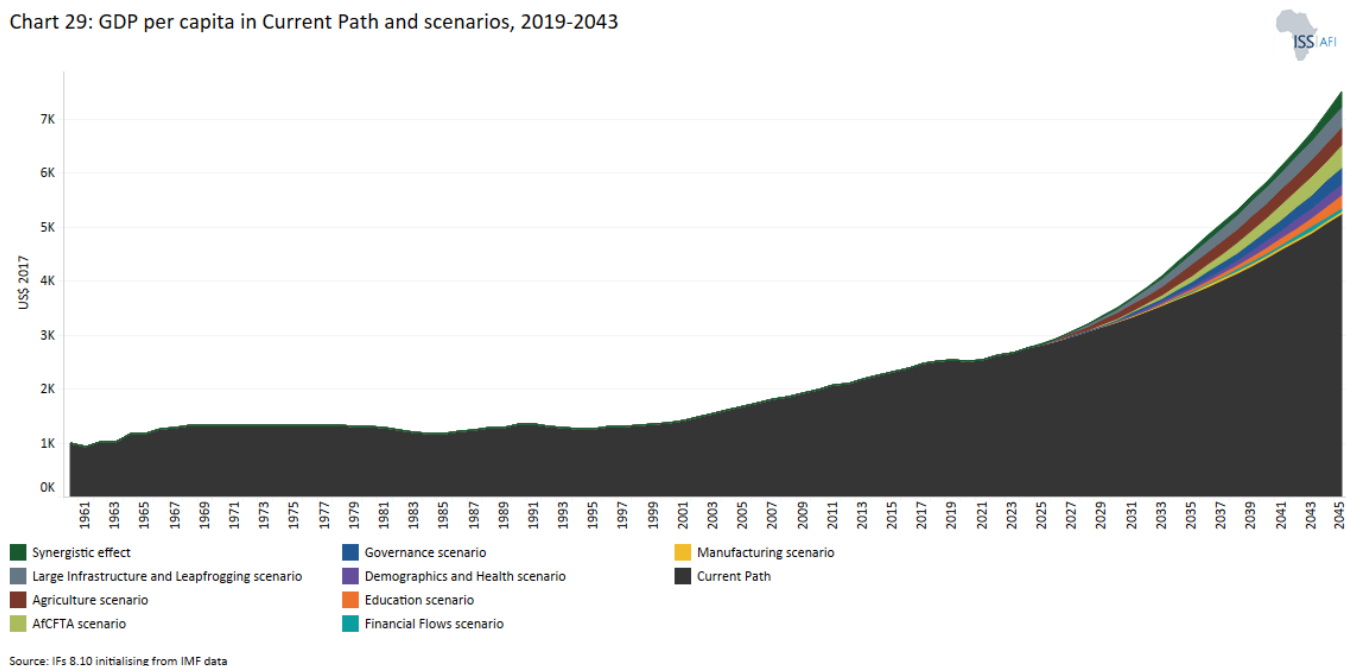


Chart 29 presents a stacked area graph of the contribution of each scenario to GDP per capita. The cumulative impact of better education, health, infrastructure, leapfrogging, etc., means an additional benefit in the integrated IFs forecasting platform that we refer to as the synergistic effect.

In 2023, Tanzania’s GDP per capita of US\$2 668 was amongst the lowest of Africa’s 24 low-middle-income countries and 50% lower than the average GDP per capita of the group, which was US\$6 112. Only Comoros, Zimbabwe, Guinea and Lesotho were below Tanzania. By 2043, Tanzania’s GDP per capita will increase to US\$4 890 in the Current Path forecast, and it will then have a higher GDP per capita than Comoros, Zimbabwe, Guinea and Lesotho, having slightly improved its ranking within its peer group.

The Combined Agenda 2063 scenario will increase Tanzania’s GDP per capita by 38% or an additional US\$1 855 above the Current Path forecast in 2043. Among the sectoral interventions, the Infrastructure and Leapfrogging scenario will have the most significant positive impact on the GDP per capita, with an increase of US\$356 above the Current Path forecast in 2043. The scenario includes an intervention that reflects how modern technology allows for the more rapid formalisation of Tanzania’s large informal sector. The second and third most significant impact on the GDP per capita will be achieved in the AfCFTA and the Agriculture scenarios. Because of its small formal sector and low average income levels, the Financial Flows and the Manufacturing scenarios are the least impactful in GDP per capita terms by 2043.

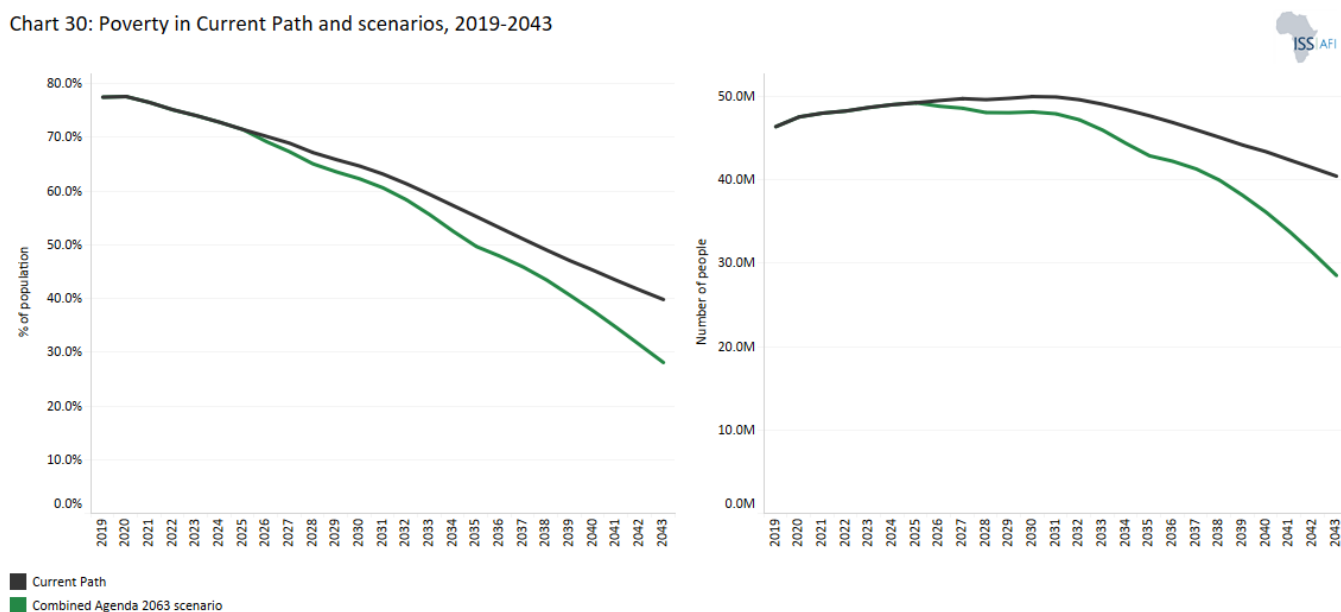
The findings reflect the challenge identified in the 2020 World Bank report[1] that low human capital and limited access to essential services limit opportunities for the poor to access productive jobs. Poverty rates are lowest among households whose head works in trade and services. It is also reflected in the analysis accompanying Chart 10, pointing to the low levels of labour productivity in Tanzania compared to its peers.

In the Combined Agenda 2063 scenario, by 2043, Tanzania’s GDP per capita will be US\$6 745 instead of US\$4 890 on the Current Path forecast. In other words, Tanzania’s GDP per capita will have increased to 78% of the average for the group. On the Current Path forecast, it would only be 57% of the group average. In 2023, the GDP per capita of Tanzania was only

44% of the group average.

On the Current Path forecast, Tanzania will cross the upper-middle income income threshold of US\$4 046 (using MER) in 2054. In the aggressive Combined Agenda 2063, it will do so a decade earlier, in 2044.

Chart 30: Poverty in Current Path and scenarios, 2019-2043



Source: IFs 8.10 initialising from UNPD population prospects estimate, WDI and PovcalNet data

Chart 30 presents the impact of each scenario on extreme poverty by 2043. The user can select the number of extremely poor people or the population percentage.

Poverty in Tanzania is stubborn, with limited responsiveness to growth. In its 2020 extensive report on [Tanzania Mainland Poverty Assessment](#), the World Bank found that a 10% increase in GDP growth per capita can be expected to produce only a 4.5% decrease in the proportion of the poor. This is very low. On average, poverty will drop by over 20% when per capita GDP rises by 10% in developing countries. The result is that poor people benefit less from economic growth in Tanzania, whilst the beneficial effects of economic growth are partially offset by rising inequality. As a result, the impact of various scenarios in this report all have disappointing effects on poverty reduction.

In 2023, 48.7 million Tanzanians lived below the US\$3.65 poverty line for low-middle-income countries, equivalent to 75.2% of the population. On the Current Path forecast, that number will decline to 40.5 million (43.2%). In the Combined Agenda 2063 scenario, extreme poverty in Tanzania will decrease significantly. By 2043, only 28.1% of the population will live below the US\$3.65 extreme poverty line, translating to 26.3 million people.

The positive impact of the interventions in the Agriculture, Demographics/Health and Education scenarios on poverty are most significant.

Chart 31: GDP (MER) in Current Path and Combined Agenda 2063 scenario, 2019-2043

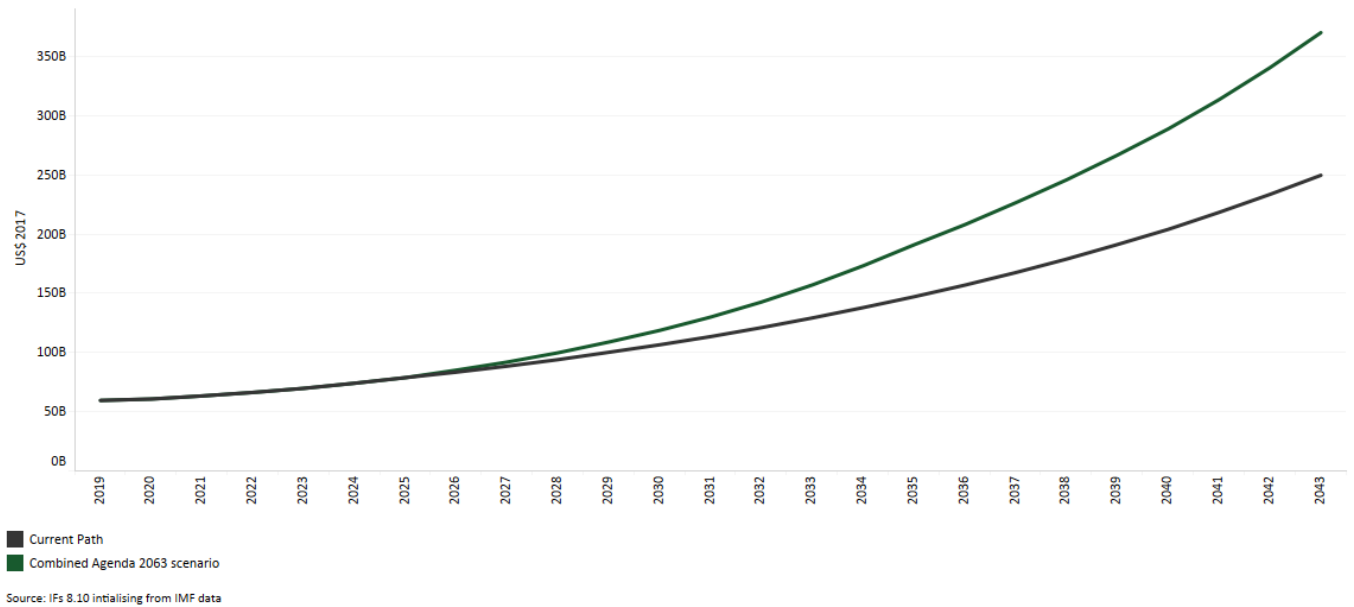


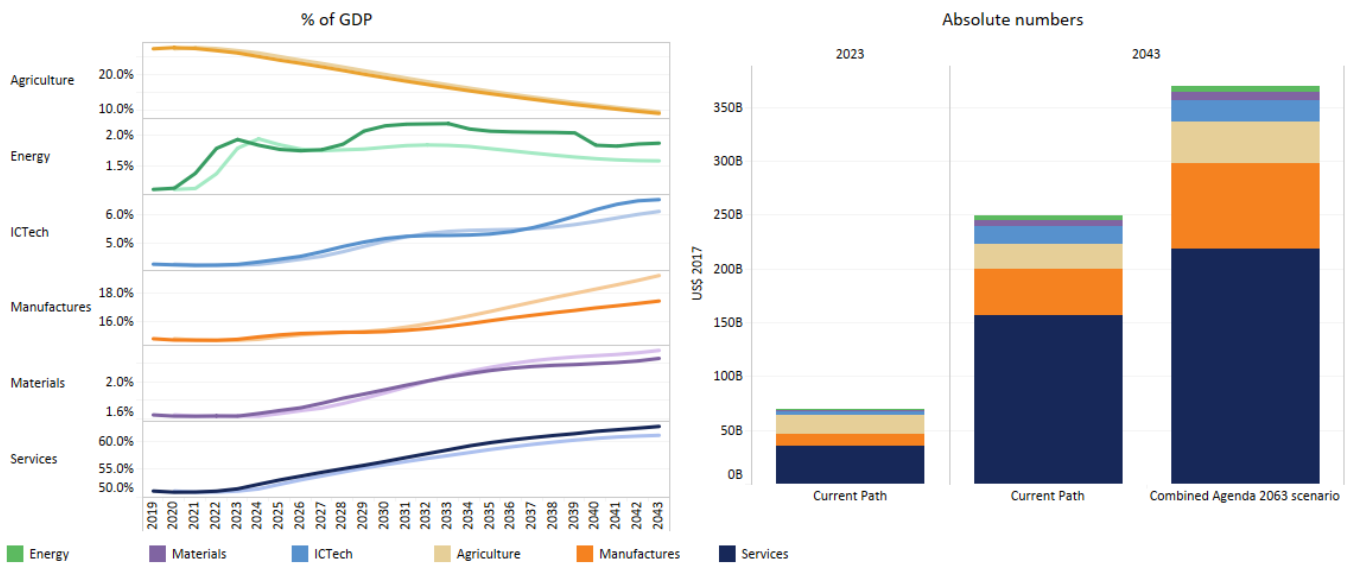
Chart 31 compares the size of the economy in the Current Path with the Combined Agenda 2063 scenario at market exchange rates (MER).

The Combined Agenda 2063 scenario combines all eight sectoral scenarios, namely Governance, Demographics and Health, Education, Infrastructure/Leapfrogging, Agriculture, Manufacturing and Leapfrogging, AfCFTA and Financial Flows.

Economic growth accelerated after Tanzania adopted multiparty democracy and market-based reforms in the 1990s. Between 1990 and 2019, Tanzania’s GDP increased more than fourfold. The economy has not, however, undergone a structural transformation to higher productivity. In recent years, most employment growth occurred in the construction sector as the government invested in the capital city of Dodoma. The manufacturing sector, generally associated with more and better jobs, is small, and employment is growing slowly.

These concerns aside, the country’s GDP will increase substantially from US\$69.7 billion in 2023 to US\$246.6 billion in 2043 in the Current Path forecast and to US\$370 billion in the Combined Agenda 2063 scenario. Instead of its current ranking as the 11th largest African economy, it will be sixth by 2043.

Chart 32: Value added by sector in Current Path and Combined Agenda 2063 scenario, 2019-2043



Source: IFs 8.10 initialising from IMF World Economic Outlook data

Chart 32 presents the change in the economy's structure, comparing the Current Path forecast with the Combined Agenda 2063 scenario from 2019 to 2043.

The IFs platform uses data from GTAP to classify economic activity into six sectors: agriculture, energy, materials (including mining), manufacturing, services and information and communication technologies (ICT). Most other sources use a threefold distinction between agriculture, industry and services, with the result that data may differ.

A previous section has expanded on the slow reduction in poverty compared to Tanzania's robust economic growth rates. According to the [Tanzania Mainland Poverty Assessment report](#), the World Bank finds that growth was driven by sectors with limited employment, particularly the poor. The fastest-growing sectors were construction, information and communication technology (ICT), real estate, nonmarket services (e.g., education, health, and public administration), and, to a lesser extent, mining, transport, and trade. Within agriculture, which contributed 26% to GDP in 2023 and where most poor Tanzanians work, the crops and livestock subsectors grew relatively fast at about 5%. However, even there, only a small number of small-scale farmers produce market-oriented crops and livestock. Thus, Tanzanians with more education and skills were better positioned to benefit from fast-growing sectors. They generally continued to work in the informal rather than the formal sector as they actively avoided engagement in the formal sector.

Manufacturing in Tanzania peaked in 2008, and future growth requires more capital accumulation, but machinery and equipment are relatively expensive. While services are growing in Tanzania, they are non-tradeable (education and labour). However, relative to most other African countries, domestic savings in Tanzania are high and offer an opportunity to fund investment.

Compared to the average for the group of 24 low-middle-income countries in Africa, Tanzania appears to have a less productive economic structure, namely

- a more significant but low-productivity agricultural and services sector (by 9.4 and 2.1 percentage points respectively);
- a much smaller energy (-5.3 percentage points) and manufacturing (by -4.5 percentage points) sectors; and

- a smaller materials (-0.6 percentage points) and ICTech (by -1.1 percentage points) sectors.

In 2023, Tanzania's service sector accounted for more than half of the country's GDP (US\$35.84 billion), followed by the agriculture sector, which accounted for 26% (US\$18.1 billion). The ICT sector contributed 4.2% (US\$3 billion). The energy sector is tiny, contributing less than 2% to GDP in 2023 (US\$1.3 billion), translating, among other issues, into low levels of electricity access and inhibiting growth in the manufacturing sector. The service sector will remain the most significant contributor to Tanzania's GDP. On the Current Path forecast, its share is set to grow to 63% (US\$156.4 billion) by 2043. At the same time, the agriculture sector's contribution will decline from 26% (US\$18.13 billion) in 2023 to just over 9.2% of GDP (but increase in value to US\$23.02 billion) in 2043. The manufacturing sector, at 14.7% in 2023 (US\$10.27 billion), constituted the third largest contributor to Tanzania's GDP. Instead of 17.4% in 2043 (US\$43.5 billion) on the Current Path forecast, manufacturing will contribute 21.5% to GDP (US\$79.41 billion) in the Combined scenario.

The evolution of Tanzania's economy roughly mirrors that of its lower-middle-income peer group, with the service sector representing both the current and future lion's share of contribution to GDP and a relatively small agriculture sector compared to other countries in similar circumstances. Tanzania's manufacturing sector is also one of the smallest among its lower-middle-income peers on the continent and contributed 5.5 percentage points less to GDP than the average for the group in 2023. With its sizeable informal service sector, low-productivity agricultural sector, and relatively small manufacturing sector, Tanzania should invest in improvements in agriculture and grow its ICT sector to improve productivity and enhance livelihoods in other sectors, particularly manufacturing.

In the Combined scenario, the manufacturing sector will increase its contribution to GDP by four percentage points by 2043 and agriculture by one percentage point. All other sectors will decline in the contribution that they make to GDP, namely materials (-0.07 percentage points), energy (-0.45 percentage points), ICTech (-1.08 percentage points), and services (-3.57 percentage points).

Compared to the Current Path forecast in 2043, the Combined scenario would see the following changes in the structure of Tanzania's economy:

- the agriculture sector will be 1.1 percentage points of GDP larger (equivalent to +US\$15.3 billion)
- energy will be -0.45 percentage points smaller (+US\$0.590 billion)
- materials will be -0.73 percentage points smaller (+US\$2.440 billion)
- manufacturers will be +4 percentage points larger (+US\$35.91 billion)
- services will be -3.7 percentage points smaller (+US\$62,28 billion)
- ICTech will be -1,08 percentage points smaller (+US\$3.91 billion)

Chart 33: Informal sector in Current Path and Combined Agenda 2063 scenario, 2019-2043

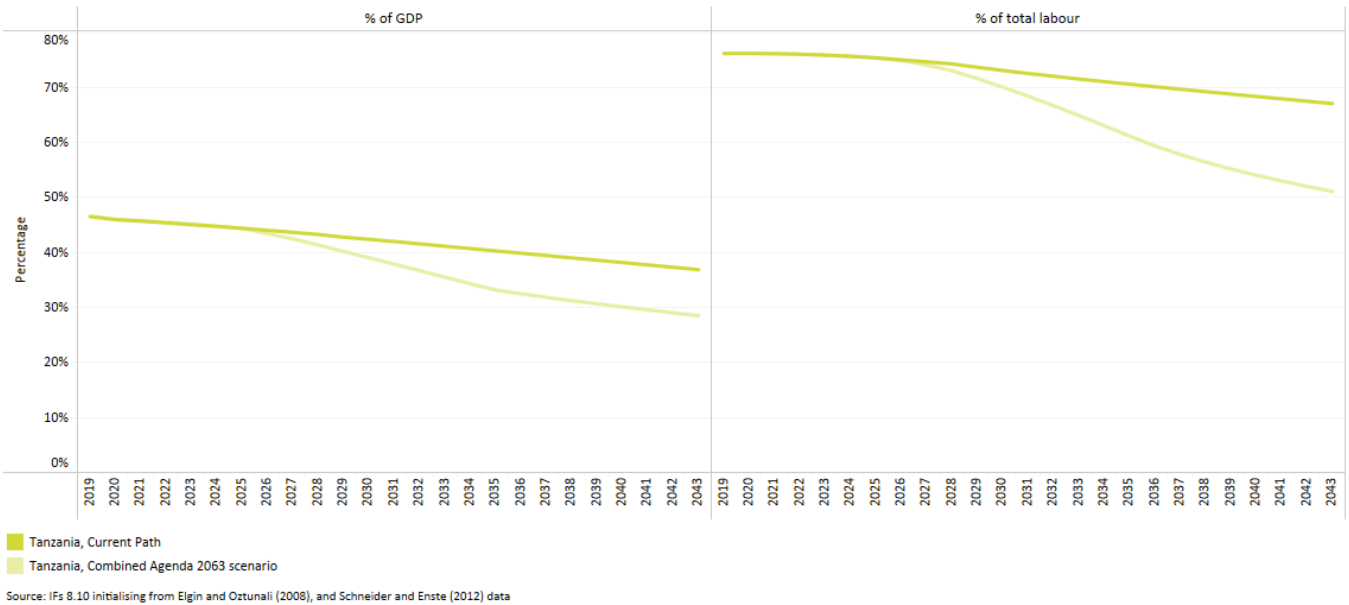


Chart 33 presents the size of the informal sector as a share of GDP and the size of the informal labour force. Data on the informal sector's contribution is often estimated and should be treated with care.

In 2023, Tanzania's informal sector accounted for approximately 45% of GDP. Within IFs, Tanzania had the second-largest informal sector in Africa. Only Zimbabwe's informal sector accounted for a higher share of GDP. The average value for Africa's 24 low- middle-income economies was 29%.

Tanzania's large informal sector is an inevitable burden on the formal economy because of low contributions to tax revenues, low productivity and the subsequent negative impact on expenditure on public utilities. By 2043, the informal sector's contribution to the country's GDP will decline to 37% in the Current Path and 28.5% in the combined scenario, Whereas Tanzania's informal sector would be the second largest in Africa by contribution to GDP in the 2043 Current Path forecast, it will improve to 20th position in the combined scenario.

In 2023, 76% of Tanzania's labour force, or 32.2 million people, worked in the informal sector (excluding agriculture). Of this total, around 31% were informal workers in the formal sector and 69% in the informal sector. The majority are male. The informal sector work is expected to remain the dominant way of economic survival in Tanzania. In the Current Path forecast, informal labour will constitute 67.1% of total labour in 2043 and 51.1% in the combined scenario. It is the largest share among Africa's 24 low-middle-income countries (even more significant than in Zimbabwe) and is set to remain thus until 2043.

Tanzania's large informal sector cushions the effects of widespread poverty but constrains structural transition and improvements in productivity.

Chart 34: Life expectancy in Current Path and Combined Agenda 2063 scenario, 2023-2043

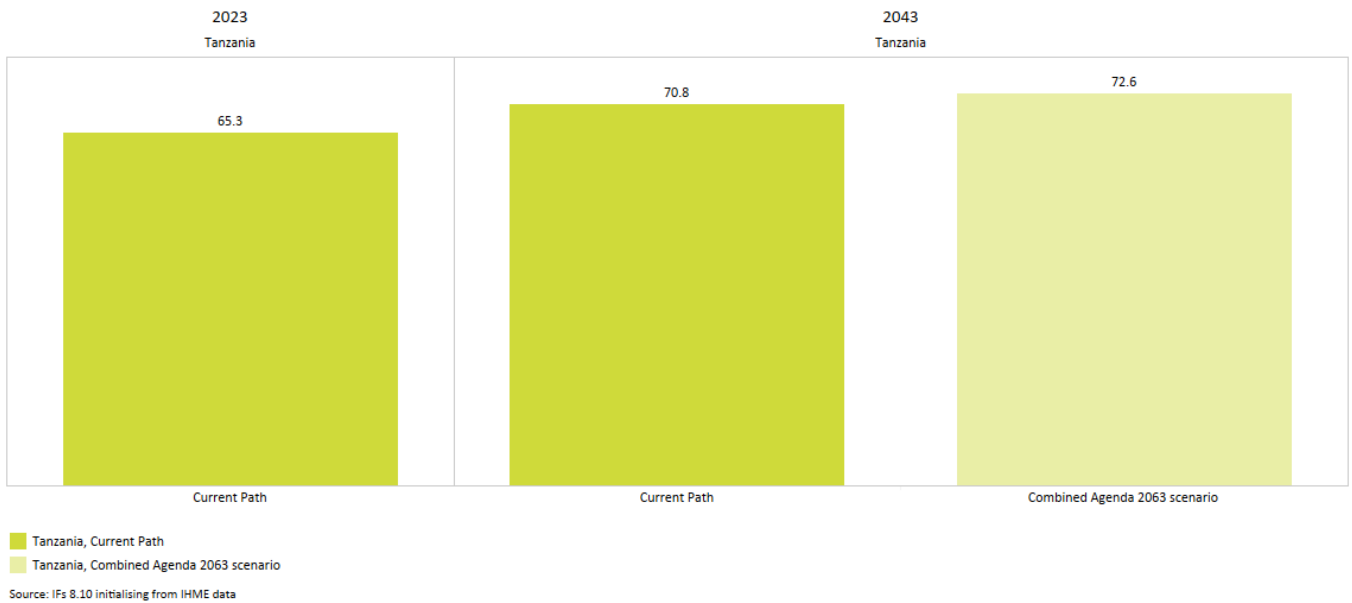


Chart 34 compares life expectancy in the Current Path forecast with the Combined Agenda 2063 scenario.

In 2023, the life expectancy at birth for the average Tanzanian was 65.3 years, with women having almost four years higher life expectancy than men. At 67.5 years, the average life expectancy for Africa’s lower-income economies is about 2.7 years higher than Tanzania’s. On the Current Path, average life expectancy in Tanzania will increase to 70.8 years in 2043, with female life expectancy 4.3 years above men.

Tanzania’s lower life expectancy is attributed to a relatively high disease burden for both communicable and non-communicable diseases as well as high levels of stunting.

According to the 2018 SMART survey, 32% of children under five years in Tanzania were stunted. This means that they are shorter than they should be for their age, due to chronic malnutrition. This is a significant decrease from 35% in 2014, but it is still a high stunting rate. In the Current Path forecast, the under-five stunting rate in Tanzania declines from 29.6% in 2023 to 16.5% in 2043. In the combined scenario, stunting rates drop to 14.9% in 2043.

Many factors contribute to stunting in Tanzania, including poverty, food insecurity, and inadequate access to healthcare and sanitation. Stunting can have severe consequences for children's health and development, including impaired cognitive function, reduced immune function, and increased risk of chronic diseases later in life. In response, the government and various agencies are implementing several programs, including

- Expanding access to nutrition services for pregnant women and young children
- Promoting breastfeeding and complementary feeding practices
- Improving food security and household incomes
- Providing access to clean water and sanitation

These efforts are making a difference, but more must be done to reduce stunting and ensure that all Tanzanian



children reach their full potential.

Life expectancy in Tanzania will increase to 72.6 years in the Combined scenario by 2043, almost 1.8 years above the 2043 Current Path forecast. Female life expectancy will continue to be 4.6 years longer than men's in 2043.

The Combined scenario will see the gap between Tanzania and its reference group reduce but not close. By 2043, the average life expectancy for Africa's low-middle-income economies will be 72.3 years compared to 71.3 for Tanzania.

In 2043, deaths from infectious diseases will be 65 000 lower in the Combined scenario compared to the Current Path trajectory. Those from non-communicable diseases that typically affect more elderly people will be 21 000 fewer.

Chart 35: Domestic Gini in Current Path and the Combined Agenda 2063 scenario, 2019-2043

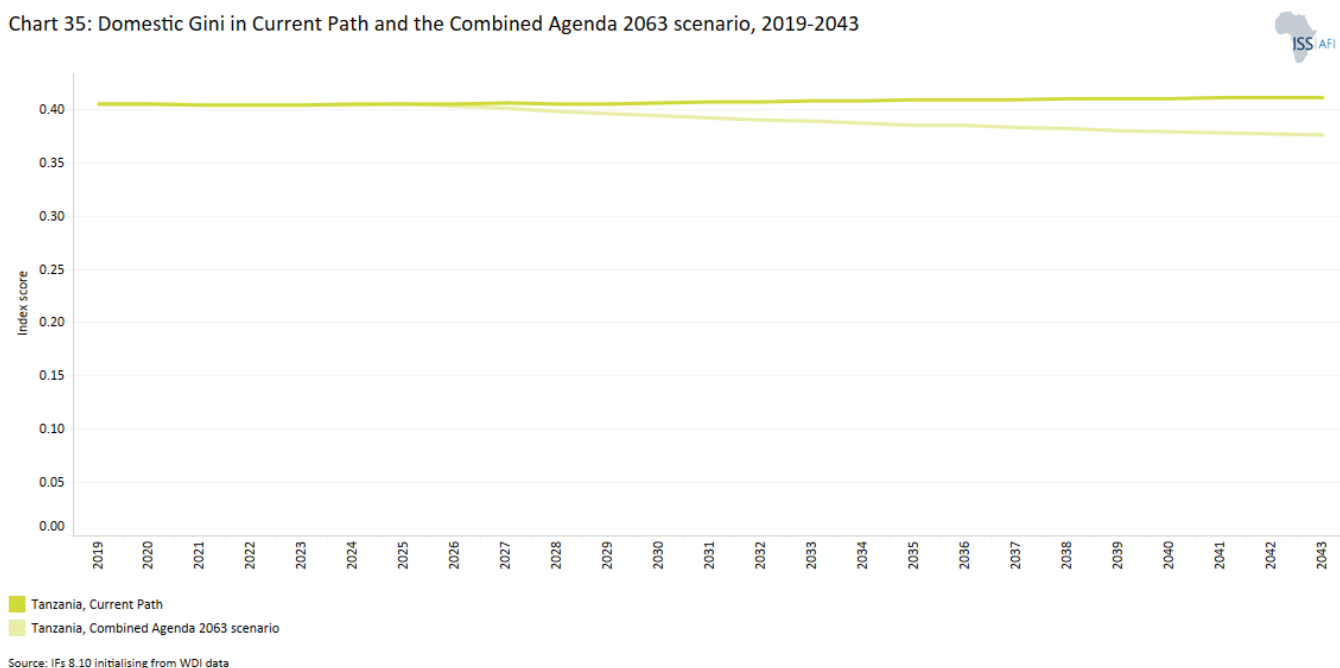
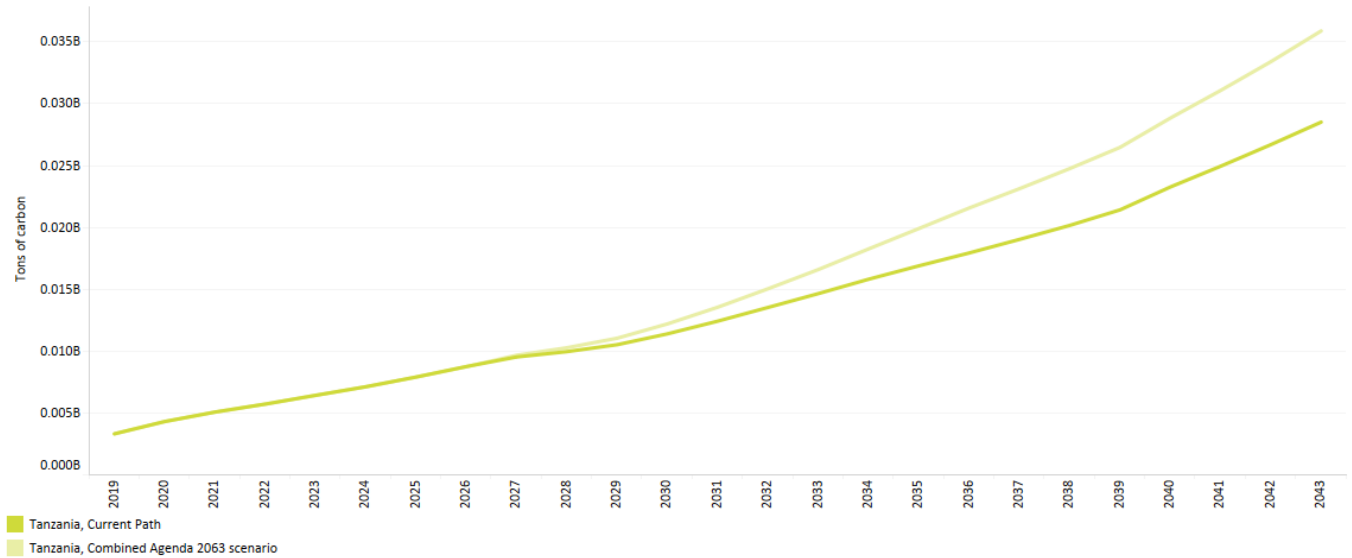


Chart 35 compares the Gini coefficient in the Current Path forecast with the Combined Agenda 2063 scenario.

Tanzania is, on average, more unequal than the average for the 24 low-middle-income countries in Africa. Using the Gini coefficient, Tanzania's score in 2023 is comparable to Djibouti and Kenya. In 2023, the Gini coefficient for Tanzania was 0.404 compared to 0.379, the average for the group, a 7% difference. In the Current Path forecast, Tanzania's Gini remains mainly unchanged to 2043 but declines to 0.365 in the Combined scenario, which will be 2% below the 2043 average for the group. The effect of the Combined scenario is, therefore, to reduce inequality. By 2043, Tanzania would be doing about 3% better than its peer group.

Chart 36: Carbon emissions in Current Path and in Combined Agenda 2063 scenario, 2019-2043

Million tons of carbon (note, not CO<sub>2</sub> equivalent)



Source: IFs 8.10 Initialising from Carbon Dioxide Information Analysis Center data

Chart 36 compares carbon emissions in the Current Path forecast with the Combined scenario.

Since carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO) and methane (CH<sub>4</sub>) have different molecular weights, IFs uses carbon. Many other sites and calculations use CO<sub>2</sub> equivalent.

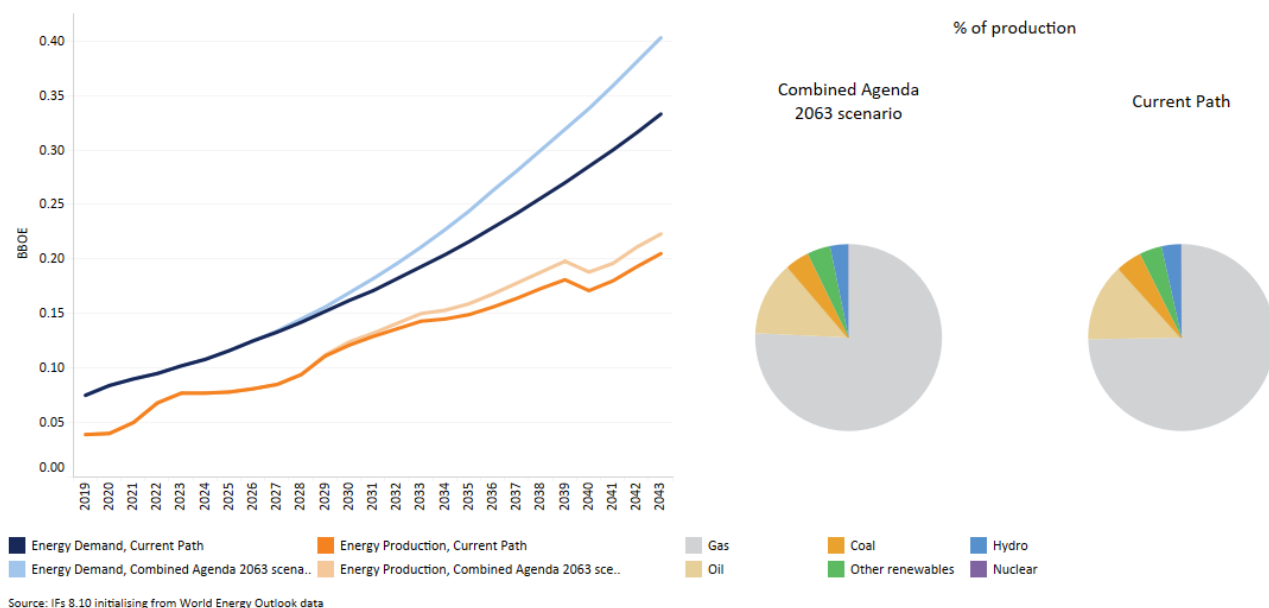
Tanzania emitted only 6.4 million tons of carbon from fossil fuels in 2023, making it the 12th largest emitter in Africa with the 11th largest economy. In the Current Path forecast, emissions will increase more than fourfold to 28.5 million tons of carbon by 2043.

Among the sectoral interventions, the Manufacturing scenario will release significantly more carbon than any other.

In the Combined scenario, due to fast economic growth and increased energy demand, carbon emissions from fossil fuels will increase to 35.9 million tons by 2043, with the seventh most significant emissions from fossil fuels among African countries. In that scenario, the economy of Tanzania will be the sixth largest in Africa. The difference in projected carbon emissions between the Combined scenario and the Current Path forecast is almost 74 million tons in 2043 as Tanzania's economy grows.

Tanzania has emerged as a leading player in the global carbon credit trade. In 2023 Tanzania signed two large **carbon credit projects**, covering 10.2 million hectares, roughly 21% of its forest resources. The projects with Blue Carbon, based in UAE, and Carbon Tanzania, a locally based company, allows a polluter to buy a credit which is worth one ton of carbon dioxide with the funds intended to go towards carbon-lowering schemes, thus offsetting the CO<sub>2</sub> that was emitted.

Chart 37: Energy demand and production by type in Current Path and Combined Agenda 2063 scenario, 2019-2043



Source: IFS 8.10 initialising from World Energy Outlook data

Chart 37 compares energy production in the Current Path forecast with the Combined Agenda 2063 scenario in six types: oil, gas, coal, hydro, nuclear and other renewables. The data is converted into billion or million barrels of oil equivalent (BBOE or MBOE) to allow for comparisons between different sources. Note that energy production could be for domestic use or export. The Current Path forecast for Tanzania already includes the completion of the 2 115MW [Rufiji hydroelectric scheme](#) and assumes a positive investment decision on the exploitation of Tanzania's substantial natural gas endowment.

According to the [IMF](#), a site for the onshore LNG plant has been identified in the Lindi region and the state-owned Tanzanian Petroleum Development Corporation (TPDC), which is responsible for the acquisition of the LNG site, commenced with the associated compensation processes in 2020. Several steps, including amending relevant laws, preparing the project blueprints, and environmental assessment are required before a final investment decision on the project is made, possibly in 2025 or thereafter. The investment decision will be followed by a development and construction phase, expected to last four to five years.

Tanzania should experience increasing FDI during the project's implementation period of 2026-30 and mid-life investment period of 2038-2043, and gas exports and consumption during 2030-2059 ([Stanbic, 2022](#)). According to the IMF: 'The large investment during the construction and development phase will likely have consequences to economic activity and the current account. Production of gas will also have impact on GDP, exports, and fiscal revenue. More importantly, if well-managed and invested, the fiscal revenue from gas exports will enable the government to build the human and physical capital of Tanzania and raise its growth potential.' The government would have to borrow about US\$3.2 bn to US\$4.8 bn, depending on its equity share, increasing public sector debt by the same amount. During the production and exports phase, however, the government will benefit from substantial amounts of revenue from its share in production, royalties, and taxes.

Tanzania's total energy production was 77 MBOE in 2023, while demand was equivalent to 102 MBOE, reflecting a substantial energy import dependence. By 2043, production is estimated to exceed 205 MBOE in the Current Path forecast, but energy demand will have increased to 333 MBOE. In the combined scenario production will increase to 223 MBOE and demand to 403 MBOE since Tanzania's economy is 48% larger. Whereas, in 2023, Tanzania imported roughly 30% of its domestic energy demand; by 2043, that would increase to 41% in the Current Path and increase further to 46% in the Combined Agenda 2063 scenario.

The country's energy production mix heavily relies on fossil fuels, with 48% from oil, 26% from gas, 18% from coal, 6% from hydro and 2% from other renewables in 2023.

Growth in renewable energy sources will be moderate from 8% in 2023 to 8% in 2043 (Combined scenario), significantly below most African countries.

## Endnotes

1. World Bank Group, [Tanzania: Mainland Poverty Assessment](#), Executive Summary, September 2020, p 27

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## About the authors

Dr Jakkie Cilliers is the ISS's founder and former executive director. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the Institute. His 2017 best-seller *Fate of the Nation* addresses South Africa's futures from political, economic and social perspectives. His three most recent books, *Africa First! Igniting a Growth Revolution* (March 2020), *The Future of Africa: Challenges and Opportunities* (April 2021), and *Africa Tomorrow: Pathways to Prosperity* (June 2022) take a rigorous look at the continent as a whole.

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