

Sudan

Sudan: Current Path

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Sudan: Current Path forecast

Demographics: Current Path

• Economics: Current Path

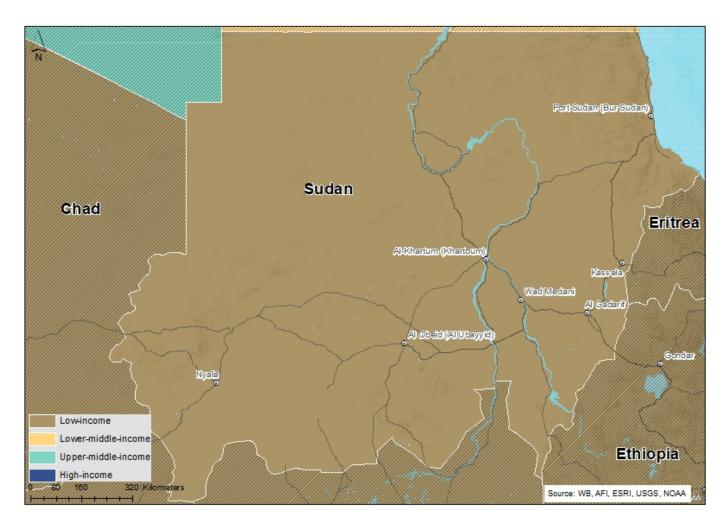
Poverty: Current Path

Carbon Emissions/Energy: Current Path



Sudan: Current Path forecast

Chart 1: Political map of Sudan



This page provides an overview of the key characteristics of Sudan 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.

The Republic of the Sudan is geographically located at the crossroads of sub-Saharan Africa and the Middle East and

stretches across the Red Sea. Sudan shares borders with seven countries including Libya and Egypt to the north, Chad to the west, the Central African Republic to the south-west, South Sudan to the south, Ethiopia to the south-east and Eritrea to the east.

Prior to the secession of South Sudan in 2011, Sudan was the largest African country, with an area that represented more than 8% of the African continent and almost 2% of the world's total land area.

Currently, Sudan has a surface area of 1.886 million km² and a population of more than 42.8 million as of 2019. The country is a member of the Intergovernmental Authority on Development (IGAD), an eight-country regional bloc in Africa with ambitions to embark on regional integration.

For most of its independent history, the country has been beset by internal conflicts that have weakened its ability to play a leadership role in the region. Continuous food price hikes led to the December 2018 demonstrations that resulted in the removal of President al-Bashir from power in April 2019. This led to the formation of a transitional government in September 2019. The power-sharing agreement between the military and civilian forces, expected to last 39 months, allowed a civilian prime minister to lead the government under the authority of a presidential sovereign council to be chaired by the military during the first 21 months followed by a civilian during the remaining 18 months. However, the transition was interrupted on 25 October 2021 when the Sudanese military, led by General Abdel Fattah al-Burhan, took control of the government in a military coup.

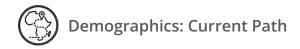
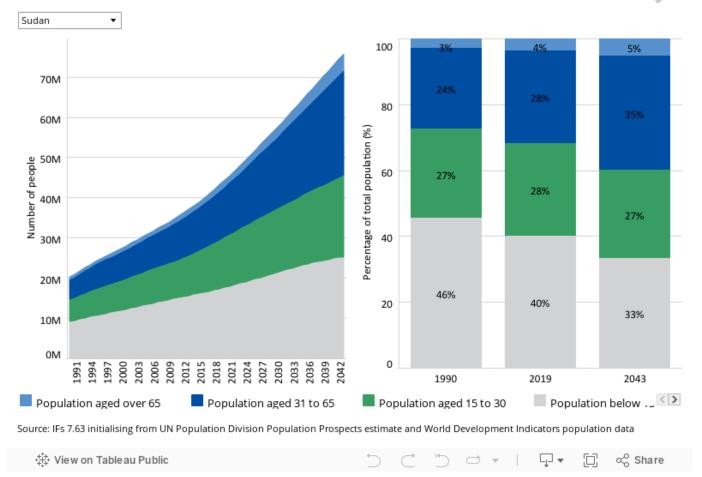


Chart 2: Population structure in CP, 1990–2043

By cohort and % of population





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

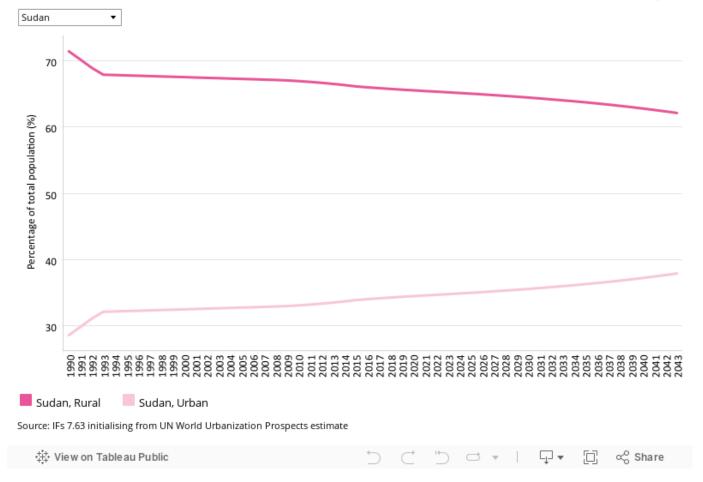
The population of Sudan is growing at a quick rate of 2.42% per year. The Sudanese population is highly mobile because of the prevalence of pastoral livelihoods. About one-tenth of the population is estimated to follow a nomadic lifestyle. Also, the country hosts 1.1 million refugees and more than 3 million internally displaced persons (IDPs).[1] Recently, it saw new displacements from Ethiopia as a result of clashes in Ethiopia's Tigray region.

The population of Sudan was 42.8 million in 2019, and on the Current Path, it is forecast to be 75.7 million by 2043, a 76.8% increase over the next 24 years.

Like many countries in sub-Saharan Africa, the population of Sudan is predominantly young with 28% of it under the age of 30, and 40% under the age of 15 in 2019. This means that a large portion of the population is dependent on the workforce to provide for its needs. On the Current Path, the population under 15 years is expected to decline to reach 33% of the population by 2043. The share of the elderly (65 years and older) was 4% in 2019, and it is projected to slightly increase to 5% by 2043. The structure of Sudan's population is typical of countries with high fertility rate and low life expectancy.

Chart 3: Urban and rural population in CP, 1990–2043 % of population





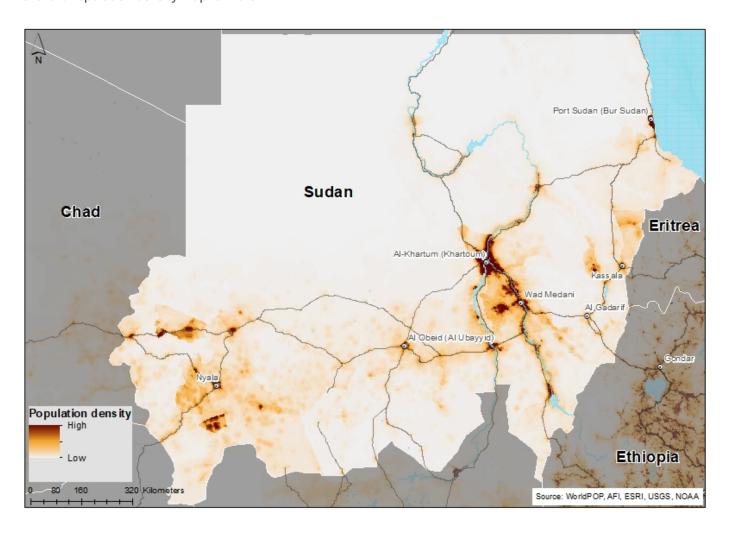
There has been considerable rural to urban migration in Sudan in the decades since independence. The urban population increased from 8.3 to 18% of the total between 1956 and 1972, and at the time of the south's secession in 2011 the fraction of the population that is urban was about one-third.[2]

In 2019, Sudan had 34.4% of its population residing in urban areas. This is about 3 percentage points above the average of 31% for low-income countries in Africa. On the current development trajectory, the rate of urbanisation in Sudan is projected to increase to 37.9% by 2043, while the rural population will have dropped to 62.1% from 65.6% in 2019.

Urbanisation has been more pronounced in areas of the country where trade is more highly developed. With few exceptions, all major cities and towns in Sudan lie along the Nile or one of its tributaries or along the coast of the Red Sea. Recurrent famine and the long-running civil war have brought more than 3 million southern and western Sudanese to the capital since 1983.[3] The largest urban area is that of the capital, Khartoum, and nearby Omdurman and Khartoum North, located roughly in the centre of the country.

If not well managed, urbanisation could lead to problems such as unemployment, poverty, inadequate health, poor sanitation, expansion of urban slums and environmental degradation. In Sudan, the population living in slums (the percentage of the urban population) was 88.4% in 2018, down from 93.6% in 2016.[4] Good urban planning could foster an inclusive economy by improving service delivery and reducing urban poverty.

Chart 4: Population density map for 2019



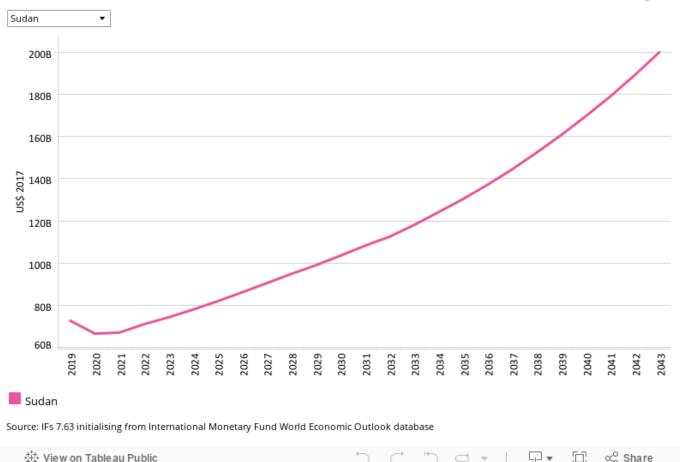
Sudan has a rather low population density as a whole, but due to the lack of adequate water supplies in many parts of the country, half of the population lives on just over 15% of the land. By contrast, one-quarter of Sudan is virtually uninhabited, including the deserts of the north and north-west.[5]

The population density of Sudan amounted to 0.25 inhabitants per hectare in 2019, below the average for low-income countries in Africa. The population density is forecast to increase to 0.44 inhabitants per hectare by 2043, below the projected average of 0.74 inhabitant per hectare for Africa low-income countries.









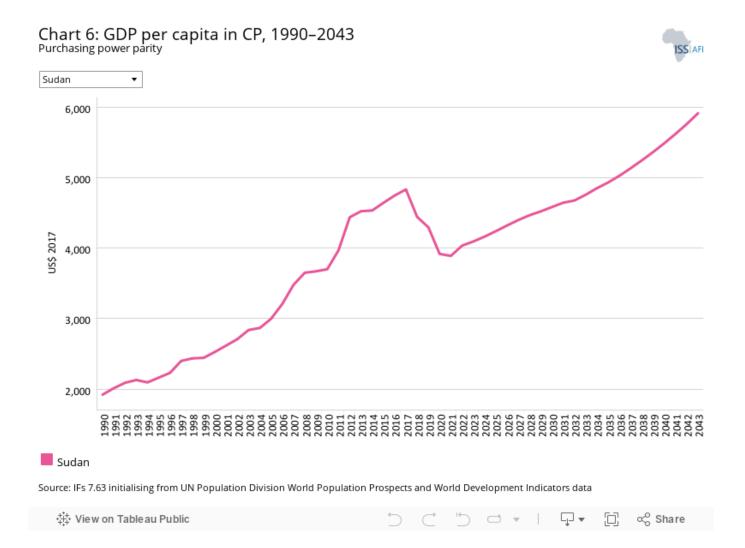
The Sudanese economy suffered from US sanctions and received a massive blow with South Sudan's secession. The secession of South Sudan led to multiple economic shocks. The biggest one being the loss of 75% of its oil resources, which accounted for more than half of Sudan's government revenue and 95% of its exports. This has reduced economic growth and resulted in double-digit consumer price inflation, which, together with increased fuel prices, triggered violent protests in the country.

About three years after former president al-Bashir was overthrown, Sudan is still trapped in political instability, economic mire with currency depreciation, rising inflation and food shortages.

The removal of Sudan from the US State Sponsors of Terrorism list, reportedly in exchange for its recognition of Israel, is expected to open the door for aid, debt relief, trade and investment which are badly needed to pull the country out of its severe economic crisis compounded by COVID-19. The October 2021 military coup that toppled the transitional government will constrain economic recovery which is heavily reliant on international support. Some key donors have made clear that their support is contingent on the political transition moving forward.

In 2019, the size of the Sudanese economy (GDP) was US\$72.7 billion. By 2043, the economy is projected to grow to about US\$200 billion, making it the 11th largest economy in Africa under the Current Path assumptions for other countries. Substantial and sustainable economic development in Sudan will be contingent on progress on inclusive politics and the

rule of law.

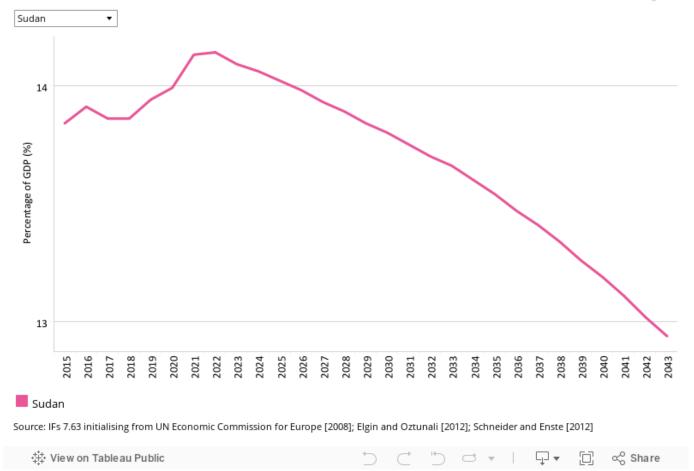


Although many of the charts in the sectoral scenarios also include GDP per capita, this overview is an essential point of departure for interpreting the general economic outlook of Sudan.

The GDP per capita (PPP) of Sudan was US\$4 298 in 2019. It declined to US\$3 920 in 2020 due to the economic slowdown associated with the COVID-19 pandemic. On the Current Path, the GDP per capita (PPP) is forecast to increase to US\$5 918 by 2043. This will be US\$2 128 above the projected average of US\$3 790 for low-income countries in Africa in the same year.

Chart 7: Informal sector value in CP, 2015–2043



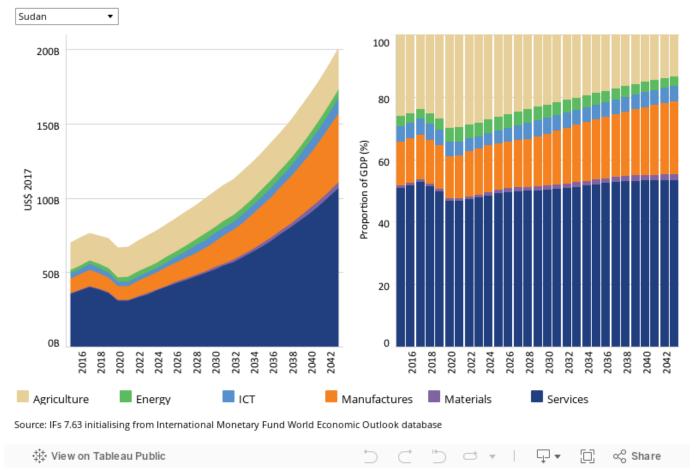


The informal economy comprises activities that have market value and would add to tax revenue and GDP if they were recorded. Countries with high informality have a whole host of development challenges, higher poverty, lower per capita incomes, greater inequality, less human capital, weaker productivity investment, and weaker governance as well. With the rise of unemployment, absence of unemployment insurance and decreasing job opportunities in the formal sector, many unemployed people have found themselves in the informal sector.

In 2019, the size of the informal economy was equivalent to 13.9% of the country's GDP. It increased to 14.1% in 2021 as the COVID-19 crisis and its associated economic crisis pushed many people out of the formal economy. Although the informal economy provides a safety net for the country's large and growing working-age population, it impedes economic growth and hinders improved economic policies. Reducing informality would allow more people to benefit from better wages and redistributive measures. It would also increase tax revenue and government capacity.

Chart 8: Value added by sector in CP, 2015–2043
Billions US\$ 2017 and % of GDP





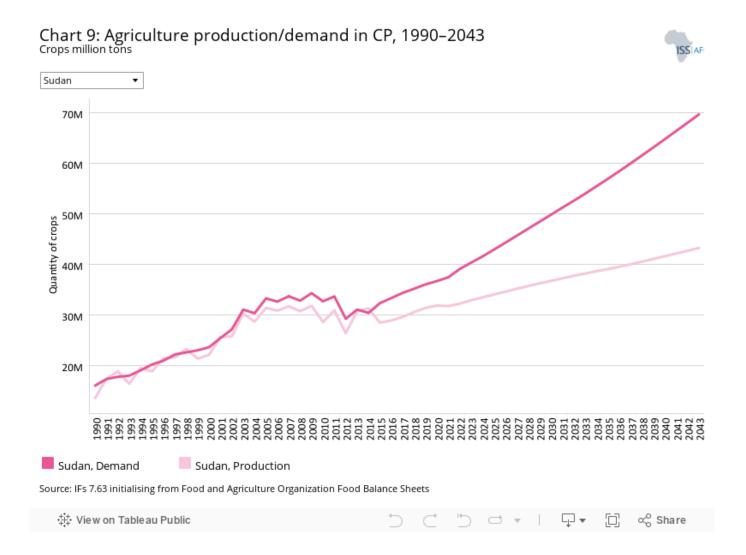
The IFs platform uses data from the Global Trade and Analysis Project (GTAP) to classify economic activity into six sectors: agriculture, energy, materials (including mining), manufacturing, services and information and communication technologies (ICT). Most other sources use a threefold distinction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

Sudan's economy is dominated by the service and agriculture sectors, which make up over 70% of GDP. In 2019, the service sector accounted for 49.7% of the country's GDP (US\$36.1 billion), while the agriculture sector, the second largest contributor to GDP, represented 26.8% (US\$19.5 billion). The manufacturing sector makes the third largest contribution to the country's GDP. Manufacturing value added has been stagnant for decades in Sudan. Moreover, the oil boom of the 2000s contributed to worsening non-oil sector performance by reducing public incentives to invest in and support diversified economies. In 2019, the manufacturing sector accounted for 13.9% of GDP (US\$10.1 billion).

Across the Current Path forecast horizon, the service sector remains the dominant sector of Sudan's economy. Thus, the share of the service sector in GDP is projected to reach 53.4% (US\$106.8 billion) by 2043.

As a result of the structural transformation of the economy, the share of the agriculture sector in GDP is forecast to decline to 13.4% (US\$26.7 billion) by 2043. The manufacturing sector is forecast to overtake agriculture by 2035 to become the second largest contributor to GDP in such that by 2043, manufacturing will account for 23.2% of GDP. This sounds good for the development prospects of the country as it will make it contribute to sustain growth, create jobs and reduce poverty.

The contributions of the ICT and materials sectors to Sudan's GDP remain below 5% across the forecast horizon.



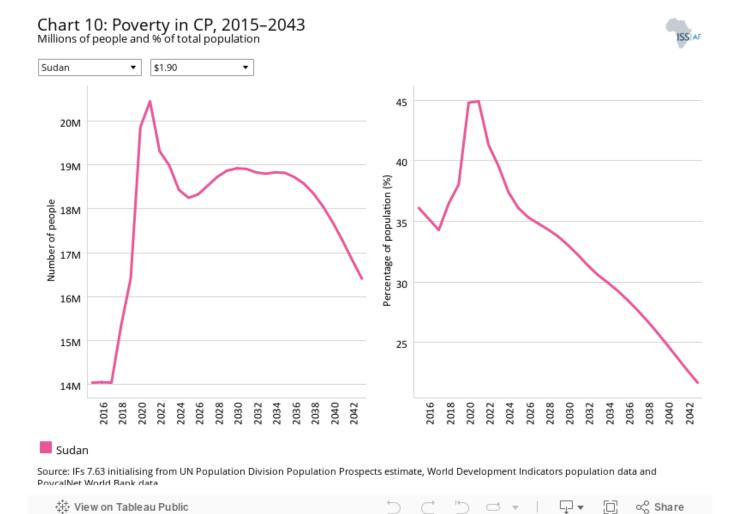
The data on agricultural production and demand in the IFs forecasting platform initialises from data provided on food balances by the Food and Agriculture Organization (FAO). IFs contains data on numerous types of agriculture but aggregates its forecast into crops, meat and fish, presented in million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

In Sudan, the agriculture sector employs about 80% of the workforce. The country has vast areas of agricultural land (about 200 million acres of arable land) and adequate water resources (25% share of Nile water resources under regional agreements). In fact, due to Sudan's loss of access to most of its oil revenue with South Sudan's secession and Sudanese authorities' desperate need for revenue, a new focus on agriculture has resurrected its long-standing dream of becoming an agricultural powerhouse.[6]

Due to a high dependence on rain-fed agriculture, lack of infrastructure and investment in agriculture, and poor governance, agricultural yields and thus productivity are quite low in Sudan. As a result, many people suffer from food insecurity and malnutrition.

Agricultural crop production in 2019 stood at 31.4 million metric tons, lower than the demand of 36 million metric tons in the same year. Across the forecast horizon, the excess demand will continue to increase. In 2043, agricultural crop production and demand are forecast to be 43.2 million metric tons and 69.7 million metric tons, respectively. This is equivalent to excess demand for crops of roughly 26.5 million metric tons that will likely be met through imports.





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 (SDG) 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.

Rampant government corruption and unemployment are major causes of poverty in Sudan. While individuals living in households with unemployed household heads represent only 2.4% of the total population, they account for 50% of the population living in extreme poverty.[7] Also, the incidence of poverty is highly uneven across states in Sudan. For example, the northern states and the districts of Khartoum City have the lowest poverty rate while poverty remains severe in the southern and the western states. The poverty rate in the Darfur states is more than 60%.[8]

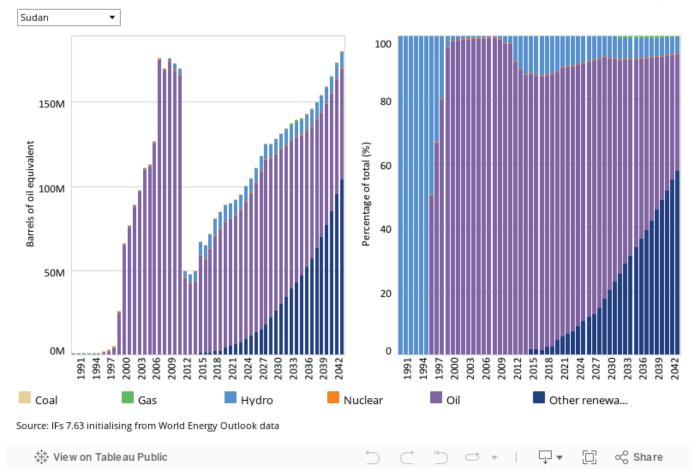
Based on the US\$1.90 2011 purchasing power parity poverty line, the poverty rate in Sudan was 38% in 2019, below the average of 47.7% for low-income countries in Africa. The extreme poverty rate increased to about 45% in 2020, probably due to the economic impact of the COVID-19 pandemic and political instability.

In the Current Path forecast, the extreme poverty rate at US\$1.90 is projected to decline to 21.7% (16.4 million people) by 2043, below the projected average of 25.1% for low-income countries in Africa in the same year.



Chart 11: Energy production by type in CP, 1990–2043 Barrels of oil equivalent and % of energy production





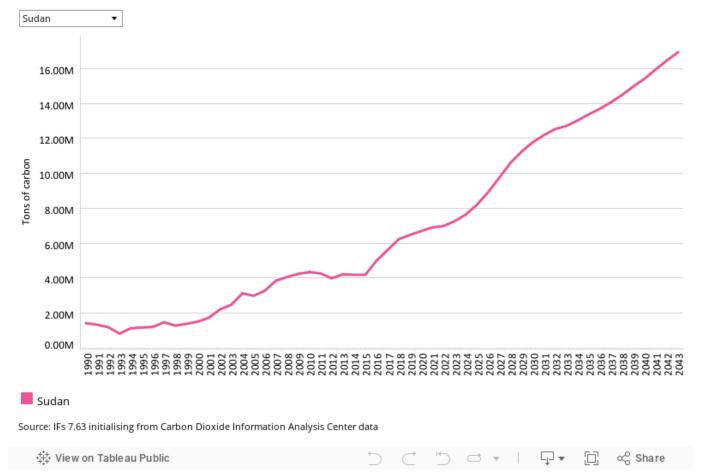
The IFs platform forecasts six types of energy, namely oil, gas, coal, hydro, nuclear and other renewables. To allow comparisons between different types of energy, the data is converted into billion barrels of oil equivalent (BBOE). The energy contained in a barrel of oil is approximately 5.8 million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

Prior to the secession of South Sudan, Sudan as a whole was estimated to have 6 billion barrels of oil and 3 trillion cubic feet of natural gas reserves. As most oil blocks are in the territory of South Sudan, the oil producing capacity of Sudan was heavily diminished by the secession. Crude oil production declined from about 130 000 barrels per day in 2013 to 72 000 barrels per day in 2019.[9]

Oil accounted for 86% of the total energy produced in Sudan in 2019 (73 million barrels of oil). On the Current Path, oil will account for 37% of energy production by 2043. The energy production from other renewable sources is currently in the embryonic stage. However, the share of other renewable energy in the total energy production is forecast to exceed that of oil by 2040 to reach 58% by 2043 versus 37% for oil and 5% for hydro.

Chart 12: Carbon emissions in CP, 1990–2043 Million tons of carbon (note, not CO2 equivalent)





Carbon is released in many ways, but the three most important contributors to greenhouse gases are carbon dioxide (CO2), carbon monoxide (CO) and methane (CH4). Since each has a different molecular weight, IFs uses carbon. Many other sites and calculations use CO2 equivalent.

Annual carbon emissions were 6.9 million tons in 2019. On Sudan's current development trajectory, carbon emissions are forecast to reach 16.9 million tons by 2043 — an increase of about 145% between 2019 and 2043. However, Sudan's total carbon emissions in 2043 will only constitute about 0.002% of global carbon emissions.

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

Endnotes

- 1. OCHA-ReliefWeb, Sudan Fact Sheet, September 2021, 28 September 2021
- 2. AS Al-Shahi, Sudan, Britannica
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- 9. K Yeboua and J Cilliers, Development prospects for the Horn of Africa countries to 2040, East Africa Report 42, 20 October 2021, Institute for Security Studies

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Scenarios and forecasting can help Africa identify and respond to opportunities and threats. The work of the African Futures & Innovation (AFI) program at the Institute for Security Studies aims to understand and address a widening gap between indices of wellbeing in Africa and elsewhere in the world. The AFI helps stakeholders understand likely future developments. Research findings and their policy implications are widely disseminated, often in collaboration with in-country partners. Forecasting tools inspire debate and provide insights into possible trajectories that inform planning, prioritisation and effective resource allocation. Africa's future depends on today's choices and actions by governments and their non-governmental and international partners. The AFI provides empirical data that informs short- and medium-term decisions with long-term implications. The AFI enhances Africa's capacity to prepare for and respond to future challenges. The program is headed by Dr Jakkie Cilliers.

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