Zambia
Zambia: Current Path

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This page provides an overview of Zambia's critical characteristics 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 start in 2024 and 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.

Formerly Northern Rhodesia, the Republic of Zambia gained independence from the United Kingdom in 1964. It is a
landlocked country in Southern Africa and shares borders with eight others, namely the Democratic Republic of the Congo (DR Congo), Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Namibia and Angola.

With the Mulungushi Declaration in 1968 and its implementation in 1972, Zambia embarked on an inward-looking approach to development, with a significant role for the state. These policies, a collapse in the copper price and conflict in the region resulted in slow growth. With the victory of Frederick Chiluba of the Movement for Multi-Party Democracy (MMD) in 1991, Zambia embarked on a period of socio-economic development, government decentralisation and democratisation. Hakainde Hichilema of the United Party for National Development was elected president in August 2021 after defeating the incumbent Edgar Lungu of the Patriotic Front but inherited an economy in debt distress. Total debt stood at US$ 11 billion. In 2020, Lungu's government requested that its debt payments be frozen under the G20-led Debt Service Suspension Initiative (DSSI). Then, in November, the government missed a US$42.5 million settlement on one of its international bonds, triggering Africa’s first COVID-19 sovereign default.

In June 2022, the countries that had lent to Zambia formed an Official Creditor Committee (OCC) to start work on debt restructuring formally. In June 2023, the government announced that the Paris Club of creditor nations and China had agreed to restructure US$6.3 billion of loans (of which US$4 billion was to China). Later that year the government announced an in-principle agreement with private creditors who were owed an additional US$3 billion, but the agreement was subsequently rejected by the OCC on the basis that they were carrying the lion’s share of relief.

Zambia is a member of the Southern African Development Community (SADC) and hosts the secretariat of the Common Market for Eastern and Southern Africa (COMESA).

The World Bank changed Zambia’s classification from low-income to lower middle-income in 2011, but it remains one of the United Nations’ 46 least developing countries.

Zambia’s economy is built on its mineral wealth. It boasts significant resources, including copper, cobalt, silver, and coal, extensive forests, and important agricultural land and water resources that could propel sustainable growth.

The country needs better human resource characteristics and is weighed down by debt.

Climatically, Zambia experiences subtropical weather, with annual average rainfall varying from 600 mm in the south to 1300 mm in the north.[1] Zambia is vulnerable to the impacts of climate change, given its high reliance on subsistence agriculture.
In 2019, Zambia’s population numbered 17.9 million, forecast to grow to 32.7 million in 2043. The population is very young. In 2019, the median age was just over 17 years and, in the Current Path forecast, this is set to increase to just above 21 years by 2043. The only other African countries with younger populations in 2019 were Burundi, the DR Congo, Uganda, Angola, Chad, Mali, Niger and Somalia.

Fertility rates have substantially decreased in Zambia, down from 7.4 births per woman in 1975 to 4.7 births per woman in 2019 (fifth highest in lower middle-income Africa). Fertility rates are set to decrease further in the Current Path forecast and will reach 3.4 births per woman by 2043. At that time, Zambia will have the third highest fertility rate in lower middle-income Africa, implying that rates in comparable countries are declining more rapidly. As its large youthful population enters the job market, it will place significant pressure on the country and its economy.
Zambia's population is still predominantly rural (56% in 2019), the eighth highest for lower middle-income Africa. The population is expected to be predominantly urban by 2030, nine years later than the average for lower middle-income Africa. By 2043, 56.2% (or 18.4 million) of Zambia's population are expected to live in urban areas, almost three percentage points lower than the average for lower middle-income Africa.
Zambia is sparsely populated, with less than 0.24 persons per hectare in 2019, forecast to increase to 0.45 by 2043. Population density is particularly high around the cities of Lusaka, Kitwe and Mufulira. The country has an estimated 10 cities with populations over 100,000, with Lusaka having an estimated 3 million residents. Much of Zambia’s development has taken place along the railway lines that link Zambia to the port of Dar es Salaam in Tanzania and southward to the Southern Africa network. However, the lines have not been maintained well and most bulk imports and exports (as well as domestic cargo) are transported by road.
In December 2006 Zambia, published its Vision 2030 ambition, to be ‘a prosperous middle-income nation by 2030’. By 2019, Zambia’s economy had grown from US$17.2 billion in 2006 to US$35.4 billion. Although the country graduated from low-income to lower middle-income status in 2011, it is a long way off from achieving upper middle-income status. The country aspires ‘to attain and sustain annual real growth of 6% (2006–2010), 8% (2011–2015), 9% (2016–2020), and 10% between 2021 and 2030’,[4] although actual growth rates have been at 5.9% from 2006 to 2019. The IFs growth forecast is that Zambia will grow at an average of 4.1% per annum from 2020 to 2030.

In 2019 Zambia was the 12th largest economy in lower middle-income Africa and fifth largest within SADC.

Evident from Chart 5 is the impact of the COVID-19 pandemic, which saw the Zambian economy contract by 4.8% in 2020 after growing by 4% in 2018 and 1.7% in 2019. Zambia’s overreliance on copper has made it vulnerable to fluctuations in commodity prices. The mining sector is dominated by copper mining, responsible for 70% of foreign currency earnings and 14% of GDP.[5] Although the recovery in international demand for copper has been positive, the economy is weighed down by Zambia’s large stock of public debt. In November 2020, Zambia defaulted on a Eurobond debt repayment and subsequently on a number of other commercial loans with foreign creditors.[6]

Because of its rapidly growing population, the Zambian economy is forecast to increase to US$92.8 billion by 2043.
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 Zambia.

By 1995, GDP per capita in Zambia had declined by almost half from what it was at independence in 1964 owing to a collapse in the copper price, inward-looking economic policies and regional instability. However, with the election of the MMD government in 1991, Zambia embarked on wide-scale economic reform. Income growth has been strong since, but recovered to independence levels only by 2011. Income growth plateaued from 2014 to 2019 as copper prices declined and sparse rainfall also saw poor agricultural outputs. The impact of the COVID-19 pandemic has also negatively affected incomes. On the Current Path, Zambia should recover to its pre-pandemic level of GDP per capita sometime in 2023 and then improve rapidly. By 2043, GDP per capita is forecast to be at US$5 467, which is 35% above its level of US$4 036 in 2019.
Similar to many other African countries the majority of the labour force is informally employed: 69.25% in 2019 and accounting for 33.7% of GDP. At 29.2%, Zambia’s informal sector contributes more to its economy than the average for lower middle-income Africa.

Owing to its youthful population structure, Zambia’s labour force is set to increase rapidly, going from 7.5 million people in 2019 to 15.9 million in 2043. These figures represent 53.4% of its population in 2019, and 60.2% in 2043. As a result, in the Current Path forecast, the portion of the labour force employed in the informal sector will slightly decline (to 69.8%), in 2043. This will represent 30.2% of GDP, compared with the average of 26.4% for lower middle-income African countries.

Detailed analysis for the International Labour Organization (ILO) gives a higher estimate of the informal sector in Zambia. For example, a 2019 study found that in 2015 '88.7% of the employed Zambian population work informally. Informality rates are highest (virtually 100%) among contributing family workers and own-account workers, resulting in more variation in working conditions amongst employees. Informality rates are generally higher in rural areas, though they still exceed 50% for urban employees. Virtually all workers in the primary sector (defined as working in the farming, fishing and forestry industries) are informally employed.'[7]
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 communications technology (ICT). Most other sources use a threefold distinction between only agriculture, industry and services, with the result that data may differ.

Copper mining dominates the Zambian economy and is included as part of the contribution from the materials sector in the IFs sectoral economic composition. Zambia is Africa’s second largest copper producer (after neighbouring DR Congo), but the country has not been able to increase local content and maximise in-country value from its copper and gold mining despite these activities dominating government revenues.

Other sectors have suffered as productivity in mining has fallen and input costs, particularly for reliable electricity, have increased.\(^8\) In 2019, materials contributed 13.6% of GDP (US$4.8 billion) with a slight increase expected in the Current Path forecast to 2043, when it will contribute 18.5% to GDP (US$17.1 billion). In 2019, manufacturing contributed 10.5% to GDP (US$3.7 billion), ICT 5.5% (US$1.9 billion) and agriculture 5.8% (US$2 billion).

The 2019 size of Zambia’s services sector, contributing 62.2% to GDP, was almost 14 percentage points larger than the average for lower middle-income countries in Africa, much of that consisting of low-end services. Zambia’s agricultural sector is also smaller – by almost 12 percentage points – while the contribution from manufactures is almost nine percentage points lower than the average for lower middle-income countries in Africa. With a relatively small agricultural
and manufacturing sector compared to its peers, Zambia has a particularly low-productivity, low-employment economy, which translates to very high levels of extreme poverty, malnourishment/food insecurity, and a large, unproductive informal sector.

Looking ahead to 2043, the contribution from the agriculture sector will decline from 5.8% in 2019 to 3.5% in 2043, and manufacturing will modestly increase from 10.5% to 12.1%. While Zambia’s ICT sector’s contribution is on par with the average for lower middle-income countries in Africa, it grows more slowly, reflecting a less dynamic economy.

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

Crops million tons

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 contributed 5.8% to Zambia’s GDP in 2019 (equivalent to US$2 billion) and is set to decline to 3.4% of GDP in the Current Path forecast, with its value increasing to US$3.2 billion by 2043. Because IFs uses a sixfold sectoral categorisation of the structure of the economy, the number is significantly below what is often quoted in other sources that suggest agriculture contributes up to 20% of GDP[9] – see Chart 8.

In 2019, agricultural production stood at 14 million metric tons, above the estimated demand of 13.4 million metric tons. This positive picture is expected to decline in the Current Path forecast and by 2043 the demand will outstrip supply by 7.2 million metric tons. This forecasted shortfall paints a picture of growing food insecurity.
Poverty: Current Path

There are numerous methodologies 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 a day (in 2011 international prices), also used to measure progress towards the achievement of Sustainable Development Goal 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.

According to Zambia’s Vision 2030 ambition, the country aims ‘to reduce national poverty headcount to less than 20% of the population; to reduce income inequalities measured by a Gini coefficient of less than 40; to provide secure access to safe potable water sources and improved sanitation facilities to 100% of the population in both urban and rural areas; to attain education for all; and, to provide equitable access to quality health care to all by 2030’. [10]

These ambitions are not on track. Zambia still has some of the highest levels of poverty and inequality globally, particularly...
in rural areas where female-headed households are disproportionately affected.

Rates of poverty peaked in 2010, when more than 65% of the country’s population lived below the US$1.90 threshold, a rate that declined to 55% in 2019 and which will, in the Current Path forecast, decline to 45.7% by 2043. Using the US$3.20 poverty threshold for lower middle-income countries, the 2019 rate was 74.4% (13.2 million) and is expected to decrease to 67.3% by 2043 (22 million) in the Current Path forecast. In 2019, Zambia’s poverty rates were 24 percentage points above the average for lower middle-income Africa and the poverty gap is expected to increase, with Zambia’s poverty rates being 29 percentage points higher than its income peers.

According to the World Bank,[11] more than 616,000 households, representing 3 million Zambians (20% of the population), were registered to receive social grants in 2020 – a relatively small portion given the levels of extreme poverty. Much of the money comes from international development partners and the intention is to expand coverage to 30% of the total population and 50% of the country’s poor citizens by 2022.
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).

Investment in power generation has not kept pace with demand. Most of Zambia’s installed electricity generation capacity (85% equivalent to 2.393 GW) comes from hydropower, particularly from the Kariba Dam (1.6 GW) and the recently completed 750 MW Kafue Gorge Lower hydro-electric power project. From 2000 to 2014, variable rainfall impacted on electricity generation from hydropower as well as negatively affected agricultural outputs, resulting in dampened economic growth.[12]

In 2019 total energy production in Zambia amounted to 24.2 MBOE, forecast to increase to 91.5 MBOE by 2043. In IFs, coal contributes 1.7 MBOE (9%), hydropower 22 MBOE (90%), and wind/solar energy 0.39 MBOE (<1%).
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.

Carbon emissions in Zambia come from a very low level. In 2019, Zambia emitted 1.3 million tons of carbon. It is forecast that carbon emissions will peak at 4.4 million tons in 2036, before declining to 2.5 million tons by 2043. This is as a result of more hydroelectricity capacity being brought online and a reduction in coal dependency.
Endnotes

12. The data in IFs comes from the International Energy Agency and differs from other sources; see, for example, USAID, Zambia Power Africa Fact Sheet.

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Dr Jakkie Cilliers is the ISS’s founder and former executive director. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the Institute. His 2017 best-seller Fate of the Nation addresses South Africa’s futures from political, economic and social perspectives. His three most recent books, Africa First! Igniting a Growth Revolution (March 2020), The Future of Africa: Challenges and Opportunities (April 2021), and Africa Tomorrow: Pathways to Prosperity (June 2022) take a rigorous look at the continent as a whole.

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