Madagascar

Madagascar: Current Path

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Madagascar: Current Path forecast

Chart 1: Political map of Madagascar

This page provides an overview of the key characteristics of Madagascar 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 Madagascar is an island country in the Indian Ocean, approximately 400 km off the coast of East Africa

across the Mozambique Channel. At 592 800 km2, Madagascar is the world's second largest island country after Indonesia. The nation consists of the main island of Madagascar and multiple smaller peripheral islands. Neighbouring islands include the French territory of Réunion and the country of Mauritius to the east, as well as Comoros and the French territory of Mayotte to the north-west. The nearest mainland state is Mozambique, located to the west.

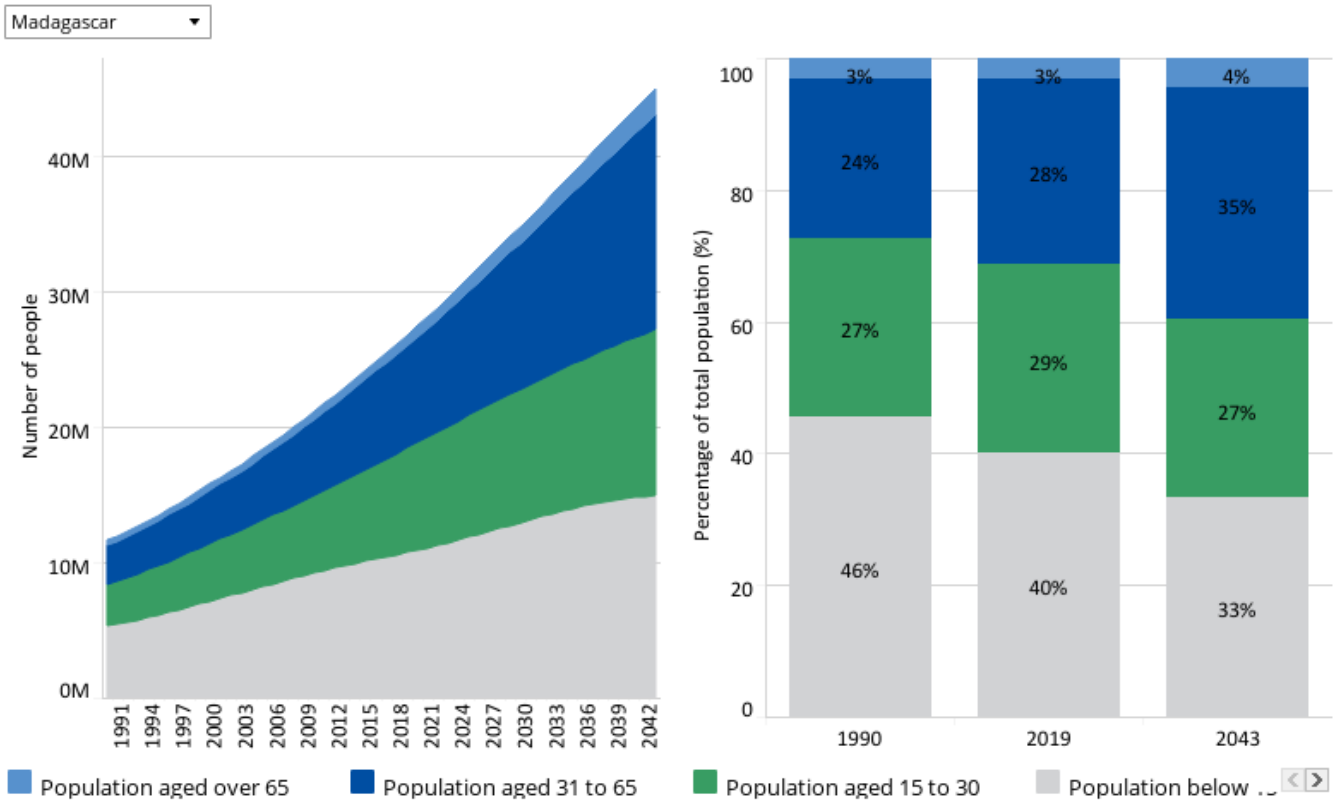
From the early 19th century, most of the island was united and ruled as the Kingdom of Madagascar. The monarchy ended in 1897 when the French colonised the island. Madagascar gained independence in 1960, and since 1992 it has officially been governed as a constitutional democracy. In 2019, Madagascar had a population of about 26.8 million people. Its capital and largest city is Antananarivo. The country's economy is based primarily on tourism, textiles, agriculture and mining.

Madagascar is a member of the United Nations, the African Union (AU), the Southern African Development Community (SADC), and the Organisation Internationale de la Francophonie.

Demographics: Current Path

Chart 2: Population structure in CP, 1990–2043

By cohort and % of population



Source: IFs 7.63 initialising from UN Population Division Population Prospects estimate and World Development Indicators population data

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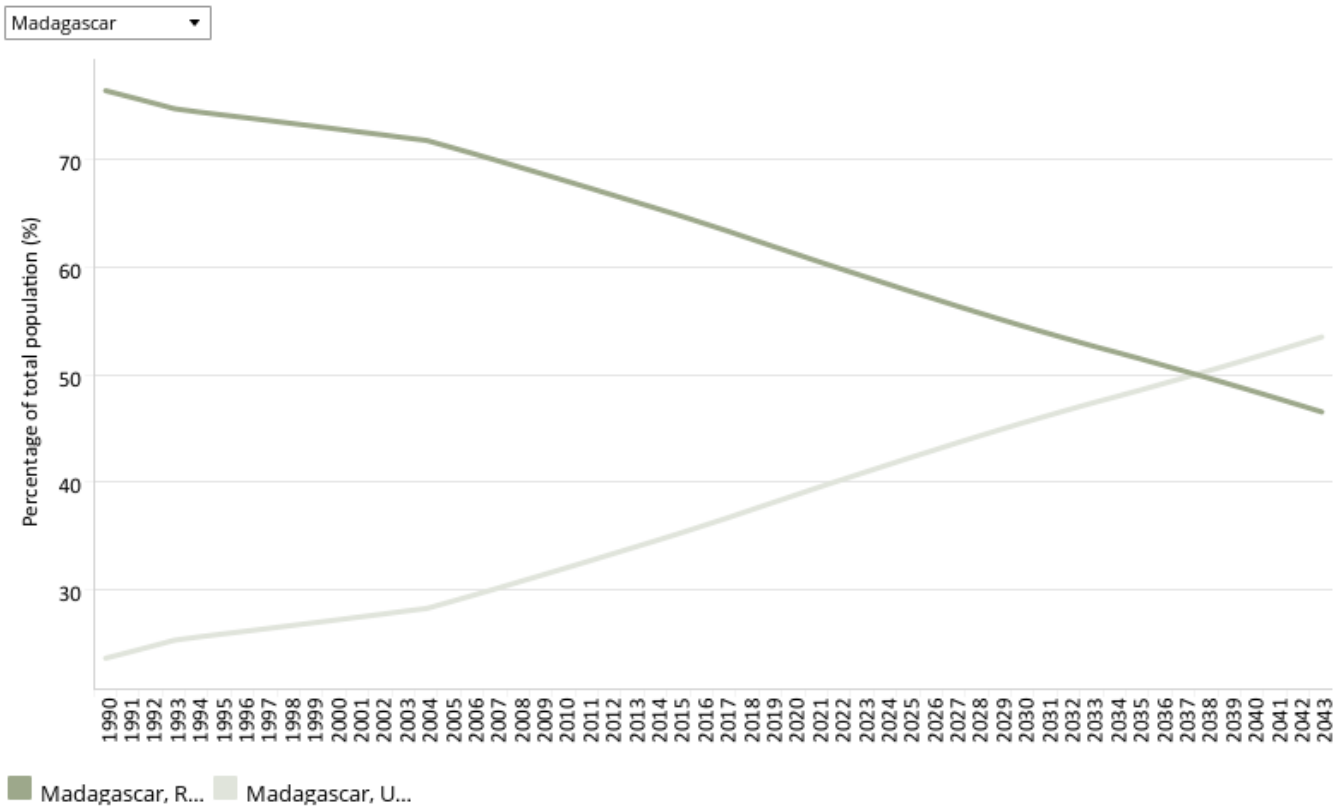
Madagascar has a young and fast-growing population. Coming from a baseline of about 6.3 million people in 1990, by 2019 its population had increased more than fourfold to 26.8 million people. Over the coming two decades, it will grow significantly and reach 45.1 million people by 2043. Population growth in Madagascar is driven by natural population growth, meaning births are outstripping deaths. Madagascar's population is also young, with 40% being under 15 years old in 2019. The country's median age of 19.5 years lies above the average median age of 17.9 years for Africa's low-income economies. On the Current Path, Madagascar's demographic structure is expected to change slowly but steadily. By 2043, only 33% of the population is forecast to be under 15 years old.

In 2019, average total fertility stood at 4.1 births per woman, below the average of 5 for Madagascar's low-income peer group. By 2043, the country's fertility rate is expected to drop to 3 births per woman. As a consequence, the median age is projected to increase to 23.6 years — the third highest among Africa's 23 low-income economies after Rwanda and Sudan.

By 2043, the country's working-age population is expected to account for about 62.3% of the population compared to 57% in 2019. Indeed, the ratio of people of working age relative to the dependent population is improving but not fast enough. On the Current Path, Madagascar is expected to reach the peak of its demographic dividend only in 2065 (from 1.3 in 2019 to 2.1 in 2065).

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

% of population



Source: IFs 7.63 initialising from UN World Urbanization Prospects estimate

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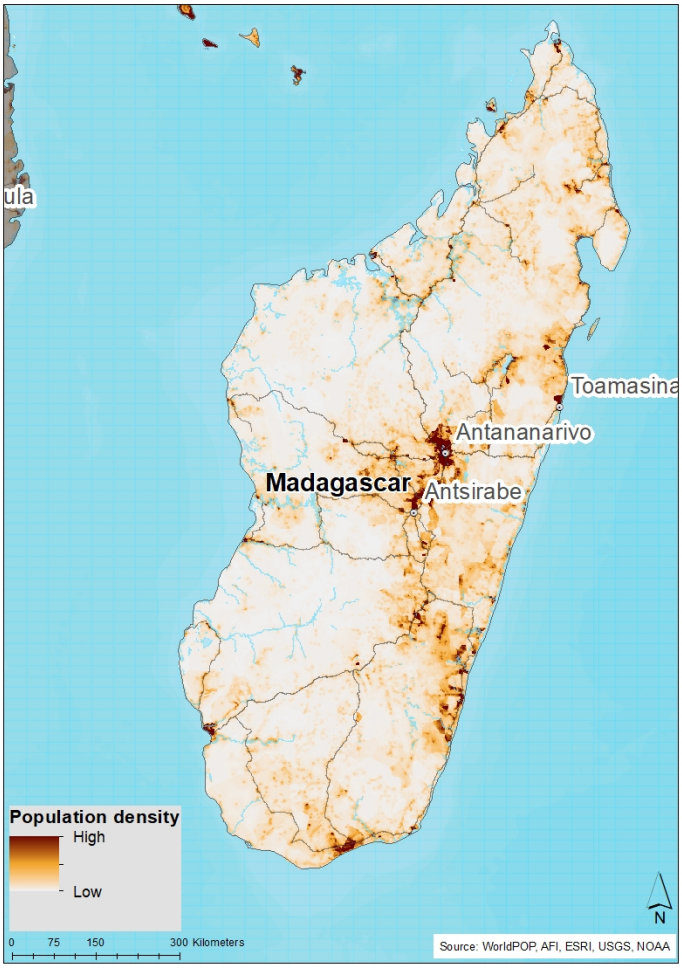
Madagascar is more urbanised than the average African low-income economy. Island economies are typically more urbanised than their non-island counterparts in similar income categories. In 2019, only 38% of Madagascar's population lived in urban areas and 62% lived in rural areas. Africa's low-income countries had a rural-urban split of 69% versus 31% in 2019. On the Current Path, Madagascar is becoming more urbanised with 53.5% of the population living in urban areas by 2043 and 46.5% living in rural areas. The anticipated ratio for Africa's low-income economies is 40.7% urban versus 59% rural by 2043.

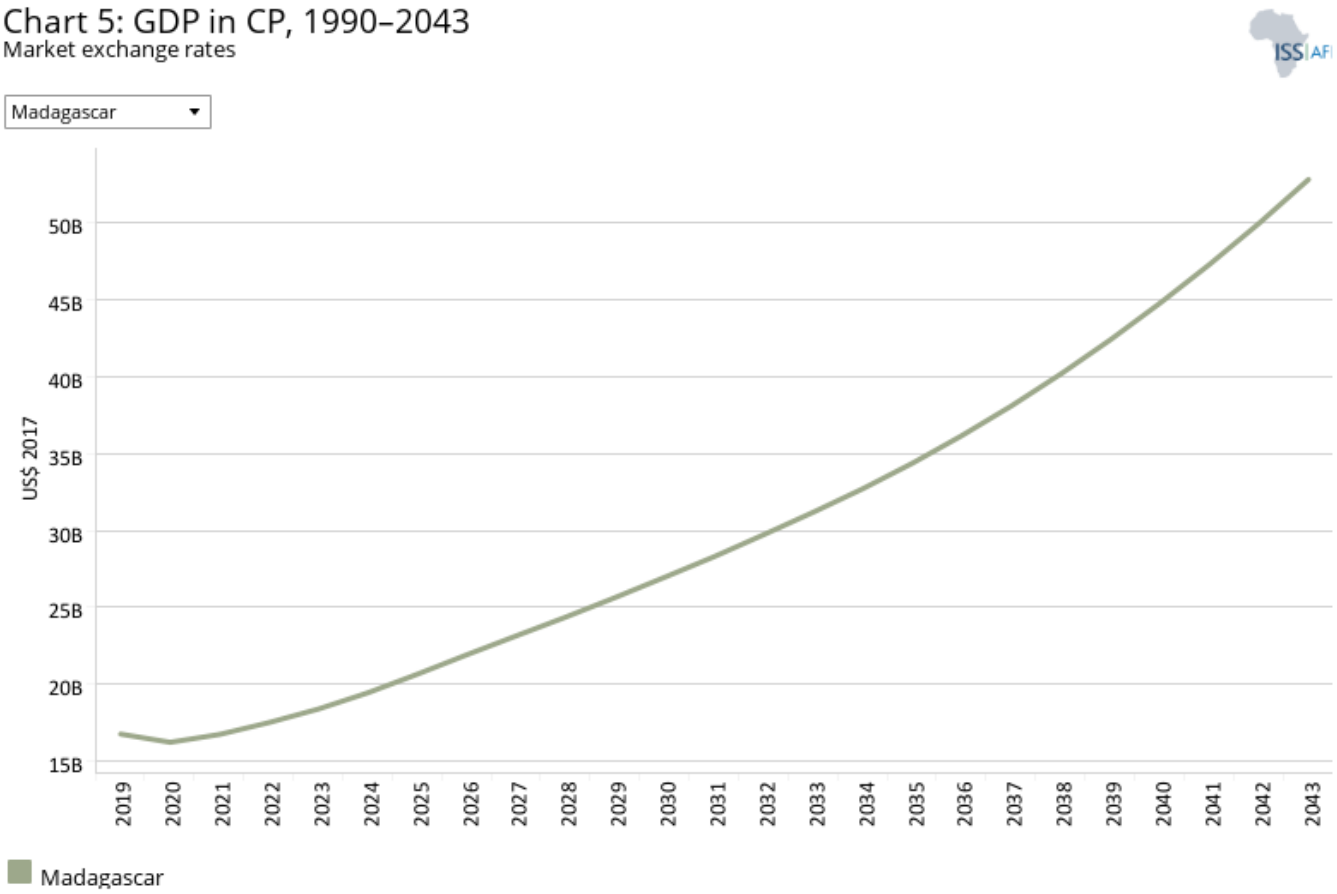
Chart 4: Population density map for 2019



Madagascar's population density is 0.46 people per hectare, making it the 135th most densely populated country in the world. The population is unevenly distributed with the west coast being sparsely populated and the centre and the east coast being more densely populated.

Antananarivo is Madagascar's capital and by far the island's largest city with an estimated population of 1.4 million people. The cities of Toamasina, Antsirabe and Mahajanga have between 200 000 and 300 000 inhabitants.

Economics: Current Path



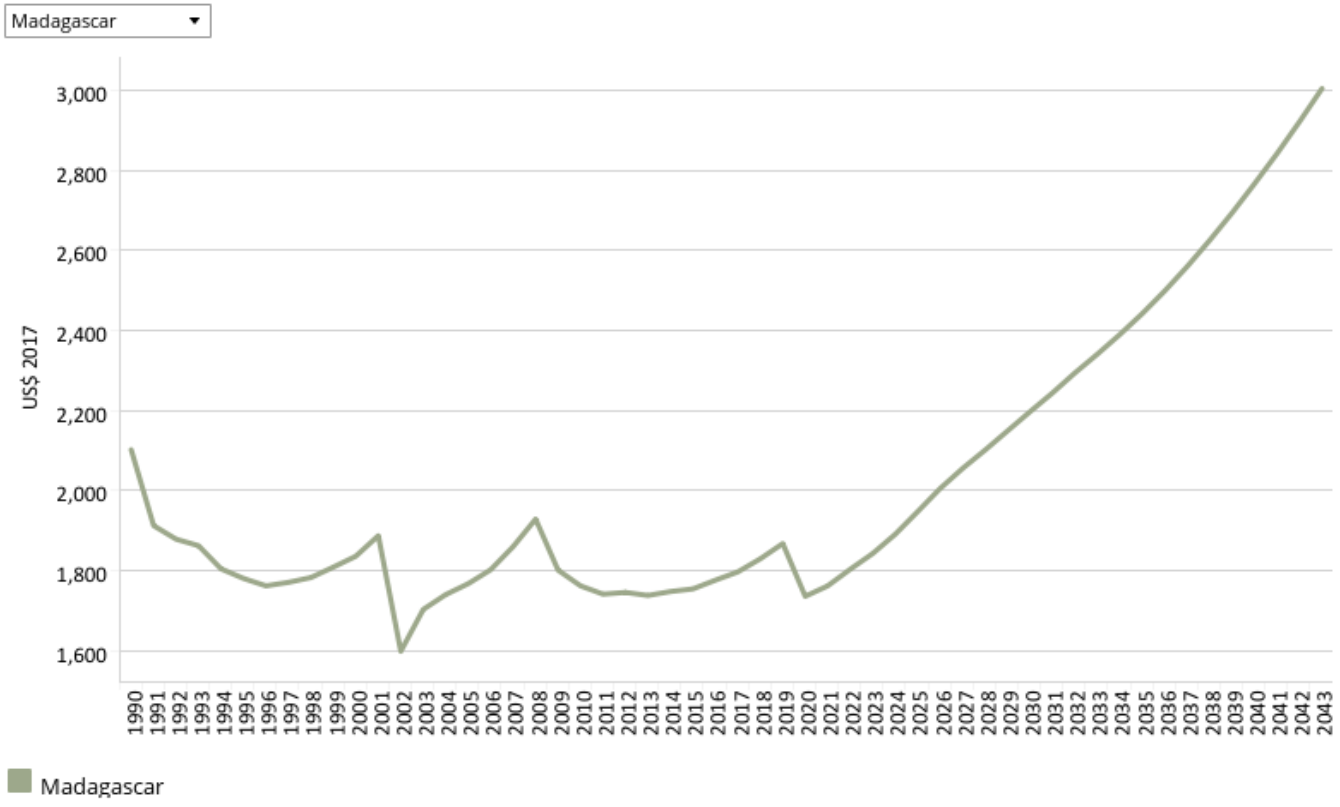
Between 1990 and 2019, Madagascar's GDP more than doubled from US$8.1 billion in 1990 to US$16.8 billion in 2019. The country ranks eighth out of 23 African low-income economies, with Sudan and Ethiopia being the lead economies. In 2043, Madagascar's GDP is forecast to be US$52.8 billion, more than three times as large as in 2019. The economy will expand, but with projected average annual growth rates under 5% over the coming two decades, combined with historically high levels of inequality, such expansion is insufficient to allow for meaningful progress in human development.

According to the African Development Bank, 'Madagascar's economy has experienced little structural transformation since 2000 and remains mostly based on services, with a poorly developed industrial sector that generates little value added'.[1] The agriculture sector is dominated by subsistence farming, and even though the agriculture sector has seen little to no reforms over the past 15 years, it is the most important source of employment, accounting for close to 80% of the country's workforce.[2]

The country's varied climate allows for the cultivation of tropical crops such as rice, cassava, beans and bananas. Rice accounts for the largest share of total crop acreage. Other valuable export-oriented agricultural products include cloves, vanilla, cacao, sugar, pepper and coffee.[3]

Chart 6: GDP per capita in CP, 1990–2043

Purchasing power parity



Source: IFs 7.63 initialising from UN Population Division World Population Prospects and World Development Indicators data

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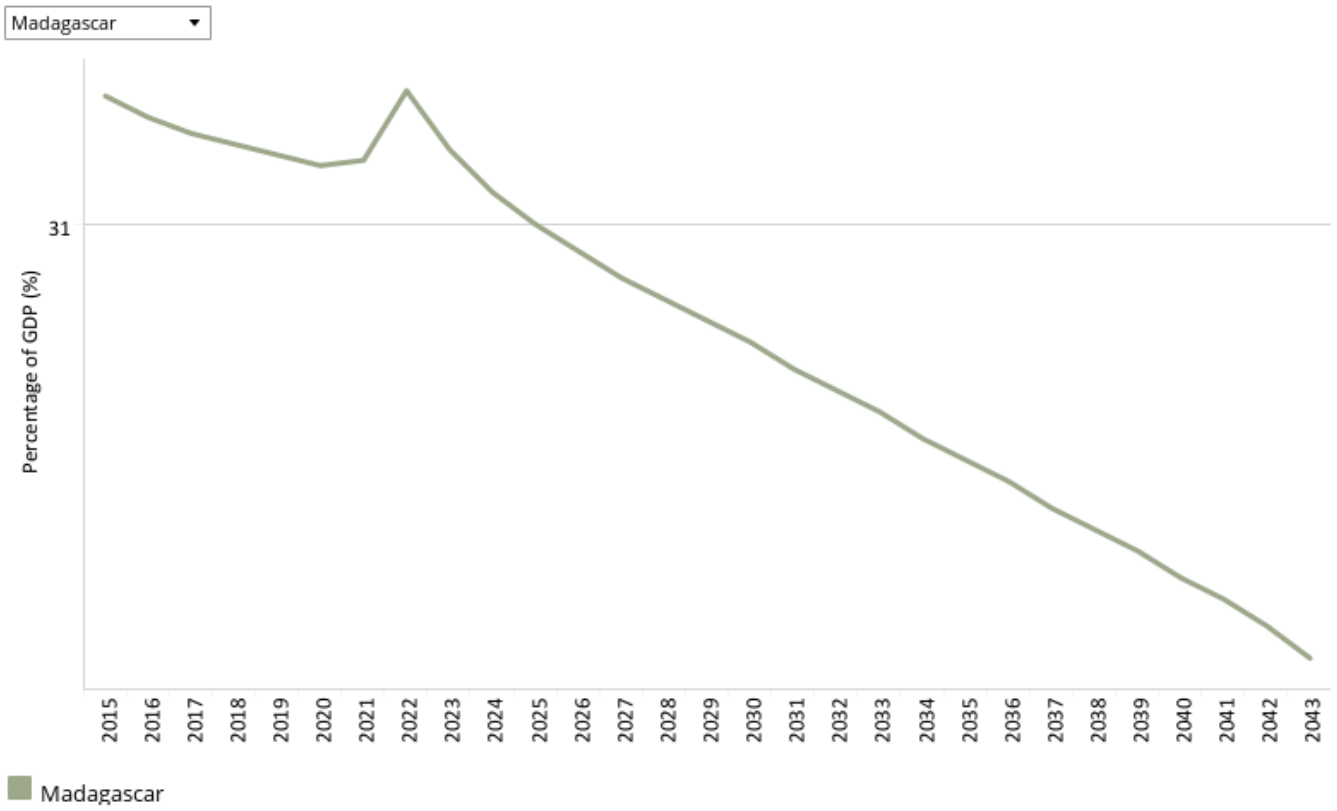
Although many of the charts in the sectoral scenarios also include GDP per capita, this overview is an essential point of departure for interpreting the general economic outlook of Madagascar.

In 2019, Madagascar's GDP per capita ranked tenth out of 23 for Africa's low-income economies, at a value of US$1 867. In the Current Path forecast, the country's per capita income is expected to increase to US$3 004 per capita by 2043, falling to 14th within its low-income peer group. In fact, Madagascar's GDP per capita is expected to fall below the average of its low-income peer group of US$3 790 by 2043.

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

% of GDP



Source: IFs 7.63 initialising from UN Economic Commission for Europe [2008]; Elgin and Oztunali [2012]; Schneider and Enste [2012]

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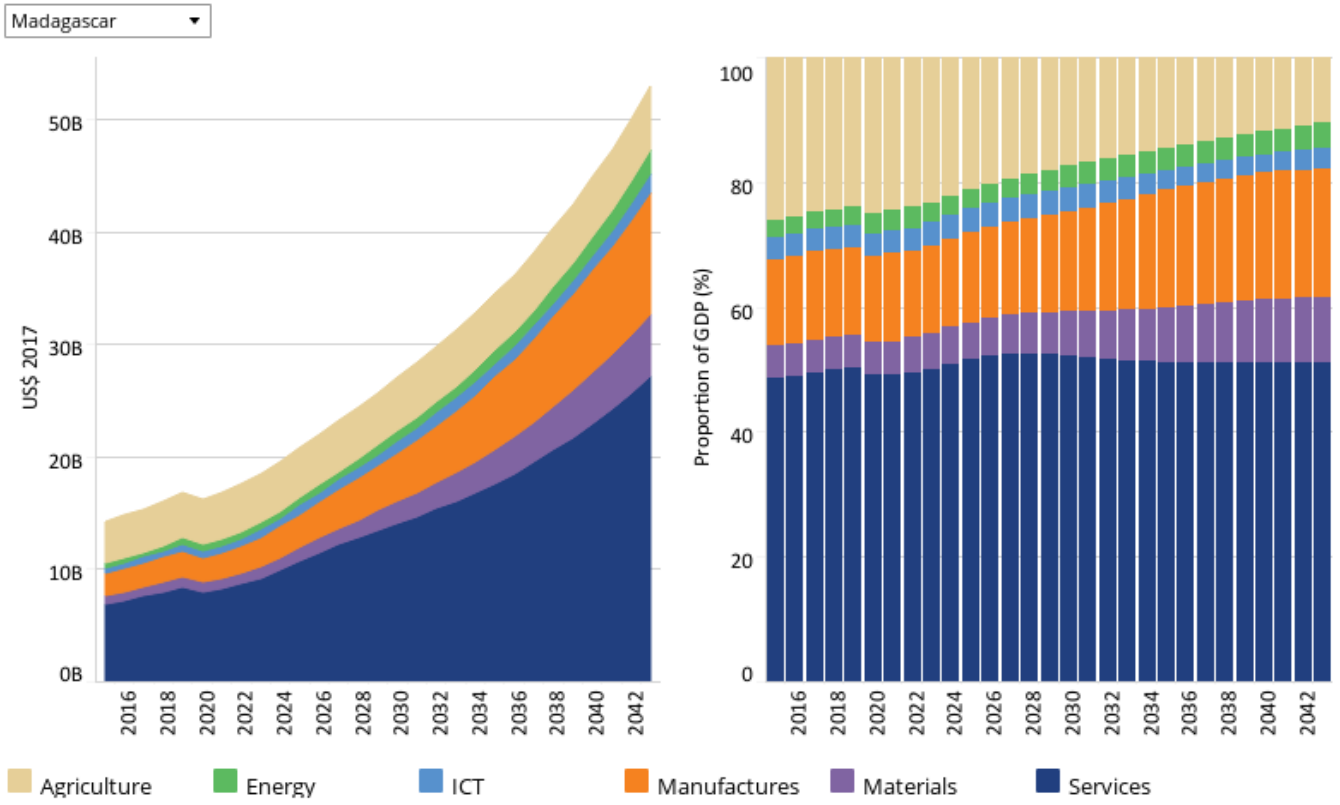
In 2019, Madagascar's informal sector accounted for approximately 31.1% of GDP, in line with the average share of 30.1% in Africa's low-income economies. The informal sector is a burden on the formal economy because of low contributions to tax revenues and the subsequent negative impact on expenditure on public utilities. By 2043, Madagascar's informal sector is forecast to account for 30.2%, a marginal decrease that likely reflects limited improvements in overall state capacity, including for taxation.

Chart 8: Value added by sector in CP, 2015–2043

Billions US$ 2017 and % of GDP



Source: IFs 7.63 initialising from International Monetary Fund World Economic Outlook database

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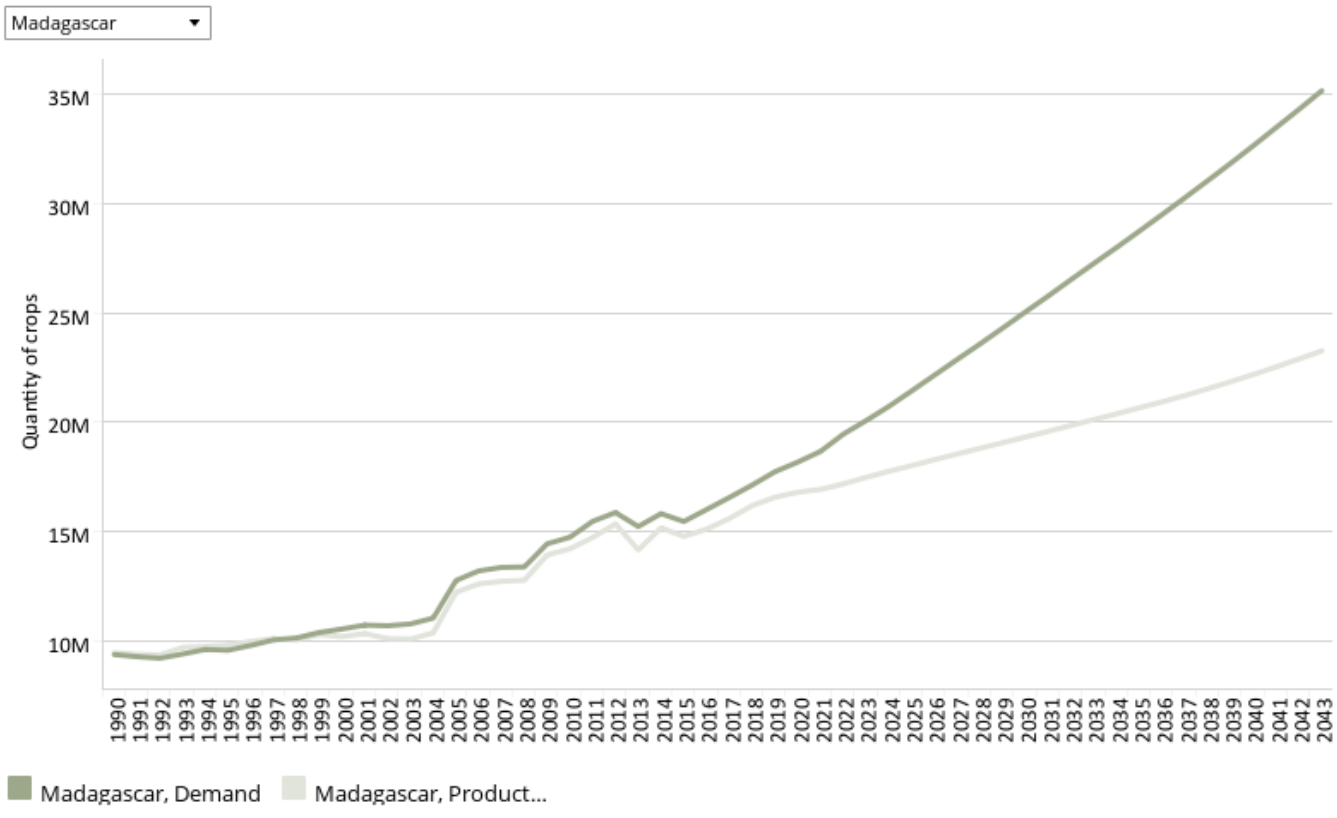
The IFs platform uses data from the Global Trade and Analysis Project (GTAP) to classify economic activity into six sectors: agriculture, energy, materials (including mining), manufacturing, services and information and communication technologies (ICT). Most other sources use a threefold distinction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

In 2019, Madagascar's service sector accounted for half of the country's GDP (50.2%), followed by agriculture which represented about 23.9% and manufacturing at 14.1%. In the Current Path forecast, the service sector is expected to remain the most important contributor to Madagascar's GDP. Its share is set to grow to 51.2% by 2043. At the same time, the contribution of the agriculture sector is forecast to drop to 5.5%. Manufacturing, on the other hand, is forecast to increase by more than 8 percentage points to 10.8% in 2043.

Madagascar's expected trajectory roughly mirrors that of its low-income peer group, with services continuing to represent the largest share of GDP, followed by agriculture, whose contribution will decline, and manufacturing, which will experience growth.

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

Crops million tons



Source: IFs 7.63 initialising from Food and Agriculture Organization Food Balance Sheets

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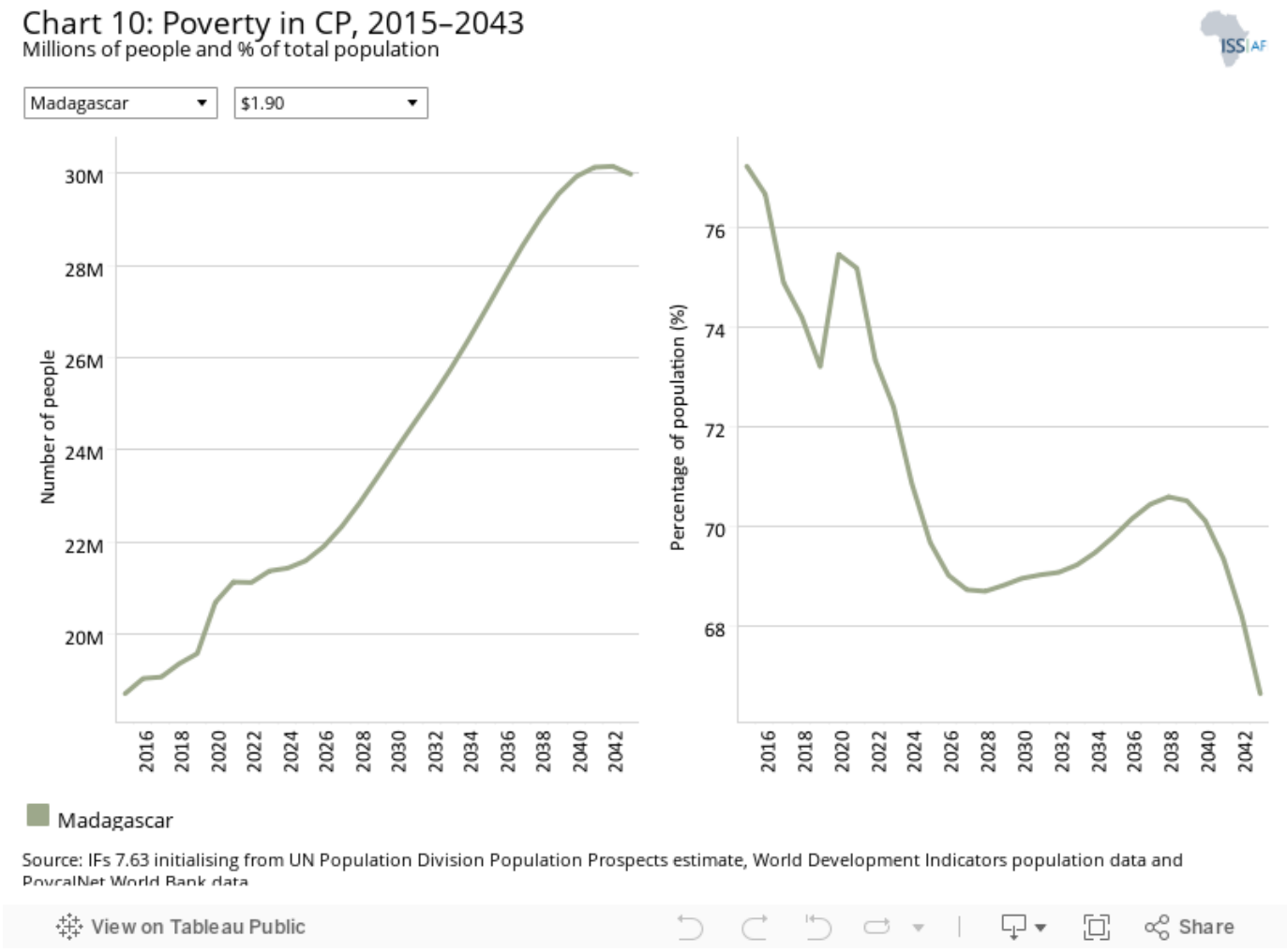
The data on agricultural production and demand in the IFs forecasting platform initialises from data provided on food balances by the Food and Agriculture Organization (FAO). IFs contains data on numerous types of agriculture but aggregates its forecast into crops, meat and fish, presented in million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

In 2019, Madagascar's agricultural production amounted to 16.6 million tons, while agricultural demand stood at 17.7 million tons. This gap is projected to widen by 2043 with Madagascar expected to increase its output to 23.3 million tons and demand almost doubling to 35.2 million tons. In other words, agricultural production does not meet demand and this situation will worsen in the Current Path forecast with the gap increasing more than tenfold from 1.2 million tons in 2019 to 12 million tons in 2043.

Fast population growth is rapidly fuelling agricultural demand. In combination with low productivity as well as environmental degradation and high exposure to climate change-related risks, Madagascar is at risk of food insecurity. In mid-2021, a severe drought in southern Madagascar caused hundreds of thousands of people to suffer from food insecurity or famine.[4]

Poverty: Current Path



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.

As a low-income country, Madagascar uses the US$1.90 benchmark to define extreme poverty. The country's poverty burden is high, with the country having Africa's fifth highest poverty rate in 2019, at 73.2%, which corresponds to 19.5 million people. Madagascar's poverty rate is significantly higher than the average for Africa's low-income economies on the continent at 47.8%.

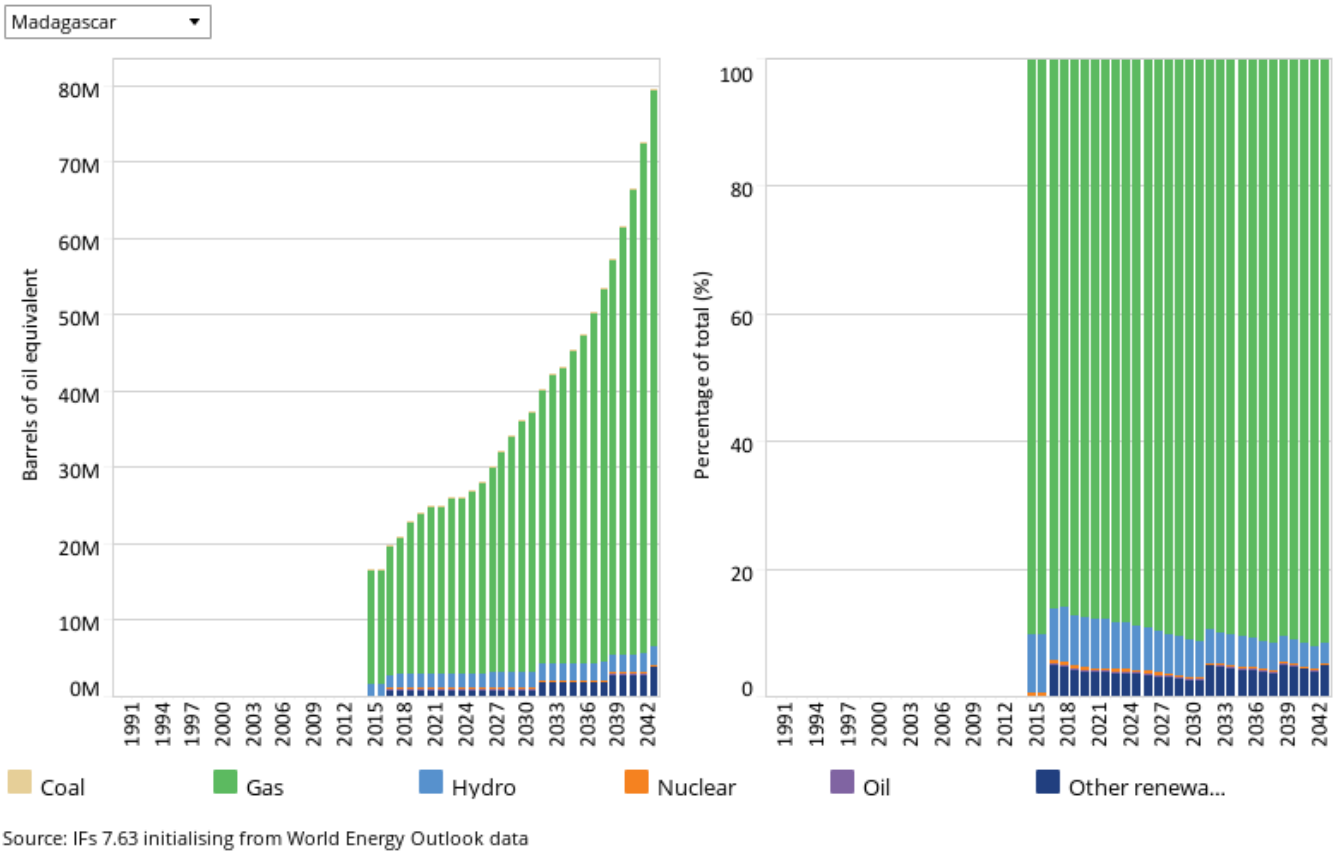
On the Current Path, the number of people living in extreme poverty in Madagascar will increase to 30 million people by

2043. The country's poverty rate, however, is projected to decline to 66.6% by then. In 2019, Madagascar had the fourth highest poverty rate among Africa's low-income economies, after South Sudan, Burundi and the Central African Republic. Unlike Madagascar, those three countries experience high levels of violent conflict. In Madagascar, incipient economic development has repeatedly been interrupted by political instability. This was the case in 2002 and in 2009.[5]

Carbon Emissions/Energy: Current Path

Chart 11: Energy production by type in CP, 1990–2043

Barrels of oil equivalent and % of energy production



Source: IFs 7.63 initialising from World Energy Outlook data

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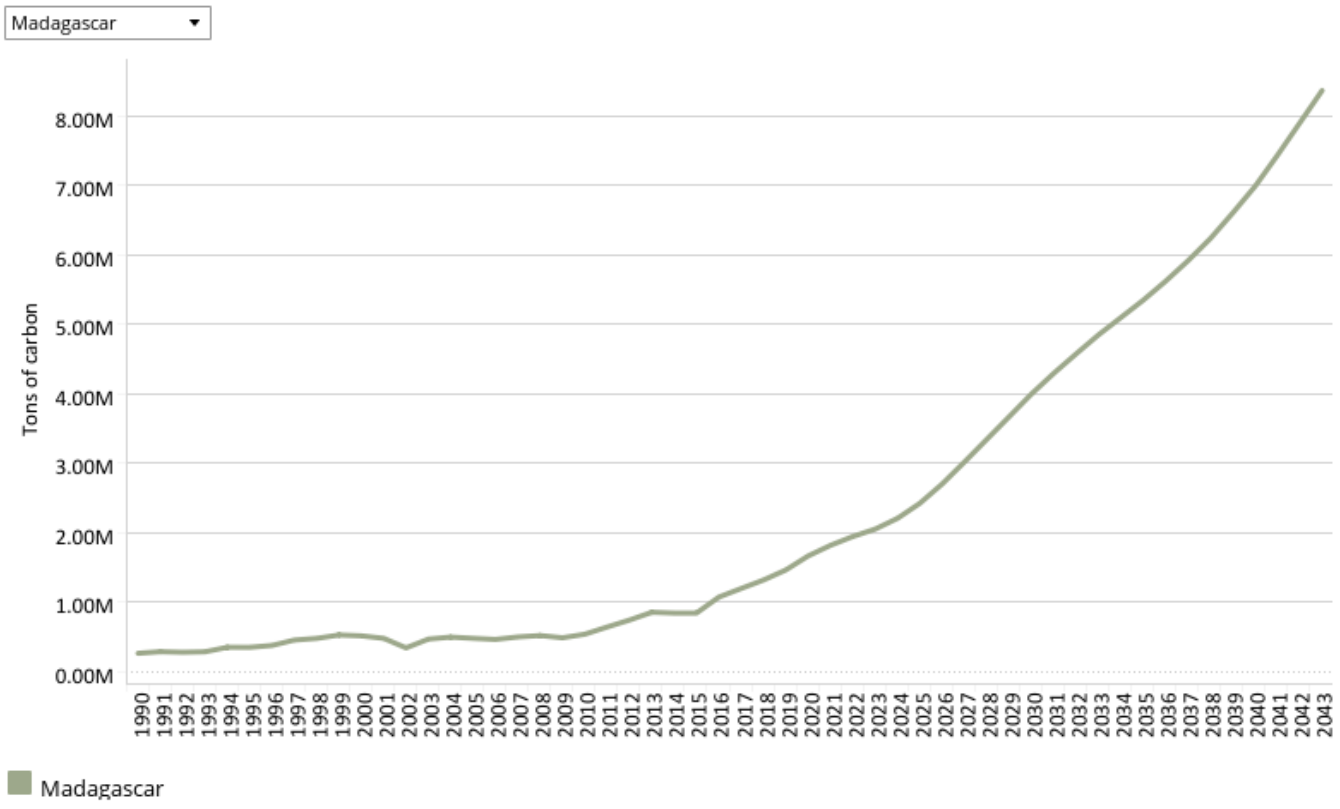
The IFs platform forecasts six types of energy, namely oil, gas, coal, hydro, nuclear and other renewables. To allow comparisons between different types of energy, the data is converted into billion barrels of oil equivalent (BBOE). The energy contained in a barrel of oil is approximately 5.8 million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

In 2019, Madagascar's total energy production equated to 23 million barrels of oil equivalent. By 2043, it is estimated to triple to 80 million barrels of oil equivalent. The country's current energy mix is heavily reliant on gas which accounted for close to 80% of total energy production in 2019. Gas was followed by hydropower at 8% and other renewables at 4%.

In the Current Path forecast, gas is forecast to become even more dominant and will account for 92% of energy production by 2043. Hydropower is set to drop in relevance accounting for only 3%, while other renewables' importance is expected to marginally grow, reaching 5% of total energy production by 2043. Madagascar's gas production is expected to reach 73 million barrels of oil equivalent by 2043, up from 20 million barrels in 2019. The anticipated share of other renewables in Madagascar's energy production profile does not come close to the average of 39% that is expected for Africa's low-income economies by 2043.

Chart 12: Carbon emissions in CP, 1990–2043

Million tons of carbon (note, not CO_2 equivalent)



Source: IFs 7.63 initialising from Carbon Dioxide Information Analysis Center data

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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.

Madagascar's carbon emissions stood at 1.5 million tons of carbon in 2019. They are forecast to increase almost sevenfold to 8.4 million tons of carbon by 2043. The increase is mainly attributable to the rise in economic activity that the country will experience over the forecast horizon, as highlighted in Chart 5.

Endnotes

1. African Development Bank Group, Madagascar, 2017–2021 Country Strategy Paper, November 2017, 2, www.afdb.org/fileadmin/uploads/afdb/Documents/Boards-Documents/Madagascar_-_2017-2021_Country_Strategy_Paper.pdf
2. African Development Bank Group, Madagascar, 2017–2021 Country Strategy Paper, November 2017, 2, www.afdb.org/fileadmin/uploads/afdb/Documents/Boards-Documents/Madagascar_-_2017-2021_Country_Strategy_Paper.pdf
3. Britannica, Madagascar – Economy, www.britannica.com/place/Madagascar/Demographic-trends#ref23467
4. OCHA-ReliefWeb, Southern Madagascar: Drought drives severe food insecurity, 25 October 2021, https://reliefweb.int/report/madagascar/southern-madagascar-drought-drives-severe-food-insecurity-october-25-2021
5. World Bank, Face of Poverty in Madagascar – Poverty, Gender and Inequality Assessment, Report No. 78131-MG, March 2014, vii, https://documents1.worldbank.org/curated/en/538821468271809604/pdf/781310PRIORITY0English0Apr900May012.pdf

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