# Table of contents

- IGAD: Current Path 3
  - IGAD: Current Path forecast 3
- Demographics: Current Path 5
- Economics: Current Path 8
- Poverty: Current Path 14
- Carbon Emissions/Energy: Current Path 16

- Endnotes 18
- Donors and Sponsors 18
- Reuse our work 18
- Cite this research 18
IGAD: Current Path

- IGAD: Current Path forecast
- Demographics: Current Path
- Economics: Current Path
- Poverty: Current Path
- Carbon Emissions/Energy: Current Path

IGAD: Current Path forecast

Chart 1: Political map of IGAD

Source: African Futures

This page provides an overview of the key characteristics of IGAD 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 Intergovernmental Authority on Development (IGAD) trade bloc was formed in 1996 and replaced the previously formed Intergovernmental Authority on Drought and Development (IGADD) formed in 1986. The original members of IGAD were Djibouti, Ethiopia, Kenya, Somalia, Sudan and Uganda, with Eritrea joining in 1993 and South Sudan joining IGAD in 2011. [1] IGAD consists of eight member states, all located in East Africa, with six members, Ethiopia, Eritrea, Somalia, Sudan, South Sudan and Uganda classified as low-income countries, while Djibouti and Kenya are classified as lower
middle-income countries. IGAD faces the same problem as all regional economic communities (RECs) in Africa, namely overlapping membership of member states, which dilutes autonomy and hampers effective intra-REC trade.
IGAD's total population size of 124.7 million in 1990, more than doubled to reach 281.7 million by 2019, with annual population growth rate staying above 2.6% across this period. The rate of growth will gradually decline to 2043, as the REC's total population size rises to 483.7 million people with the growth rates dipping below 2% from 2039. Ethiopia had the largest population size in 2019 constituting about 40% of IGAD's population, and will see rapid growth to 2043, while other members such as Kenya, Uganda and Sudan will grow at a slower rate. Indeed, the Ethiopian populace totalled 112.2 million people in 2019 and will grow to 192.2 million by 2043, an increase of 80 million people. The next biggest increase will come from Uganda at 39.9 million, followed by Sudan at 32.6 million and Kenya at 31.2 million. Uganda will see the largest percentage increase, 91.2%, of these four countries. The other four members, Djibouti, Eritrea, Somalia and South Sudan, only accounted for 12.5% of the REC's total population in 2019, with their share dropping below 10% by 2043.

The composition of IGAD's population will become more mature from 2019 to 2043: whereas 59% of the population were aged above 15 years in 2019, 67% will fall in this age bracket by 2043. Specifically, 63% of the population will be aged between 15 and 64 years by 2043, meaning the ratio of working-age individuals to dependants (at 2.2 to 1) will exceed the minimum ratio for a demographic dividend which will be favourable for increased development in the REC. Ethiopia's population structure is important to consider, as the country will constitute almost 40% of IGAD's total population. The country will also see its population mature and increase the number of people falling in the working-age bracket by 2043. People aged below 15 years will constitute less than a third of Ethiopia's population by 2043. Djibouti's population will have matured considerably by 2043, with 9% of the population aged 65 and older, while only 22% will be 15 years or younger.
Urbanisation encourages development due to economies of scale in service delivery and proximity to more productive activities. IGAD’s population has been steadily urbanising since 1990, when only 17.2% of the population was living in urban areas. In 2019, 26.3% of IGAD’s population lived in urban centres, below the average of 42.8% for Africa. By 2043, this will have risen to 36.6% by which time it will still be below Africa’s average of 51.8%. The large rural population in the region means that authorities must focus on promoting local economic development to provide sustainable livelihoods for the large rural population.

Among IGAD’s member countries, only Djibouti had more urban inhabitants, 78.2% of the population, than rural inhabitants in 2019, and by 2043 Somalia will join Djibouti to be the only countries in the region to have more than half of their populations living in urban areas. South Sudan will continue to have the largest rural population over the forecast horizon reaching 73.6% in 2043 as its urban population will only grow by 6.1 percentage points. Ethiopia will see the largest growth in its urban population, which will increase by 12.1 percentage points to 33.1% by 2043.
The average population density for IGAD in 2019 was 0.58 persons per hectare, higher than Africa’s average of 0.45 persons per hectare in the same year. This will still be the case by 2043, as Africa’s population density rises to 0.76 while the RECs will be 0.99 people per hectare. Uganda had the highest population density in 2019 at 2.19 persons per hectare, followed by Ethiopia’s 1.12 persons per hectare. Uganda’s density is expected to almost double to 4.18 by 2043. The lowest density is in South Sudan, also the country with the highest ratio of rural to urban dwellers, with a rate of 0.16 persons per hectare in 2019. South Sudan’s population density will only marginally rise to 0.21 by 2043.
The size of IGAD’s economy was US$274.7 billion in 2019, which was comparable to the size of the Algerian economy and only about 9% of Africa’s economy. The REC will however see a marked increase in the scale of its economic activity over the forecast horizon: GDP will rise by 381.3% from 2019 to 2043, reaching US$1 322.2 billion. After recovering from the impact of the COVID-19 pandemic, annual growth will not drop below 6% and will equal or exceed 8% from 2035 to 2043.

The remarkable growth will be driven by Ethiopia’s rapid expansion: in 2019, the country’s GDP was US$70.6 billion and it will grow to US$588.6 billion by 2043, an increase of 733%. This growth translates to Ethiopia increasing its share of IGAD’s total GDP from 26% in 2019 to 44.7%. After Ethiopia, Uganda will perform well, having the fourth biggest economy by 2043 at US$249.9 billion, surpassing both Kenya and Sudan in the process. The other three economies, Eritrea, Somalia and South Sudan, are all small and will constitute only 3.2% of total GDP by 2043. All three will however more than double the size of their economies by 2043, with Eritrea seeing the largest increase of 317.5%.
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 IGAD.

The region’s GDP per capita of US$2,406 in 2019 represented 45.5% of Africa’s average of US$5,289. IGAD will however see a remarkable period of growth from 2019 to 2043 as its GDP per capita rises by 120.8% to US$5,313. Africa’s average GDP per capita will only rise by 35.3% in that time, reaching US$7,157 by 2043 meaning IGAD’s GDP per capita will constitute 74.2% of Africa’s average.

The IGAD member with the highest GDP per capita in 2019 was Sudan, followed by Djibouti, Kenya, Ethiopia, Uganda, Eritrea, South Sudan and lastly Somalia. The trajectories of these eight countries differ considerably: Ethiopia and Uganda will grow rapidly, with average incomes increasing by more than 100% over the forecast horizon. Djibouti will experience robust growth, with its GDP per capita rising by 77% to be the highest among the member countries by 2043. Kenya’s and Sudan’s GDPs per capita will grow by 64.9% and 37.7%, respectively. Somalia, however, will continue to be ranked last and despite growth of 76.7% will have a GDP per capita of US$1,502 by 2043, the second lowest in Africa.
Decreasing informality will positively affect development through increases in productivity and government revenue. The value of IGAD’s informal sector was below Africa’s average in 2019 and will gradually fall from 24.1% of GDP in 2019 to 22.4% in 2043.

Somalia’s informal sector equated to 40.5% of GDP in 2019, the highest among IGAD’s members. Alongside Eritrea, the country will also see the largest decrease in its informal sector’s value, with a fall of 6 percentage points. Sudan sees the smallest decrease but will continue to have the smallest informal sector by value in 2043 at 12.9%.
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.

The sector which added the most value to IGAD's combined economy in 2019 was the service sector at 50.2% of GDP (US$137.6 billion), followed by the agriculture sector at 27.9% (US$76.6 billion) and the manufacturing sector at 11.9% (US$32.7 billion). The other three sectors combined added less than 10%. By 2043, the structure of the economy is expected to have changed: agriculture's contribution to GDP will have decreased to 9.1%, equivalent to US$120.8 billion, while manufacturing will add 17.9%, translating into US$237.0 billion, and ICT will add 7.2%, equivalent to US$94.7 billion. Services will however continue to dominate and by 2043 will constitute 61.2% of GDP, equivalent to US$808.8 billion.

Although these changes point towards a maturing of the economy and a shift towards higher value added activities in the ICT and service sector, the nature of services offered must be considered. Compared to the manufacturing sector, the service sector in low-income countries is characterised by activities which are less labour intensive and therefore do not lead to job creation. As such, reliance on the service sector to the neglect of the manufacturing and agriculture sectors can result in joblessness and non-inclusive growth which can worsen unemployment and food insecurity in the region.

The trend towards a larger service sector is primarily driven by South Sudan, whose dependence on energy exports is replaced by a rapidly expanding service sector. In 2019, the energy sector's contribution equated to 54.2% of GDP, while services added 31.8%. By 2043, the service sector will however have far outstripped the contribution of energy exports, as services add 64.3% of total value added, while energy accounts for only 25.1%.
Eritrea is the only country where services add less value in 2043 than in 2019, although the sector’s contribution will still be 63.7% of GDP by 2043. Ethiopia, IGAD’s largest economy, will see its agriculture sector add 7.7% of total value added in 2043, a significant decrease from 33.6% in 2019. The country will also see a large increase in the contribution of services, 15.7 percentage points, but encouragingly manufacturing will also see an increase of 5.9 percentage points and ICT will rise to 8.4% by 2043. Djibouti will continue to rely heavily on its service sector, which added 77.9% of total value in 2019 and will contribute 75.7% of total GDP by 2043.

Chart 9: Agriculture production/demand in CP, 1990–2043

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.

The projected trajectory for IGAD’s agricultural production and demand in the Current Path forecast show a situation of increasing import dependence, with an excess demand of 14 million metric tons for domestic production in 2019, growing to 96.6 million metric tons in 2043. To meet the increasing demand, food imports must increase which will result in the REC being more food insecure and more susceptible to fluctuations or shocks in international food prices. Avoiding this situation will require an agricultural revolution in the region.

Djibouti had the highest level of dependence in 2019, with a shortfall of 1.8 million tons, but by 2043 several countries will have surpassed the small coastal country. As their populations expand rapidly, Ethiopia, Kenya, Sudan and Uganda will experience rapid increases in demand, outgrowing domestic production, with Uganda facing the most severe shortage of
28 million tons by 2043. South Sudan had a surplus in 2019 but by 2043 will have a shortfall of 0.5 million tons.
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.

IGAD will see robust progress in reducing the percentage of its population living below the US$1.90 per day poverty line over the forecast horizon. In 2019, 88 million people, constituting 31% of the total population, were classified as extremely poor but by 2043 the poverty rate will have decreased to 8.3% and the poor population will have shrunk to 40 million people. The REC is thus already on its way towards eliminating extreme poverty and the scenarios act as accelerators for this positive trend.
The decrease is mainly driven by the REC’s most populous country, Ethiopia, which will see the size of its poor population fall from 32.9 million people in 2019 to 5.9 million by 2043. This translates into an extreme poverty rate reduction from 29.4% in 2019 to 3.1% in 2043. Sudan, which had the lowest extreme poverty rate in the region at 11.9% in 2019, will make progress by reducing it to 4.2% by 2043. Uganda and Kenya will also see significant reductions to 7.6% and 10.7%, respectively. However, Somalia and South Sudan will continue to struggle. Somalia’s poor population will in fact grow slightly from 10 million to 10.4 million, although the poverty rate will fall to 37.5% from 66% in 2019. South Sudan’s poverty rate was very high in 2019 at 79.4% and despite a decrease of 29.4 percentage points, half of the country’s population will still be poor by 2043.
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.

IGAD predominantly generated energy through oil in 2019, followed by hydro and other renewables. Oil production constituted 48% of the total energy produced in 2019, while hydro energy accounted for 27% and other renewables 16%. The dependence on oil will rapidly decline, such that by 2043 renewable sources will account for 83% of total energy produced and oil's share will have shrunk to 14%.

South Sudan and Sudan together produced almost all the oil in the region accounting for over 99% of the total oil produced in 2019. This will remain the case throughout the forecast period. Ethiopia is the major source of hydro production in the region, increasing its share of total hydro production from 84% in 2019 to about 89% in 2043. The production of other renewable energy types mainly comes from Kenya, whose output represents 87% of all other renewable energies produced in the region. However, by 2043, Ethiopia will surpass Kenya as the leading producer of other renewable energies in the region, contributing about 57.6% of total renewable production compared to 5.4% in 2019. By then, Kenya’s contribution to renewable energy will have dropped to 24.4%.
Carbon is released in many ways, but the three most important contributors to greenhouse gases are carbon dioxide (CO$_2$), carbon monoxide (CO) and methane (CH$_4$). Since each has a different molecular weight, IFs uses carbon. Many other sites and calculations use CO$_2$ equivalent.

IGAD produced 4 million tons of carbon in 1990 and emissions grew slowly over the next 29 years to reach 16 million tons of carbon by 2019, constituting just 4% of total emissions in Africa. The REC is, however, projected to see a marked increase as economic activity ramps up significantly over the forecast horizon, as detailed in Chart 5. By 2043, IGAD will emit 62 million tons of carbon — an increase of 288% compared to 2019, by which time its emissions will equate to 6.6% of total emissions from Africa.

Three countries, Uganda, Kenya, Sudan, drive this increase: Uganda’s emissions will grow by 732%, to reach 23.3 million tons by 2043, while Kenya and Sudan will see more modest increases of 179% and 161% but still be the second and third highest emitters by 2043. Ethiopia follows a curious trajectory, as the country will lead the REC’s emissions until 2038, before it drops to fourth place by 2043. The country will still see an increase of 129% from 2019 to 2043, but this will be a significant fall from an increase of 676% from 2019 to 2038.
Endnotes

1. IGAD, About IGAD, 2021

Donors and sponsors

Reuse our work

- All visualizations, data, and text produced by African Futures are completely open access under the Creative Commons BY license. You have the permission to use, distribute, and reproduce these in any medium, provided the source and authors are credited.

- The data produced by third parties and made available by African Futures is subject to the license terms from the original third-party authors. We will always indicate the original source of the data in our documentation, so you should always check the license of any such third-party data before use and redistribution.

- All of our charts can be embedded in any site.

Cite this research

About the authors

Mr Du Toit McLachlan joined the ISS in February 2021 as an extern from the Auwal Socio-Economic Research Institute (ASRI). Du Toit holds an honour's degree in international relations from the University of Pretoria and is the AFI website manager.

About African Futures & Innovation

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.