

Comoros

Comoros: Current Path

Comoros: Current Path	3
Comoros: Current Path forecast	3
Demographics: Current Path	5
Economics: Current Path	8
Poverty: Current Path	13
Carbon Emissions/Energy: Current Path	15
Endnotes	17
Donors and Sponsors	17
Reuse our work	17
Cite this research	17

Comoros: Current Path

· Comoros: Current Path forecast

Demographics: Current Path

• Economics: Current Path

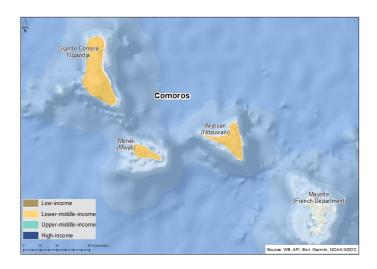
Poverty: Current Path

· Carbon Emissions/Energy: Current Path



Comoros: Current Path forecast

Chart 1: Political map of Comoros



This page provides an overview of the key characteristics of Comoros 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 Comoro Islands is an archipelago off the east coast of Africa located to the north of the Mozambique Channel. The island group is politically divided between Mayotte, an overseas Department of France, and The Union of the Comoros (Comoros), a sovereign country that gained independence in 1975 after they voted for self-determination in a French-organised referendum in 1974.

Comoros consists of three separate islands with the capital city Moroni located on the biggest island of Grande Comore (N'gazidja). It is a member of the regional economic communities of the Southern African Development Community (SADC), the Community of Sahel-Saharan States (CEN-SAD), the Common Market for Eastern and Southern Africa (COMESA) and is one of 23 lower middle-income countries in Africa, according to the World Bank's income classification.

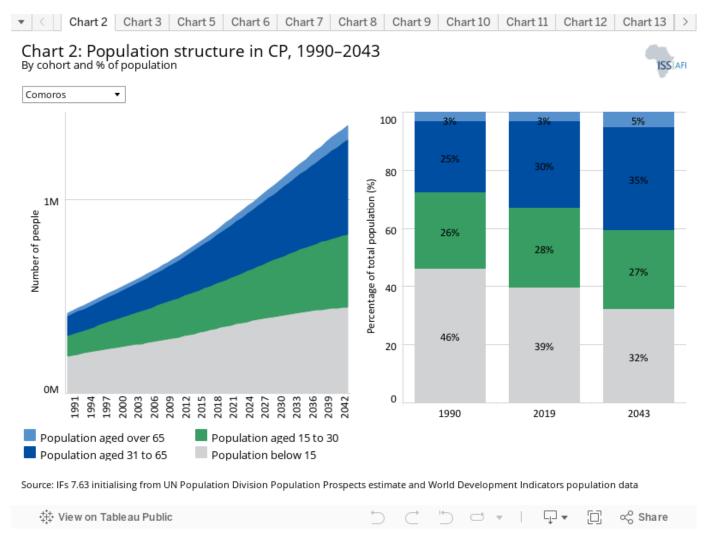
The country's location in the warm Indian Ocean exposes the country to intense tropical storms and cyclones. Seven tropical cyclones in the past four decades have caused devastation, with Cyclone Kenneth affecting 345 000 people and wiping out 80% of crop production in 2019. [1] Recovering from the 2019 devastation caused by Cyclone Kenneth was

complicated with the onset of the COVID-19 pandemic in 2020 that affected the country's tourism, service sector and export market of cash crops. The country's economy is heavily reliant on subsistence farming and fishing while manufacturing is limited to the processing of agricultural products. Aid contributions from the EU heavily underpin the economy.

While Comoros boasts great ecotourism potential due to its rich biodiversity and tropical climate, the country is paralysed by its turbulent political history. More than 15 successful, attempted and plotted coups d'état have taken place in the period after independence, severely hampering the development potential of the country.

The geographical isolation of the island, its limited land resources, heavy agricultural subsistence reliance, political turmoil and the additional burden of climate change and natural hazards are all threatening the sustainable development of Comoros. Comoros' development prospects are unpacked in more detail in the subsequent charts and sections.





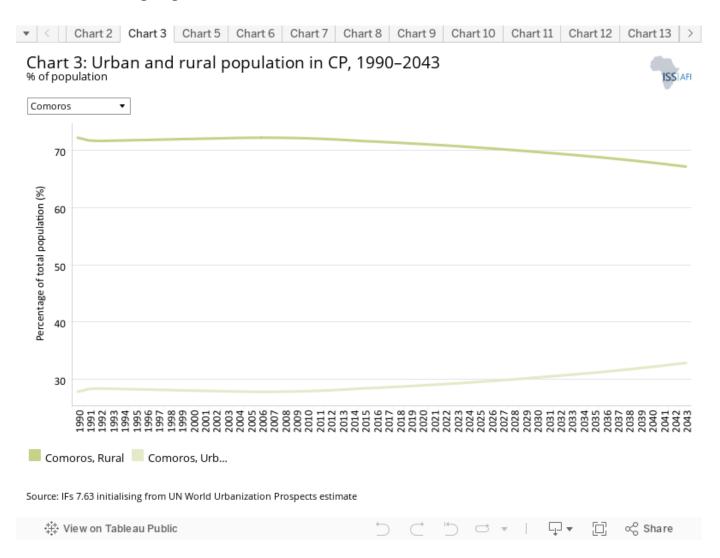
Comoros' population of 857 000 in 2019 gives it the position as the fourth smallest nation in Africa in population size and the third smallest in geographical area. Total fertility rates have dropped the past three decades, down from 7.1 births per woman in 1985 to 4.2 in 2019, slightly below the 4.3 average of lower middle-income Africa. The decline in fertility rates has slowed down population growth and in 2019 the growth rate was slightly below the average for lower middle-income Africa.

In the Current Path forecast, the population is expected to reach 1.4 million people by 2043 — an increase of 524 000 people in the next 24 years. This will place severe pressure on this small island state that is already battling high population densities and limited land. The drop in fertility rates continues to alter the age structure of the country with the median age expected to increase from 20.1 years in 2019 to 24.4 years by 2043. This figure is on par with the average of Africa that had a mean population age of 20 years in 2019, but it is slightly below the 20.8 years for lower middle-income Africa.

Comoros is at an early stage of the demographic transition and has a large youthful population (aged below 15 years). The working-age population (age 15–65) increased from 51% in 1990 to 58% in 2019, and the dependant population (elderly and young) made up 42% of the population in 2019. The country has a small elderly dependant population with fewer than 30 000 people aged 65 and over in 2019. This figure will more than double, reaching 74 000 by 2043 — the result of the large cohort between 30 and 65 years ageing together with a longer life expectancy, climbing by 4.6 years from 2019 to

2043. Despite the growing elderly dependency, the child dependant population group is expected to shrink from 39% in 2019 to 32% by 2043.

The country is expected to enter its first demographic dividend only towards the end of the forecast horizon, in 2043. The use of modern contraception by Comorian women remains low and in 2019 it was estimated at 21% of fertile women. It is important that the Comorian government ensures modern contraceptive availability, offering high quality and equitable services and continuing the generation of demand.[2]

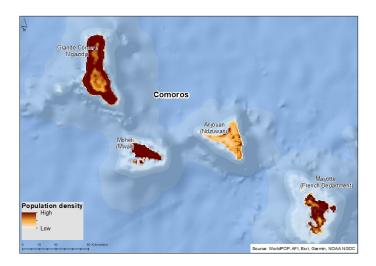


Comoros is a predominantly rural country with 71% of its population in 2019 living in rural agglomerations/clusters throughout the three islands, making it the fourth most rural country in lower middle-income Africa. Between 1960 and 1990, urbanisation rates increased rapidly from 12.6% to 27.9%, but have remained stable during the past three decades, while lower middle-income Africa has continued the urban transition growing from 21.2% in 1960 to 49.2% in 2019.

Rural clusters throughout Comoros host 610 000 dwellers and are small and scattered all over the three islands. Comoros has nine cities with populations above 10 000 with Moroni, the capital, located on the Grande Comore island being the largest with an estimated population of 43 000. Fomboni, located on Moheli has 15 000 people, while the Anjouan island has seven cities with more than 10 000 people. The largest city, Moutsamoudou, is home to an estimated 24 000 people.

Comoros is expected to remain predominantly rural throughout the forecast horizon, and by 2043 it is forecast that 67.1% of the population will still be living in rural spaces throughout the three islands. This is in contrast to the average urbanisation rate of lower middle-income Africa that is expected to be 59% compared to 32.9% for Comoros in 2043.

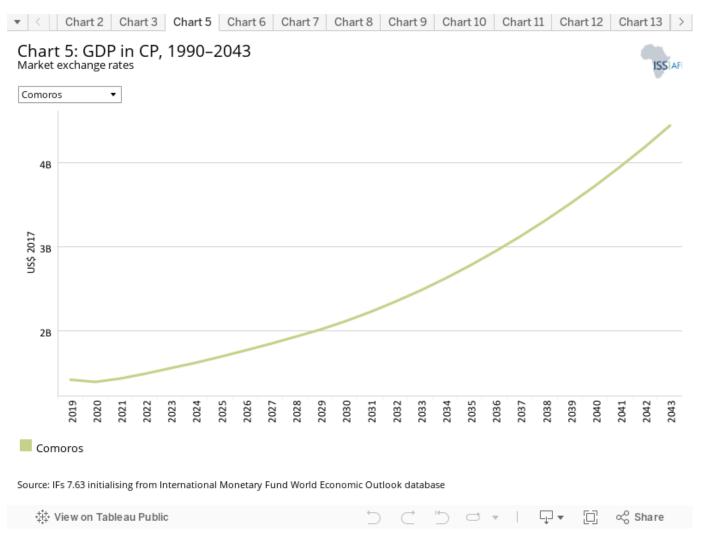
Chart 4: Population density map for 2019



All three islands feature a rugged topography with steep peaks formed by volcanic activities. This places pressure on the coastal regions that have much higher population densities. Mount Karthala, one of the world's most active volcanoes, is situated on Grande Comore and is surrounded by the protected Karthala forest, which limits development on its slopes and restricts available land for future development. Land pressure is one of the biggest constraints for development in Comoros.

Comoros is the third smallest country in Africa with a geographic size of 1 862 km2. This results in the third highest population density of 4.6 people per hectare in Africa with only Mauritius and Rwanda having more people per hectare. This high population density places intense pressure on natural resources and the environment. The country's location and topography are among the most climate vulnerable in the world, and 54.2% of the population live in at-risk areas. [3] In the Current Path forecast, the population densities are expected to increase to 7.4 people per hectare, significantly above the average for lower middle-income Africa that is projected to be 1 person per hectare by 2043.

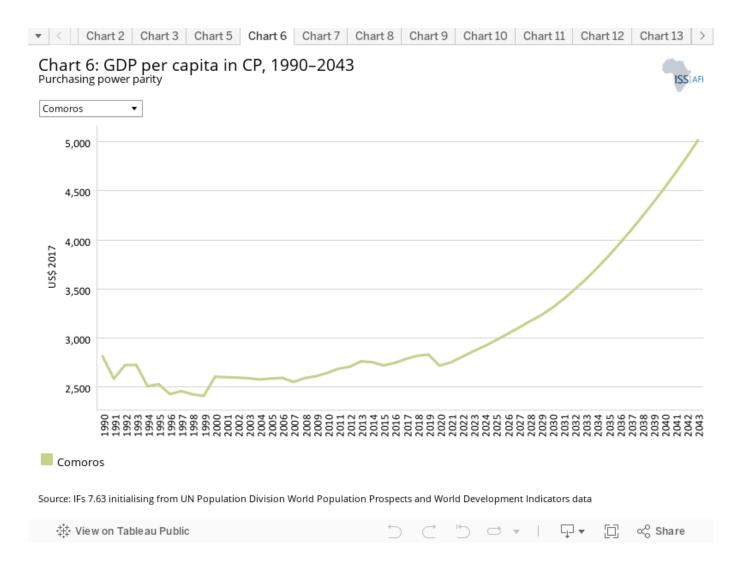




Comoros has a very small economy measuring only US\$1.4 billion in 2019 — the second smallest among African countries. The country's economy is heavily reliant on agriculture as the majority of Comorians are dependent on subsistence farming, fishing, hunting and forestry to earn a livelihood and exports are limited to agricultural produce. Cloves, ylang-ylang and vanilla [4] comprise 84% of all exports from the island group. Poor harvest, high population densities, natural disasters and a general lack of performance in this sector have necessitated the importation of basic foodstuffs, and it is estimated that 70% [5] of Comoros' food needs are met by imports.

The country's economy remains underpinned by aid contributions from the EU, particularly France, and foreign remittance earnings. Comoros lacks mineral resources and manufacturing is limited to the processing of the few agricultural commodities produced. The country boasts great eco-tourisms potential but its turbulent political history and the lack of connectivity between the three islands and limited transportation routes severely hamper its potential.

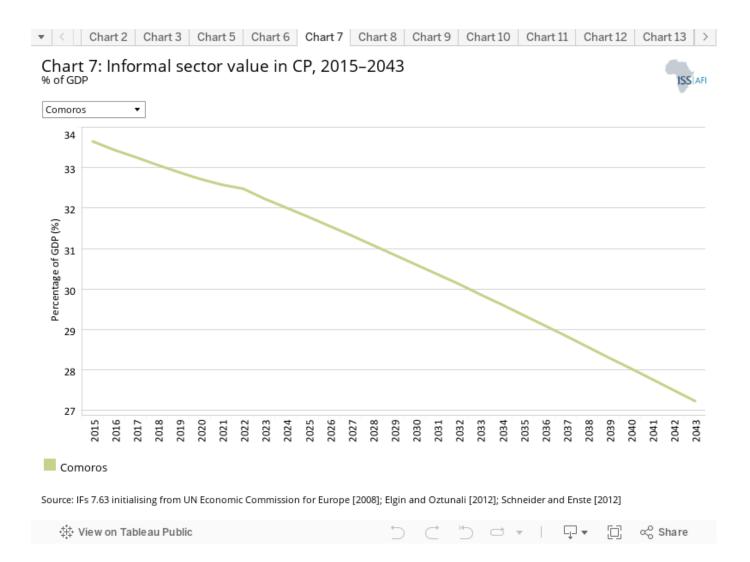
Comoros was impacted by two successive shocks leading to a decline of the growth rate from 3.7%, on average in 2017 and 2018, to 1.8% in 2019 (Cyclone Kenneth) and 0.3% in 2020 (COVID-19 pandemic). The economy slightly recovered in 2021, however, growing by 2.4%. On the Current Path, the economy of Comoros is forecast to grow to US\$4.5 billion by 2043 — an increase of US\$3.1 billion within the next 24 years.



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 Comoros.

The country's small economy, high import dependency, lack of resources and fragile state give rise to some of the worst income levels in lower middle-income Africa. In 2019, Comoros ranked third lowest among lower middle-income Africa with GDP per capita of US\$2 818. The gap between Comoros' income per capita and that of the average for lower middle-income Africa has risen since the 1990s. In 1990 the per capita income gap stood at US\$1 592, and in 2019 it was US\$4 158.

In the Current Path forecast, GDP per capita of Comoros is expected to increase to US\$5 015 in 2043, US\$4 127 and US\$2 142 below the projected averages for lower middle-income Africa and Africa, respectively, in the same year.



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 host of development challenges such as higher poverty, lower per capita incomes, greater inequality, and weaker productivity investment, among others.

Comoros has a large informal sector owing to its dependence on subsistence farming and lack of awareness of tax and social security procedures. [6] In 2019, the size of the informal economy was estimated at 32.9% of GDP, amounting to a value of US\$427 million. This is 3.7 percentage points above the average of lower middle-income Africa and 7 percentage points higher than the average of Africa. The informal economy is an important employer in Comoros, and in 2019, 61% of Comoros' labour force worked in the informal sector. A recent study [7] also suggests that informal employment creates the bulk of female employment in Comoros.

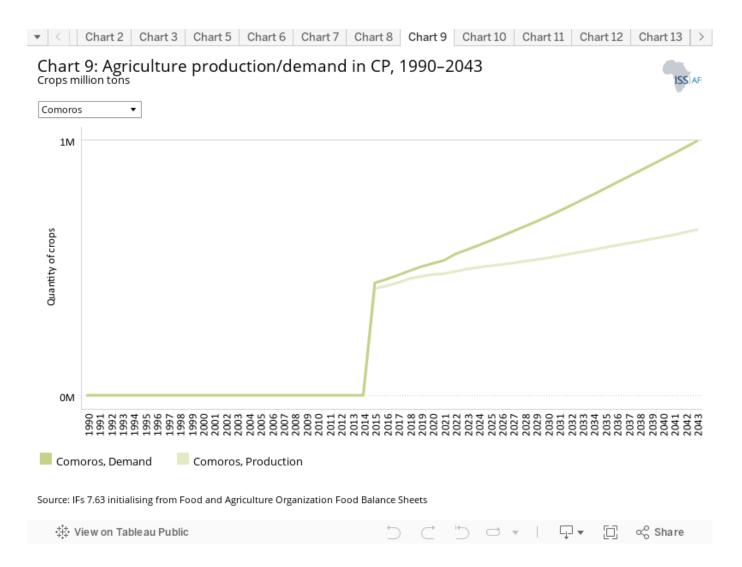
On the current development trajectory, the size of the informal sector is forecast to modestly decline to 27.2% of GDP by 2043. This will amount to an informal economy with a value of US\$1.1 billion in 2043. The gap between Comoros and the rest of Africa's informal sector will narrow significantly by 2043.

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, service 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 service sector contributes the most to Comoros' GDP. In 2019, it accounted for nearly 58% of GDP, equivalent to US\$800 million. The agriculture sector contributed as much as 23.2% to the country's GDP in 2019 (US\$300 million), while the manufacturing sector, which is limited to the processing of agricultural produce, contributed 11.4% in 2019 (US\$200 million).

In the Current Path forecast, the contribution of the service sector is expected to contribute 66.5% (valued at US\$3 billion) by 2043. The manufacturing sector is forecast to overtake the agriculture sector from 2036 to become the second largest contributor to GDP (15.4% of GDP or US\$700 million) by 2043. The agriculture sector will account for only 10.1% of GDP by 2043 (valued at US\$500 million), down from 23.2% of GDP in 2019, indicating the structural transformation of the economy.

🛱 View on Tableau Public

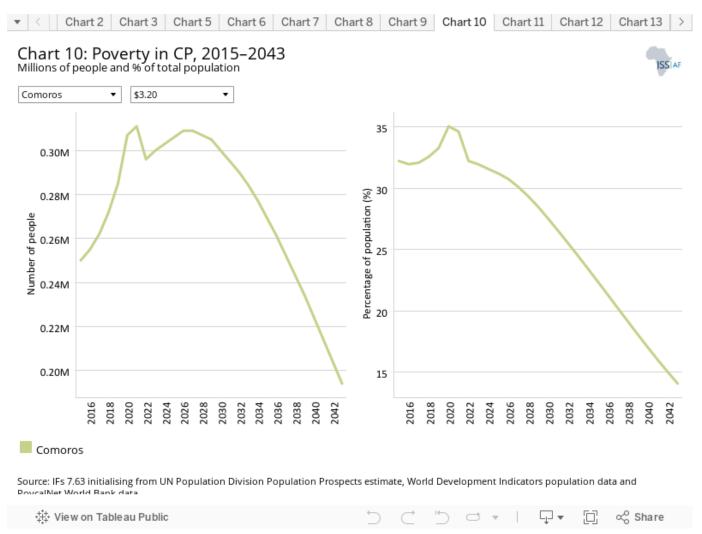


The data on agricultural production and demand in the IFs forecasting platform initialises from data provided on food balances by the Food and Agriculture Organization (FAO). IFs contains data on numerous types of agriculture but aggregates its forecast into crops, meat and fish, presented in million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

Agriculture is a vital part of the Comorian economy with agricultural exports (cash crops) responsible for the majority of exchange earnings. Agricultural exports include ylang-ylang, vanilla and cloves and are grown in the lowlands next to the coast. Crops such as coconuts, bananas, cassava and sweet potatoes are grown in the highlands and are used primarily for domestic consumption. A large percentage of the population is dependent on subsistence rain-fed agriculture, making the agriculture sector extremely vulnerable to weather variability. Regular natural disasters have impacted food production extensively in the past.

In 2019, production stood at 470 000 metric tons, while demand stood at 500 000 metric tons, exceeding production by 30 000 metric tons. This production and demand gap is expected to increase in the Current Path forecast. By 2043, agricultural production is forecast to be 650 000 metric tons and demand would be 1 million metric tons, translating to a 350 000 metric ton shortfall. This paints a picture of a growing food-dependent country with a heavy importation bill, reliant on external markets while vulnerable to global shocks. The agriculture sector remains vital in the country's fight against poverty and severe acute malnutrition. In 2019, chronic malnutrition led to stunting in 17% of the Comorian population while affecting an estimated 30% of children.





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:

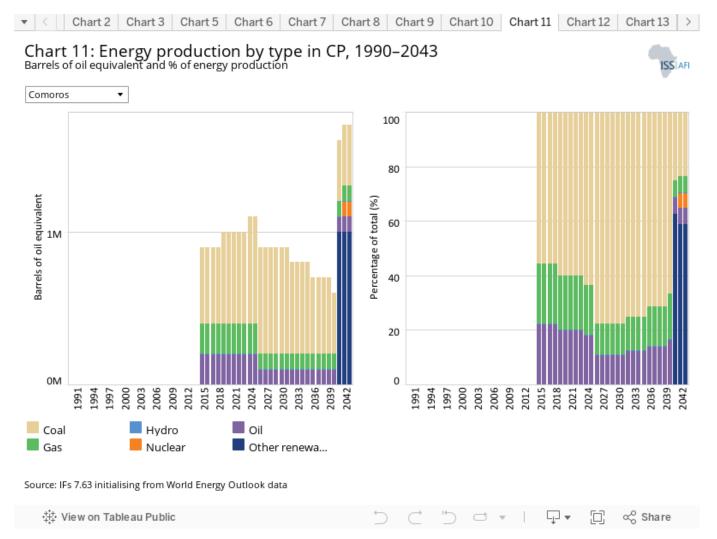
- US\$3.20 for lower middle-income countries
- US\$5.50 for upper middle-income countries
- US\$22.70 for high-income countries.

In 2019, the country's score on the Human Development Index (HDI) was 0.554, placing it in 156th out of 189 countries. [8] The country has made steady progress in raising GDP per capita since 2000, increasing mean and expected years of schooling and extending life expectancy. Using the US\$3.20 extreme poverty threshold for lower middle-income countries, Comoros had 33.3% of its population (290 000 people) living below the poverty line in 2019. While this is 16.8 percentage

points below the average of lower middle-income Africa, serious concerns remain in regard to income inequality, especially between urban and rural spaces. [9] Poverty remains highest in rural areas, especially on the Nzwani (Anjounan) island. [10] These areas lack sufficient services and housing.

Nearly 75% of the population classified as poor are self-employed and more than 50% depend on subsistence farming, [11] which made Cyclone Kenneth in 2019 especially devastating as it had an enormous impact on crop production. The impact felt from the COVID-19 pandemic on the back of Cyclone Kenneth pushed the country's fight against poverty back, but the country is forecast to recover in the short term. In the Current Path forecast, the extreme poverty rate is forecast to decline to 14.1% in 2043 (using the US\$3.20 benchmark), equivalent to 100 000 people. The projected extreme poverty rate in Comoros by 2043 is 24.2 percentage points below the average for lower middle-income Africa in the same year.

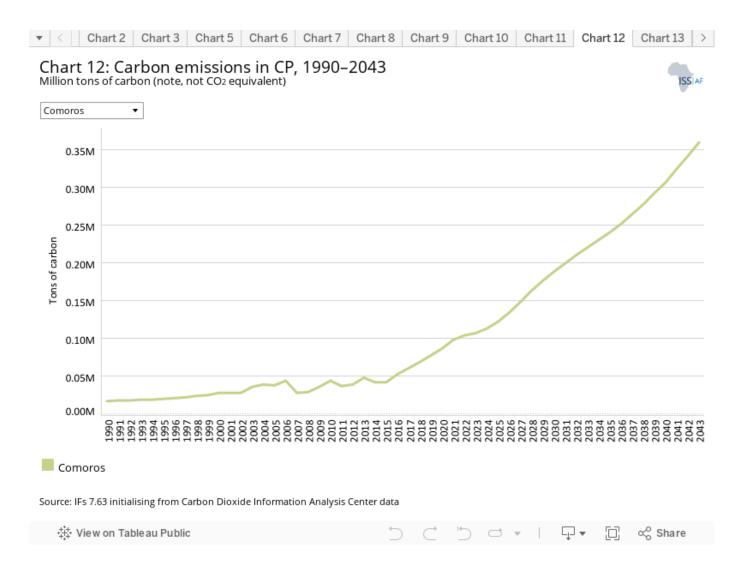




The IFs platform forecasts six types of energy, namely oil, gas, coal, hydro, nuclear and other renewables. To allow comparisons between different types of energy, the data is converted into billion barrels of oil equivalent (BBOE). The energy contained in a barrel of oil is approximately 5.8 million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

Comoros was created by volcanic activity, and the main island of Grande Comoros is home to Mount Karthala, one of the largest active volcanoes in the world. This volcano covers two-thirds of the Grande Comoros island group and boasts enormous untapped geothermal potential.[12] The country also has sufficient hydroelectric resources to meet local energy needs.[13]

However, Comoros remains significantly dependent on fossil fuels and biomass. In 2019, energy production from coal stood at 1 million barrels of oil equivalent — 60% of total energy production. In 2019, gas and oil also contributed to the country's energy mix making up the remaining 40% of the total energy production. If the geothermal potential of the country is realised, this dependency can be expected to decrease significantly by 2043. Clean geothermal power has the potential to generate a surplus of electricity for the island group.[12]



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.

Comoros is an extremely low carbon emitter, with carbon emissions of 100 000 tons in 2019. In 2019, the country was the second lowest emitter of carbon in Africa and ninth lowest in the world. In the Current Path forecast, carbon emissions are likely to increase to 400 000 tons by 2043, the result of the projected increased economic activity. The country has great geothermal and sufficient renewable (specifically hydroelectricity) potential and needs to bring renewables into the energy mix urgently.

Endnotes

- 1. OCHA-ReliefWeb, Comoros: Tropical Cyclone Kenneth Emergency Appeal (MDRKM007) Final Report, 27 November 2020
- 2. Track20, Exploring Opportunities for mCPR Growth in Comoros, February 2020
- 3. World Bank, The World Bank in Comoros, 7 April 2022
- 4. Trading Economics, Comoros Exports
- 5. Moody's Analytics, Comoros Economic Indicators
- 6. IMF, Union of the Comoros: Selected issues, 29 June 2018
- 7. IMF, Union of the Comoros: Selected issues, 29 June 2018
- 8. UNDP, Human Development Report 2020, Comoros, The Next Frontier: Human Development and the Anthropocene
- 9. IMF, Union of the Comoros: Poverty Reduction Strategy Paper—Review of the Second Year of Implementation, IMF Country Report No. 13/39, February 2013
- 10. IMF, Union of the Comoros: Poverty Reduction Strategy Paper—Review of the Second Year of Implementation, IMF Country Report No. 13/39, February 2013
- 11. World Bank, Union of Comoros, Comoros poverty assessment, April 2017
- 12. OCHA-ReliefWeb, Comoros: Between the devil and the deep blue sea, 8 December 2008
- 13. AfDB, Comoros Promotion of renewable energy in Comoros Enabling Environment SEFA Appraisal Report, 21 December 2020

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

Alize le Roux (2024) Comoros. Published online at futures.issafrica.org. Retrieved from https://futures.issafrica.org/geographic/countries/comoros/[Online Resource] Updated 29 April 2024.



About the authors

Ms Alize le Roux joined the AFI in May 2021 as a senior researcher. Before joining the ISS, she worked as a principal geo-informatics researcher at the CSIR, supporting various local and national policy- and decision-makers with long-term planning support. Alize has 14 years of experience in spatial data analysis, disaster risk reduction and urban and regional modelling. She has a master's degree in geographical sciences from the University of Utrecht, specialising in multi-hazard risk assessments and spatial decision support systems.

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.

The opinions expressed do not necessarily reflect those of the ISS, its trustees, members of the Advisory Council or donors. Authors contribute to ISS publications in their personal capacity.