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Chad

Chad: Scenario Comparisons

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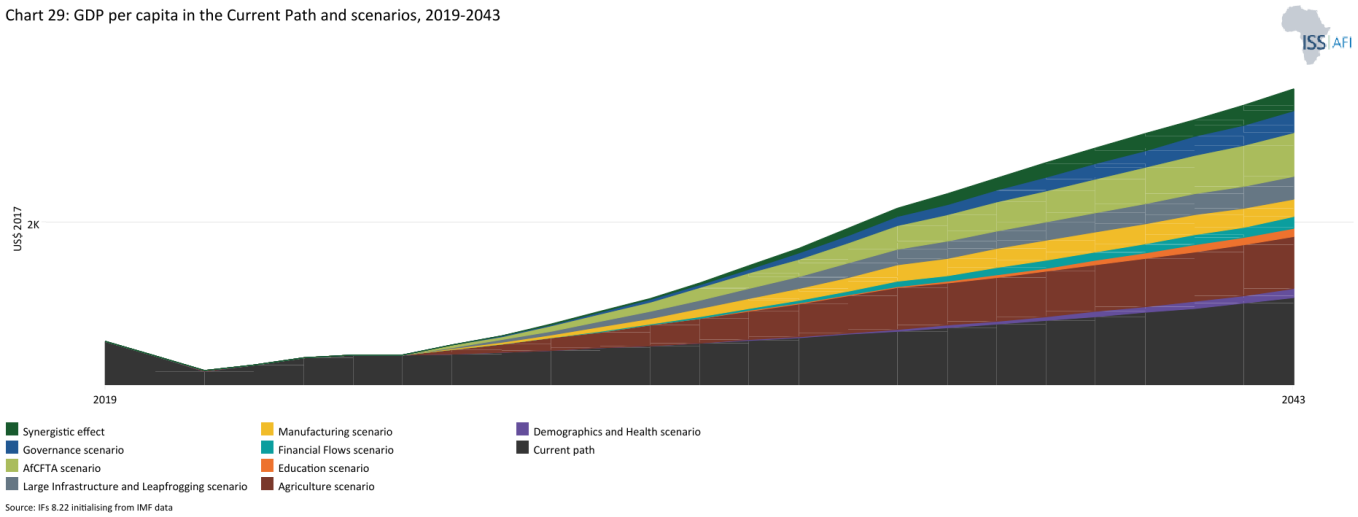
Chart 29: GDP per capita in the Current Path and scenarios, 2019-2043



Source: IFs 8.22 initialising from IMF data

Chart 29 presents GDP per capita in purchasing power parity (PPP) in the Current Path and each of the eight sectoral scenarios, plus the synergistic effect and the Combined scenario. The data is from 2019 with a forecast to 2043.

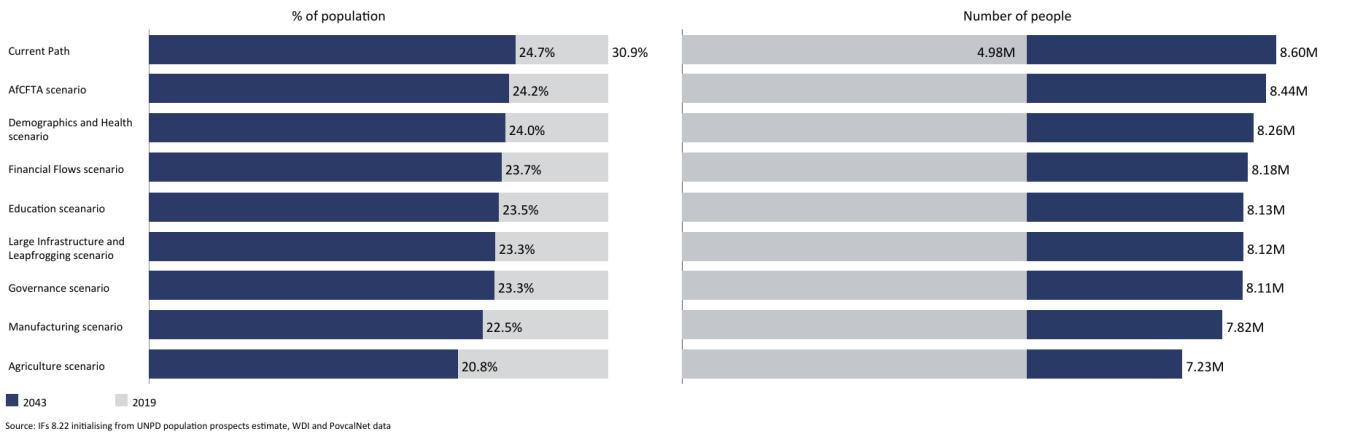
This section compares the impacts of each sectoral scenario on GDP per capita.

The agriculture development scenario has the most significant positive impact on GDP per capita with an increase of US$201 above the Current Path in 2043. The second, third and fourth most significant impact on GDP per capita is achieved in the AfCFTA scenario, US$170 , above the Current Path, the Large Infrastructure and Leapfrogging scenario (US$89), and the Governance scenario (US$84) above the Current Path. The Demographics and Health and Education scenarios are the least impactful in terms of GDP per capita, with an increase of US$36 and US$34 (respectively) compared with the Current Path in 2043.

These sectors are, however, not isolated; they are strongly interlinked. For instance, infrastructure and human capital development are crucial for industrialisation and economic diversification. Similarly, the provision of rural roads is vital for agriculture commercialisation and food self-sufficiency. Agriculture can also pave the way to manufacturing through agro-processing while improving governance and security cuts across all sectors. Thus, a holistic approach or a coordinated policy push across industries is the best option to achieve inclusive, sustained growth in Chad. Therefore, the Combined scenario combines all the sectoral scenarios; it represents an integrated development push to remove the binding constraints on sustained, inclusive growth and development in Chad.

The Combined scenario has a much greater impact on GDP per capita compared to the individual sectoral scenarios. By 2043, the GDP per capita of Chad (PPP) is US$2 511, US$810 larger than in the Current Path, indicating that an integrated push across all the development sectors could significantly improve the living standard of Chadians.

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



Source: IFs 8.22 initialising from UNPD population prospects estimate, WDI and PovcalNet data

Chart 30 presents poverty in the Current Path and for each scenario, from 2019 to 2043. The user can select the number of extremely poor people or the percentage of the population.

All the scenario interventions contribute to poverty reduction in Chad (Chart 30); however, the Agriculture scenario contributes most significantly to reducing the extreme poverty rate by 2043. In the Agriculture scenario, the poverty rate will decline to 20.8% by 2043, compared to the Current Path of 24.7%. This is equivalent to 1.3 million fewer poor people than the Current Path in 2043. Agriculture employs 80 per cent of the workforce in Chad. Enhancing productivity in the sector could increase incomes for millions of people and reduce poverty in Chad.

The Agriculture scenario is followed by the Manufacturing and the Governance scenarios in terms of poverty reduction. The extreme poverty rate in Chad by 2043 will be 22.5% in the Manufacturing scenario and 23.3% in the Governance scenario compared with the Current Path of 24.7% in the same year.

Like in other African countries, many impoverished individuals in Chad find themselves entrenched in low-productivity sectors and informal service-based activities. Boosting the manufacturing sector will generate inclusive growth by facilitating the transition of low-income individuals from these sectors to higher productivity areas. This structural shift not only boosts incomes but fosters a positive cycle wherein the growth of productive employment, capacities and earnings mutually reinforce one another, propelling economic expansion and poverty reduction.

Also, good governance as embodied, for example, in the control of corruption and the design and implementation of effective regulatory policies, significantly improves the ability of the poor to participate in and benefit from economic growth. Corruption, for instance, affects poor people by reducing the government's ability to allocate public services in an efficient and equitable manner.

In the AfCFTA scenario, the poverty rate remains slightly below the Current Path. By 2043, the poverty rate in the AfCFTA scenario is 24.3% compared with 24.7% on the Current Path in the same year. This implies that the economic growth that the full implementation of the AfCFTA is expected to generate in Chad will likely not be inclusive. Many studies conclude that the benefits of trade liberalisation in terms of poverty reduction are not automatic, but rather depend on good domestic policies. This implies that trade liberalisation could have a marginal impact on poverty reduction or increase poverty in the absence of the right complementary policies. Policies could include carefully designed trade adjustment assistance programmes and training in new skills that would be valuable in the growing sectors of the economy. Chad authorities could also target the most critical sectors for the poor through policies to increase their productivity and efficiency of trade.

In the Combined scenario, by 2033, 19% of Chadians will be living in extreme poverty compared to 28.4% in the Current Path. This represents about 2.4 million fewer people living in extreme poverty compared to 7.3 million people in the Current Path. By 2043, the extreme poverty rate at the US$2.15 poverty threshold will decline to roughly 12% (4 million people) compared to 24.7% (8.6 million people) in the Current Path. Even though the Combined scenario does not completely eliminate extreme poverty in Chad, its materialisation could have a significant impact on poverty reduction in the country.

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

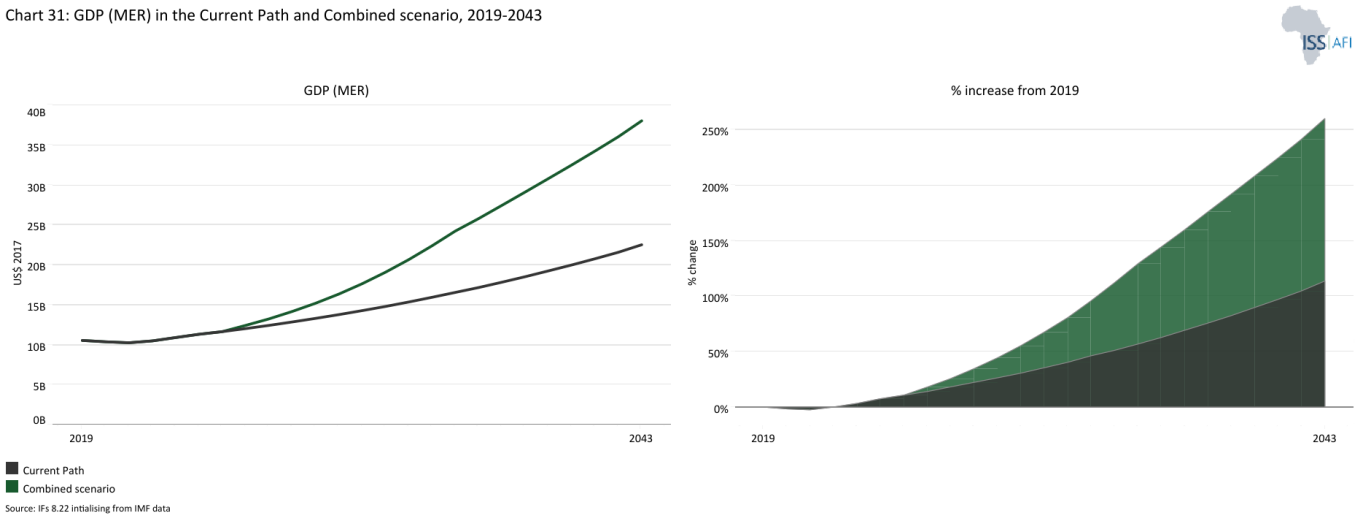
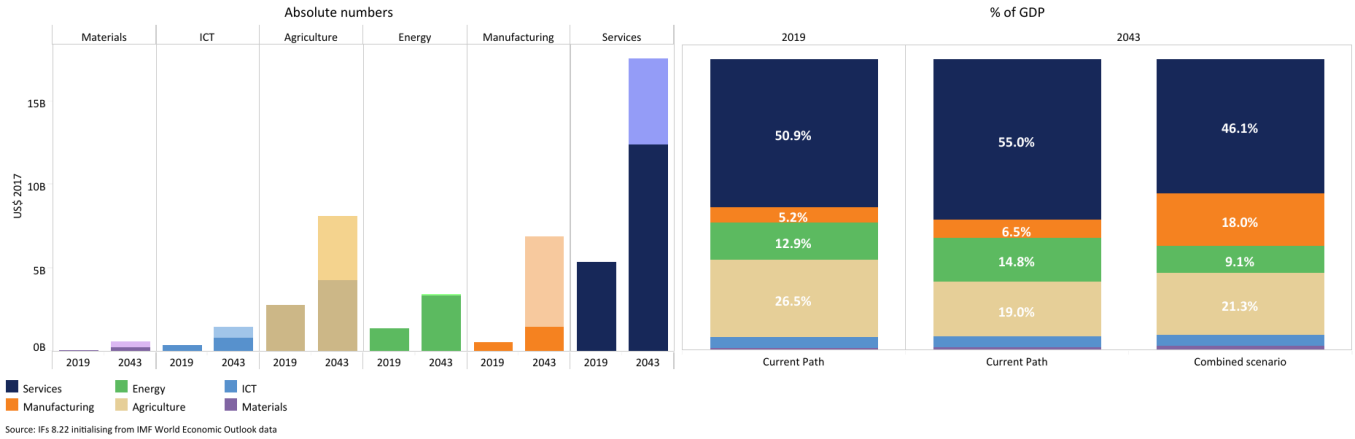


Chart 31 presents GDP in the Current Path and in the Combined scenario, from 2019 to 2043. The data is in US$ 2017 and at market exchange rates (MER).

The Combined scenario incorporates all eight sectoral scenarios: Governance, Demographics and Health, Education, Large Infrastructure and Leapfrogging, Agriculture, Manufacturing, AfCFTA and Financial Flows.

Assuming that the Combined scenario is implemented, Chad could expect a significant improvement in its growth prospects. In this scenario, the average growth rate between 2025 and 2043 is 6.5% compared with 3.7% on the Current Path over the same period. The size of the Chadian economy measured in GDP at the market exchange rate (MER) is US$15.5 billion larger than the Current Path in 2043. On the Current Path, Chad will have the 37th-largest economy in Africa by 2043. If the Combined scenario is implemented, the country will have the 29th-largest economy in Africa in 2043 with a GDP of about US$38 billion, assuming a business-as-usual scenario (Current Path assumptions) for other countries.

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



Source: IFs 8.22 initialising from IMF World Economic Outlook data

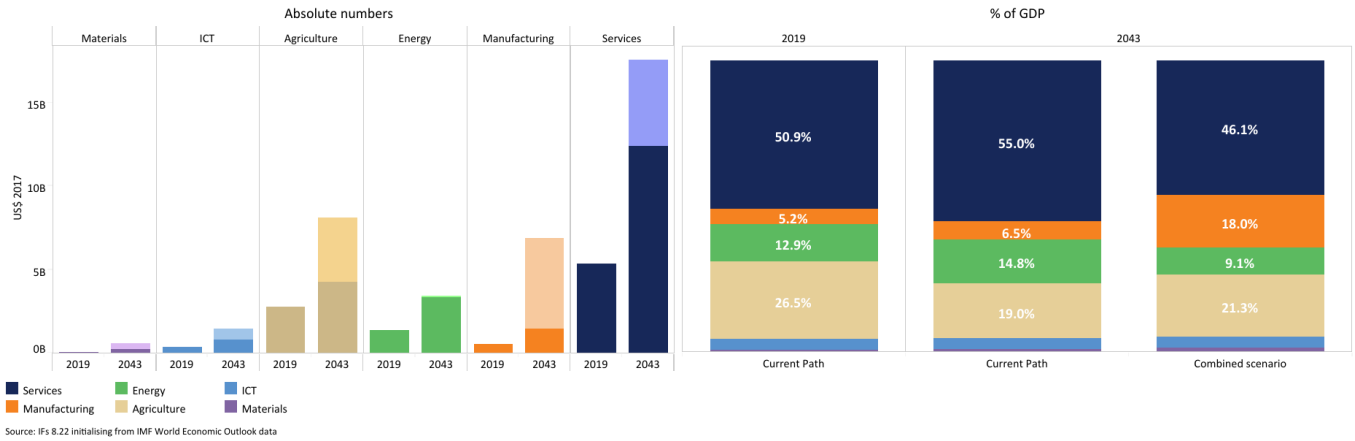
Chart 32 compares the value added by sector in the Current Path and Combined scenario, from 2019 to 2043. The data is in US$ 2017 and as a percentage of GDP.

Implementing the Combined scenario will increase the value-add of all the sectors above the Current Path across the forecast horizon to 2043 (Chart 32).

In 2043, the agriculture value-add in the Combined scenario is about US$3.8 billion, larger than the Current Path in the same year. The manufacturing and services value-add are US$5.4 and US$5.1 billion, respectively, higher than the Current Path in 2043.

Implementing the Combined scenario could accelerate the structural transformation of the Chadian economy, with the share of the manufacturing sector in GDP increasing from 4.8% in 2023 to 18% in 2043, 12.5 percentage points of GDP above the Current Path in 2043. The share of the agriculture sector in GDP declines from 28.6% in 2023 to 21.2% in 2043 as a result of the structural transformation of the economy. The services sector remains the dominant sector in the economy, although its contribution to GDP in the Combined scenario (46.2% in 2043) is lower than the Current Path of 55% in the same year.

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



Source: IFs 8.22 initialising from IMF World Economic Outlook data

Chart 33 presents the size of the informal sector as percentage of the total economy in the Current Path and in the

Combined scenario, from 2019 to 2043.

With limited formal sector opportunities, most of the workforce in Chad is employed in the low-value-added informal sector. The size of Chad's informal economy was estimated at 34.6% of GDP in 2023, above the average of 29.3% for low-income Africa. On the Current Path, the level of informality will likely decline to 31.5% of GDP by 2043, still above the average of 27% for low-income Africa in the year. Assuming that all policies and reforms in the Combined scenario are implemented, the size of the informal sector could significantly decline to 23% of GDP in 2043, below the average of 26.8% for low-income Africa. As a result, informal labour as a percentage of total labour in Chad could decline to 41.3 compared with 61.5 in the Current Path in 2043.

Chart 34: Life expectancy in the Current Path and Combined scenario, 2019-2043

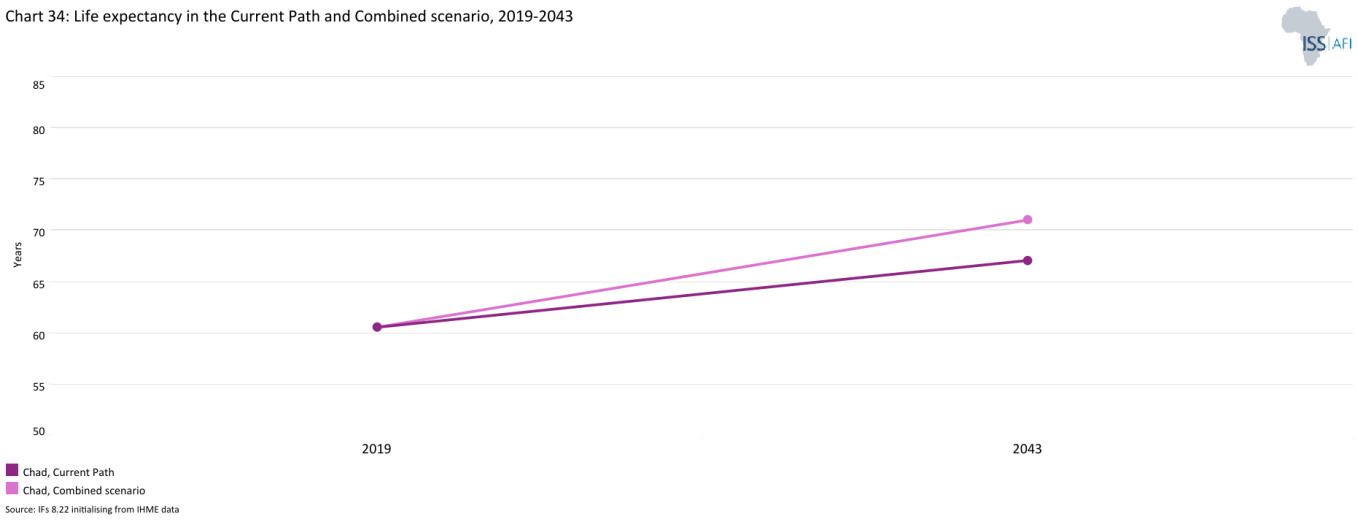


Chart 34 shows the trends in life expectancy in the Current Path and the Combined scenario from 2019 to 2043.

In Chad, life expectancy at birth (years) has improved by 8.5 years from 52.6 years in 2000 to 61.1 years in 2023. Life expectancy for women stood at about 63 years in 2023 compared with 59.5 years for men. On the Current Path, life expectancy at birth will improve to 67 years by 2043. In the Combined scenario, the average Chadian could expect to live four years longer at 71 years, one year below the average for low-income Africa in the same year.

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

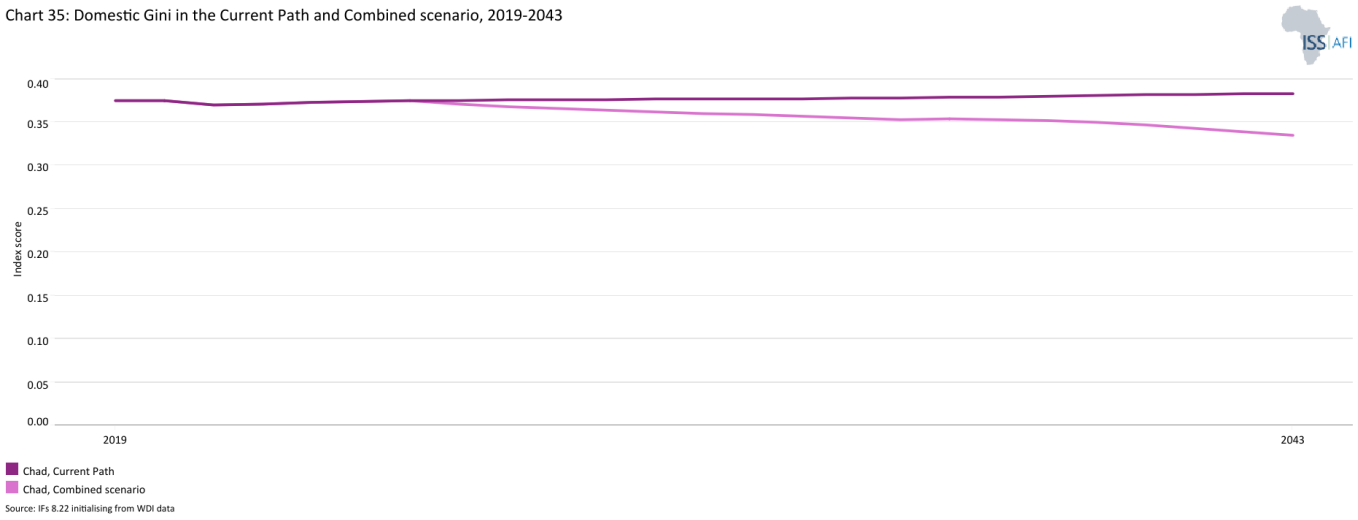
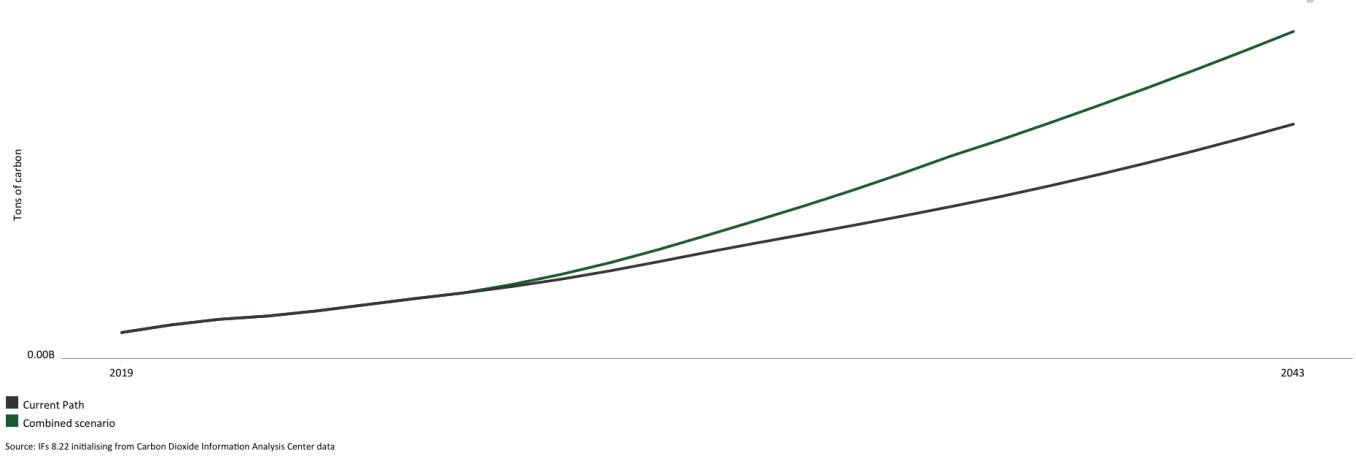


Chart 35 compares the Gini coefficient in the Current Path with the Combined scenario in 2023 and 2043.

The Gini coefficient is a standard measure of the level of inequality. In Chad, oil has constituted the main natural resource since 2003. Before this date, agriculture and livestock were the two main economic activities in the country. However, income from oil exploitation has not been equally distributed. The intensity of income inequality captured by the Gini index increased by 8.8%, from 0.398 to 0.433, over the period 2003-2011 before declining to 0.375 in 2018 and 0.373 in 2023. On the Current Path, income inequality in Chad will slightly increase with a Gini coefficient of 0.383 by 2043. The implementation of the Combined scenario could however generate inclusive growth and improve income distribution in the country. In the Combined scenario, the Gini index will decline to 0.33 by 2043, 12% lower than the Current Path in the same year.

Chart 36: Carbon emissions in the Current Path and Combined scenario, 2019-2043
Million tons of carbon (note, not CO2 equivalent)



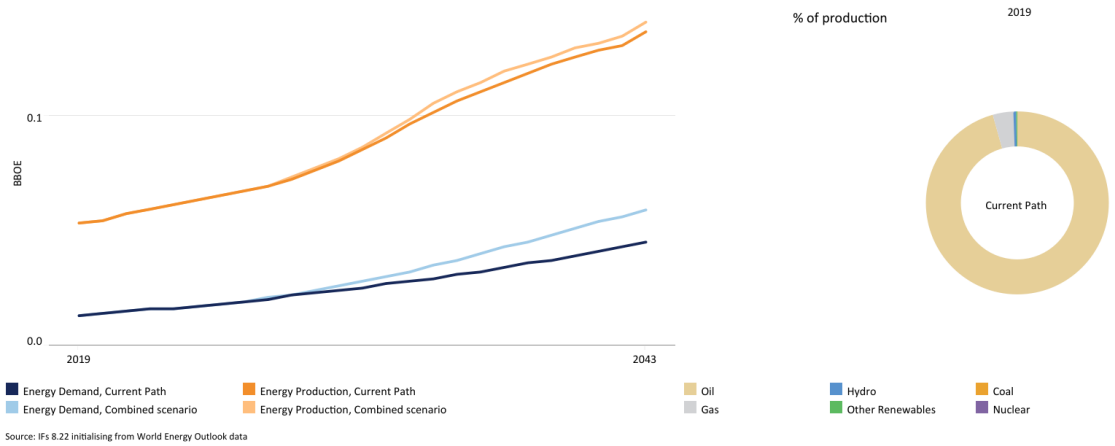
Source: IFs 8.22 initialising from Carbon Dioxide Information Analysis Center data

Chart 36 compares carbon emissions in the Current Path with the Combined scenario from 2019 to 2043. Note that the data is in million tons of carbon, not CO_2 equivalent.

In 2023, Chad released about 1 million tons of carbon, and in the Current Path, it will release 5 million tons by 2043. Although carbon emissions are set to increase with increased economic activity, Chad's carbon emissions come from a very low base. Like many developing countries, Chad 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 materialisation of the Combined scenario and the associated rapid economic growth in Chad will increase carbon emission to 7 million tons by 2043, two million tons above the Current Path.

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



Source: IFs 8.22 initialising from World Energy Outlook data

Chart 37 compares energy demand and production in the Current Path with the Combined scenario from 2019 to 2043. Production is done in six types, namely oil, gas, coal, hydro, nuclear and other renewables. The data is converted into billion barrels of oil equivalent (BOE) to allow for comparisons. Note that energy production could be for domestic use or for export.

The total energy produced in Chad in 2023 stood at 61 million BOE compared with a total energy demand of 16 million BOE leading to an excess production of 45 million BOE. On the Current Path, total energy production will continue to outgrow demand so that by 2043, excess energy production will be equivalent to 92 million BOE compared to an excess of 81 million BOE in the Combined scenario, reflecting an increase in energy demand in the Combined scenario.

However, the aggregate energy production and demand in Chad can be misleading as total energy demand outweighs production in all types of energy except oil. Since 2003, oil has been the main source of energy produced in Chad. Energy production from other sources is negligible. In 2023, the total amount of oil produced in Chad amounted to 58 million BOE, constituting about 95% of total energy production.

On the Current Path, this trend is likely to persist with oil production projected to represent 94.8% of total energy production in 2043. The composition of energy production in the Combined scenario will not significantly differ from the Current Path. Oil production will still constitute about 94% of total energy production followed by gas (4.9%).

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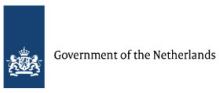

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About the authors

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

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