ISS AFRICAN FUTURES



DR Congo DR Congo: Scenarios

Blessing Chipanda

Last updated 10 September 2024 using IFs v8.18

Table of contents

DR Congo: Scenarios	3
Demographics and Health scenario	3
Agriculture scenario	7
Education scenario	9
Manufacturing scenario	11
AfCFTA scenario	13
Large Infrastructure and Leapfrogging scenario	15
Financial Flows scenario	19
Governance scenario	21
Endnotes	23
Donors and Sponsors	23
Reuse our work	23
Cite this research	23

DR Congo: Scenarios

- Demographics and Health scenario
- Agriculture scenario
- Education scenario
- Manufacturing scenario
- AfCFTA scenario
- Large Infrastructure and Leapfrogging scenario
- Financial Flows scenario
- Governance scenario

Demographics and Health scenario



Chart 9: Urban and rural population in Current Path and Demographics and Health scenario, 1990-2043

The eight sectoral scenarios as well as their relationship to the Current Path forecast and the Combined Agenda 2063 scenario (hereafter Combined scenario) are explained in more detail separately. Please read more on the website's About Page.

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. A healthy population is a key driver of labour and capital investment and economic growth. It can lead to a higher GDP per capita in the long-term due to its impact on population participation and productivity.

At independence, DR Congo had a relatively well-organised and efficient health system as a result of the mutual efforts of the government, multilateral cooperation and secular and religiously affiliated NGOs. However, subsequent lack of

investment, mismanagement and decades of conflict have led to a near-collapse of the system. There is a high presence of non-state actors in the country's health system. For instance, in 2013, 45% of hospitals in the country were managed by religious organisations, 44% by the government and 11% by private firms.^[1]

Congolese have little access to basic healthcare, mainly due to lack of funding, mismanagement and corruption, lack of qualified medical staff, and high costs. For example, healthcare costs are 60%–70% paid by direct contributions from households, compared to a world average of 46%. Also, because there are a limited number of health centres, around 74% of the population live more than 5 km from such centres.^[2]

The epidemiological profile of DR Congo is marked by the emergence and re-emergence of several communicable diseases.^[3] The country has experienced several epidemic outbreaks such as cholera, yellow fever, measles, Ebola virus and the recent COVID-19. These diseases lead to increased morbidity and mortality among the vulnerable populations, in particular children, women and populations living in isolated areas. Since the mid-2000s, the country has, however, undertaken several reforms in the health sector reflected in multiple strategies. In 2010, the government adopted the National Health Development Plan 2011–2015 which was followed by a second plan for 2016–2020, in 2015.

With the technical and financial assistance of the international community, the health system has registered some recent improvements, reflected in changes in indicators such as life expectancy, infant mortality and maternal mortality rates. Yet, DR Congo still lags behind its peers.

The Demographic and Health scenario consists of reasonable but ambitious reductions in child and maternal mortality ratio, increased access to modern contraception and reductions in the mortality rates associated with both communicable diseases (e.g. AIDS, diarrhoea, malaria and respiratory infections) and non-communicable diseases (e.g. diabetes), as well as improvements in access to safe water and better sanitation.

Visit the themes on Demographics and Health/WaSH for more detail on the scenario structure and interventions.

DR Congo's health sector has been greatly impacted by the country's own protracted conflicts, as well as by the continued long-standing complex humanitarian crises in the world. This has been worsened by the COVID-19 pandemic and by recurrent disease outbreaks such as cholera, measles and Ebola. There is significant evidence that COVID-19 has had a negative effect on the utilisation of health services in DR Congo since March 2020, with a decline in hospital visits, a decrease in the number of antenatal care visits, a reduction in access to family planning and contraception and increased food insecurity. Nearly 23 million children missed out on routine vaccinations in 2020 due to the COVID-19 pandemic —the highest number in more than a decade, according to WHO/UNICEF data.

Rapid population growth in DR Congo goes hand-in-hand with rapid urbanisation. In 2022, about 46.8% of the population lived in urban areas, up from 30.6% in 1990. This is about 14.3 percentage points more than the estimated average of 32.5% for low-income African countries.

On the Current Path development trajectory, the rate of urbanisation in DR Congo will increase to about 56.5% (nearly 103.9 million people) by 2043, while the rural population will drop from 53.2 (2022) to nearly 43.5% by 2043.

In the Demographics and Health scenario, the urban population in DR Congo will decrease to about 100.7 million people (nearly 59.6% of the total population). This is a reduction of about 3% (equivalent to nearly 3.1 million people) relative to the Current Path forecast in 2043. The size of the urban population in 2043 will be significantly above the projected average of low-income African countries by 15.7 percentage points in this scenario.

Rapid urbanisation in DR Congo is associated with unemployment, poverty, inadequate healthcare, poor sanitation, urban

slums and environmental degradation, especially in the main cities such as Kinshasa. Nearly three-quarters of the urban population in DR Congo live in slums, which is 15 percentage points higher than the average for sub-Saharan Africa.





Chart 10 presents the infant mortality rate in the Current Path and the Demographics and Health scenario.

The infant mortality rate is the probability of a child born in a specific year or period dying before reaching the age of one. It measures the survival rate of children born and reflects the social, economic and environmental conditions in which children live, including their healthcare. The rate is measured as the number of infant deaths per 1 000 live births, and it is considered a proxy indicator of general population health. A high rate of infant mortality reflects precarious conditions such as poor nutrition, low access to safe drinking water and inadequate healthcare services.

At 61.2 infant deaths per 1 000 live births in 2021, infant mortality in DR Congo was higher than the estimated average of 49.6 and 46.2 deaths per 1 000 live births for low-income African countries and Africa, respectively. One reason for high infant mortality in DR Congo is its reliance on a physical and healthcare infrastructure that has suffered from lack of investment and fallen prey to decades of protracted conflict, poor governance and economic mismanagement. The Demographics and Health scenario will reduce the infant mortality rate in DR Congo to 21.6 deaths per 1 000 live births by 2043, compared to 29.8 deaths in the Current Path forecast.

When it comes to fertility rates, in 2022, DR Congo had the fourth highest total fertility globally (an average of six births per woman) after Niger, Chad and Somalia, respectively. The fertility rate in DR Congo is mainly driven by cultural values, which encourage people to have large families, and an early start to childbearing, which means more years of giving birth and less use of contraception. The Demographics and Health scenario will reduce the fertility rate from about four births per woman in the Current Path forecast to three births per woman in 2043.





Chart 11 presents the demographic dividend in the Current Path and in the Demographics and Health scenario.

Demographers typically differentiate between a first, second and even third demographic dividend. We focus here on the contribution of the size of the labour force (people between 15 and 64 years of age) relative to dependants (children and elderly people) as part of the first dividend. Thus, the demographic dividend is the window of economic growth opportunity that opens when the ratio of working-age persons to dependents increases to 1.7:1 and higher.

DR Congo has not entered a demographic window of opportunity, meaning that the ratio of working-age persons to dependents is below 1.7:1. In 2022, DR Congo ratio stood at 1.03:1. On the Current Path or business as usual scenario, the ratio will reach 1.3:1 by 2043. The interventions in the Demographic and Health scenario will have a marginal impact on DR Congo's demographic dividend, the ratio will slightly increase to 1.5:1 by 2043. DR Congo will reach the minimum ratio of 1.7:1 described above by 2047, three years earlier than the average for African low-income countries.

The increasing size of the working-age population in DR Congo can be a catalyst for growth if sufficient education is provided and adequate employment is generated to successfully harness their productive power. Otherwise, it could turn into a demographic 'bomb' as many people of working age may remain in poverty, potentially creating frustration, social tension and conflict.

Agriculture scenario



Chart 12: Import dependence in the Current Path and Agriculture scenario, 2019-2043

The Agriculture scenario envisions an agricultural revolution that ensures food security through ambitious yet feasible increases in yields per hectare, thanks to improved management, seed, fertiliser technology, and expanded irrigation and equipped land. Efforts to reduce food loss and waste are emphasised, with increased calorie consumption as an indicator of self-sufficiency and prioritising it over food exports. Additionally, enhanced forest protection signifies a commitment to sustainable land use practices.

Visit the theme on Agriculture for our conceptualisation and details on the scenario structure and interventions.

DR Congo has an estimated 80 million hectares of available arable land but only about 10% of this land is currently being cultivated. The country has the largest untapped agricultural production in Africa, with production potential capable of feeding a quarter of the world's population. But the country has so far failed to make the required investments and policy changes to make this potential a reality.

DR Congo has not achieved food independence and malnutrition is widespread. According to the Global Hunger Index 2023, DR Congo is one of the world's most food-insecure countries, ranking 122nd out of 125, with an agricultural extension system that is apparently ineffectual. The main cash crops are coffee, palm oil, rubber, cotton, sugar, tea and cocoa. Food crops include cassava, plantains, corn, peanuts and rice.

The agriculture sector accounts for over 60% of new jobs, and in 2022, the sector accounted for about 17.4% of its GDP—a decline in share from about 56.5% in 1995. The agriculture sector in DR Congo was severely affected by violent armed conflicts from 1996 to 2000. For instance, by 2006, agricultural productivity had fallen to 60% of its level at independence in 1960.

The DR Congo Agriculture Rehabilitation and Recovery Support Project (ARRSP) aims to increase agricultural productivity by smallholder farmers. Other constraints on production include a lack of transport infrastructure, limited access to agricultural inputs and land disputes.

In 2022, crop yields were estimated at about 4.5 metric tons per hectare, a decline of about 0.3 metric tons per hectare in the past decade, however, above the estimated average of 2.9 metric tons per hectare for low-income African countries in 2022. In the Current Path forecast, crop yields will increase to about 5.6 metric tons per hectare in 2043. In the Agriculture scenario, crop yields in DR Congo will improve to nearly 8.9 metric tons per hectare, which would be an increase of nearly 3.3 metric tons per hectare relative to the Current Path forecast in 2043.

Chart 12 presents import dependence in the Current Path forecast and the Agriculture scenario.

Without significant efforts to improve agricultural production, the current low crop yield will continue to make DR Congo a net food importer for the foreseeable future. In 2022, DR Congo's post-loss agricultural production (crop) stood at 59.9 million metric tons, falling short by 10.3 million metric tons to meet the year's agricultural crop demand of 68.3 million metric tons.

In the Current Path forecast, by 2043, the gap between agriculture crop production (post losses) and demand will increase to about 47.2 million metric tons. The Agriculture scenario will increase post-loss production (crop) by 35.9 million metric tons relative to the Current Path forecast of 107.1 million metric tons in 2043. Due to improvements in rural road access, crop production losses will decrease by 1.4 million metric tons in 3025 and to 0.2 million metric tons by 2043 relative to the Current Path forecast of about 9.8 million in 2035 and 12.1 million metric tons by 2043.

Education scenario



Chart 13: Mean years of education in Current Path and Education scenario, 2019-2043

The Congolese education system is a hybrid. It is made up of public secular schools and religiously affiliated schools. The Catholic Church is by far the most important actor in DR Congo's education system since the very early stages of the colonial period. The Church organises most of the education and the state provides (at least in theory) the funding.

The duration of compulsory basic education is six years for children between six and eleven years old. Although there is a three-year pre-primary education, it is only available in a few urban areas.

Secondary education has two components (cycle long and cycle court). The cycle long consists of the first stage of two years of general studies called tronc commun or cycle d'orientation. The second stage of four years of specialisation ends with a certificate called the Diplôme d'Etat for those who pass the terminal examination called the Examen d'Etat which grants access to tertiary education. The cycle court concerns vocational education and consists of a four-year course starting immediately after primary education, or a three-year course after the first stage of the cycle long.^[4] Political instability and conflicts in the 1990s severely affected the educational outcomes in DR Congo. In addition, widespread malnutrition, the difficulty of switching from mother tongue tuition to learning in French, and, in particular, financial constraints continue to hamper educational outcomes. Despite these challenges, DR Congo has recorded a notable improvement in indicators related to education (i.e. literacy and net enrollment rates) in recent years. For example, the literacy rate for people aged 15 years and older improved from 61.2% in 2007 to an estimated value of about 80.3% in 2022.

The regular age for lower secondary education is 12 to 13 years and 14 to 17 years for upper secondary education. Repetition is permitted only once in each stage.^[5]

Quality education is crucial for economic development. It not only allows the country to increase its current added value but also creates tomorrow's technological innovations. Thus, Congolese authorities should accelerate reforms to improve the quality of education in the country.

The Education scenario represents reasonable but ambitious improved intake, transition and graduation rates from primary to tertiary levels and better quality of education at primary and secondary levels. It also models substantive progress towards gender parity at all levels, additional vocational training at the secondary school level and increases in the share of science and engineering graduates.

Visit the theme on Education for our conceptualisation and details on the scenario structure and interventions.

Chart 13 presents mean years of education in the Current Path forecast and the Education scenario for 15 to 24 age group.

The average years of education in the adult populatio is a good first indicator of the stock of knowledge in society.

The average years of education for adults aged 15 to 24 years was estimated at 5.9 years in 2022, about 0.2 years above the average of low-income African countries.

On the Current Path, the mean years of education (15-24 years of age) in DR Congo is projected to improve to about 7 years by 2043, which will be below the projected average of low-income African countries at 7.2 years in the same year. In the Education scenario, the mean years of education for this cohort will increase to 8.3 years—an increase of about 1.2 years relative to the Current Path forecast in 2043.

Although DR Congo has made significant progress in getting more children into school in recent years, the quality of education they receive is poor and not well suited to the needs of the job market. The main factors explaining this low quality of education are a shortage of teaching staff with the required skills, obsolete equipment and overcrowded classrooms. The education sector is underfunded: government spending on education was estimated at about 2.7% of GDP in 2022, while the average of low-income African countries was 3.4% of GDP.

In the Education scenario, the score for the total quality of primary education will improve from 34.3 out of a possible 100 in the Current Path forecast to 41.4 in 2043—a 20.6% increase compared to the Current Path forecast. The score for the quality of secondary education will improve from 39.5 (Current Path forecast) to 44.6 in the Education scenario by 2043—a 12.5% increase in quality compared to the Current Path forecast.

By investing in the education of its citizens, DR Congo can cultivate a foundation for innovation, economic advancement, and social harmony.

Manufacturing scenario



Chart 14: Value-add by the manufacturing sector in Current Path and Manufacturing scenario, 2019-2043

In the Manufacturing scenario, reasonable but ambitious growth in manufacturing is envisaged through increased investment in the sector, research and development (R&D), and improved government regulation of businesses. This aims to enhance total labour participation rates, particularly among females where appropriate and is accompanied by increased welfare transfers to unskilled workers to mitigate the initial rises in inequality typically associated with a low-end manufacturing transition.

Visit the theme on Manufacturing for our conceptualisation and details on the scenario structure and interventions.

In DR Congo, manufacturing contributed about 16.7% of GDP in 2022, but the content is low technology, with limited value-addition. Products include processed foods (particularly flour and sugar), beer and other beverages, cigarettes, textiles and clothing, footwear, processed wood and paper, chemicals, cement and bricks, glassware and metal goods, such as nails and metal furniture.

Chart 14 presents the contribution of the manufacturing sector to GDP in the Current Path and the Manufacturing scenario. The -model 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 agriculture, industry and services, with the result that data may differ.

In the Current Path forecast, the manufacturing sector's value-added contribution to GDP will reach 24.1% by 2043. The manufacturing scenario will increase the share to 27.7% of GDP by 2043—an increase of 3.6 percentage points relative to the Current Path forecast. Thus, the Manufacturing scenario will increase the size of DR Congo's economy by U\$35.3 billion relative to the Current Path forecast in 2043.

In addition to a larger economy, the Manufacturing scenario also reduces extreme poverty. Instead of 48.1 million people living below US\$2.15 in the Current Path forecast in 2043, 35.7 million (in the Manufacturing scenario) will live below the

poverty threshold. This is the result of the inclusion of social transfers to unskilled workers and more rapid economic growth, as outlined in the Manufacturing scenario.

AfCFTA scenario



Chart 15: Trade balance in Current Path and AfCFTA scenario, 2019-2043

The AfCFTA scenario represents the impact of fully implementing the continental free trade agreement by 2034. The scenario increases exports in manufacturing, agriculture, services, ICT, materials and energy. It also includes an improvement in multifactor productivity growth emanating from trade and a reduction in tariffs for all sectors.

Visit the theme on AfCFTA for our conceptualisation and details on the scenario structure and interventions.

International trade can help accelerate growth and improve living standards. In 2022, exports and imports represented 48% and 50.9% of GDP, respectively. The country's exports are highly concentrated in commodity goods, with the top five exports including refined copper and unwrought alloys, cobalt, unrefined copper, copper ores/concentrated and crude oil. Together these are the top five export products, representing about 92.2% of the total exports.

According to the Observation of Economic Complexity (OEC), in 2022 DR Congo was the world's biggest exporter of cobalt (US\$5.99 billion), cobalt oxide and hydroxides (US\$899 million), copper alloys (US\$199 million), cobalt ore (US\$175 million) and other ores (US\$92.7). In the same year, the value of exported refined copper was valued at US16.3 billion, raw copper at US\$1.4 million and crude petroleum at US\$916 million, destined mostly to China, Singapore, the United Arab Emirates, Hong Kong, and Tanzania. The country's imports were mainly refined petroleum (US\$1.1 billion), sulphur (US\$979 million), delivery trucks (US\$367 million), stone processing machines (US\$363 million) and iron structures (US\$285) sourced mostly from China, Zambia, South Africa, the United Arab Emirates and India.

DR Congo deposited its instrument of ratification in February 2022 and became the 42nd country to ratify the AfCFTA. The country signed the AfCFTA in March 2018 and the National Assembly approved the treaty in April 2021.

Chart 15 compares the trade balance in the Current Path forecast with the AfCFTA scenario.

Trade openness increases the size of the market available to domestic firms. As for DR Congo, trade openness has led to significant progress in strengthening total trade (export plus imports), which represented 66.9% of its GDP in 2021.

DR Congo's trade balance is structurally in deficit, and on the Current Path, this trend will continue until at least 2047. DR Congo's trade deficit will represent about 5.1% of GDP (equivalent to about US\$13.3 billion) in 2043.

In the AfCFTA scenario, DR Congo's trade balance will become positive (a surplus) in the short to medium term (between 2029 -2035), with a trade surplus of US\$1.03 billion by 2035, equivalent to 0.8% of GDP, compared to a trade deficit of about US\$2.9 billion (2.4% of GDP) in the Current Path forecast. The trade surplus will be driven by the materials sector which includes mining. In the Current Path forecast, DR Congo will continue to have a trade surplus in the material sector.

In the AfCFTA scenario, the country's materials sector trade surplus will increase to 31.2% of GDP compared to 28.6% of GDP in the Current Path forecast in 2035. By 2043 the materials sector trade surplus will account for 40.5% of GDP relative to 34.5% of GDP in the Current Path.

Due to the increase in exports in the materials sector, DR Congo's total deficit will be reduced to US\$2.2 billion (about 0.8% of GDP) in 2043, compared to a deficit of US\$13.3 billion (about 5.1% of GDP) in the Current Path forecast.

With the removal of trade restrictions following the implementation of the AfCFTA, it will become easier to trade across the continent; however, DR Congo firms will likely face intense competition in the continent's trade market.

Large Infrastructure and Leapfrogging scenario



Chart 16: Cookstove usage in Current Path and Infra/Leapfrogging scenario, 2019-2043

Source: IFs 8.20 initialising from IEA data

The Large Infrastructure and Leapfrogging scenario involves ambitious investments in road and renewable energy infrastructure, improved electricity access and accelerated broadband connectivity. It emphasises adopting modern technologies to enhance government efficiency and the rapid formalisation of the informal sector, incorporating significant investments in major infrastructure projects like rail, ports, and airports while highlighting the positive impacts of renewables and ICT.

Visit the themes on Large Infrastructure and Leapfrogging for our conceptualisation and details on the scenario structure and interventions.

Infrastructure shortage in DR Congo is one of the key impediments to higher productivity and, hence, faster economic growth, particularly transport infrastructure. According to the World Bank, the infrastructure investment needed in DR Congo is among the highest in Africa.

Road transportation has always been a challenge and the country's vast geography, low population density, extensive forests and meandering rivers further complicate the development of infrastructure networks. Due to a decade of war conflict, networks have been seriously damaged or left to deteriorate. Road and rail infrastructure is dilapidated, and the rail network has fallen into disuse. DR Congo's share of paved roads is estimated at about 5% of total roads, and the share will increase to 23.5% in 2043. About half of the country is inaccessible by road including the capital city Kinshasa which cannot be reached by road from much of the rest of the country. Only a few provincial capitals are connected to Kinshasa. The country is effectively an 'archipelago' state; the only effective means to travel and trade internally is by air — which is costly — or via the Congo River.

The country has abundant and varied energy resources such as hydroelectricity, biomass, solar, wind and fossil fuels. For instance, the country possesses a huge potential of hydroelectric power estimated at 100 GW, which represents about 13% of the world's hydroelectric potential. The country also has potential in other sources of energy, estimated at 70 GW for solar and 15 GW for wind power. In sum, DR Congo has the potential to become a leading exporter of electricity in Africa.

Paradoxically, DR Congo has one of the largest deficits in energy access in the world. The energy supply is largely insufficient for the country's needs and energy consumption comes mainly from biomass. Only 3% is generated by hydroelectric power, and the rest is from charcoal and firewood. Although progress has been made, DR Congo still has one of the lowest rates of electrification globally. The share of the population with access to electricity increased from 6% in 2005 to 21.2% in 2022; far below the estimated 35.9% average of low-income African countries. By 2043, electricity access in DR Congo will increase to 53% of the population.

Access to electricity is heavily skewed toward urban and mining areas, notably Lualaba and Haut Katanga provinces where the copper and cobalt industry is concentrated. In rural areas, electricity is almost non-existent; with only 1% of the rural population connected compared to 42% in urban areas. Access is also uneven across the provinces, ranging from 44% in Kinshasa to 0.5% in Kasaï Occidental.^[6]

Rural households primarily use firewood (traditional cookstoves), leading toenvironment degradation through accelerated deforestation and health risks, such as respiratory issues in infants and children. Additionally, the time spent gathering firewood often limits educational opportunities for children, particularly girls. It is therefore very concerning that the use of traditional cookstoves is still at 59% by 2050.

The power supply is also inadequate and unstable, with frequent shortages and blackouts. For instance, in Kinshasa, about 21% of the population with electricity access receives less than four hours of power daily, and the country averages electricity shortages on 10 days per month.^[7] As a result, about 60% of firms in DR Congo have back-up generators, compared to an average of 43% in sub-Saharan Africa.^[8] These ongoing electricity issues affect economic productivity and growth.

Out of 100 GW hydroelectric potential, only about 2 677 MW have been installed, and only 1 100 MW are exploited. This power is mainly generated by the Inga I and Inga II dams which currently operate at around 50% capacity due to lack of maintenance. The World Bank has been leading efforts to rehabilitate turbines at Inga I and Inga II but the project is not yet complete.

The state power utility, Societe Nationale d'Electricite (SNEL), in charge of electricity production, transportation and distribution is highly inefficient. Almost half of the electricity produced is lost during transmission and distribution due to outdated equipment and maintenance systems.^[9]

Aside from the national grid, there are a few mini-gridssuch as Synoki, Hydroforce and Virunga with a market share of about 6%.^[10] According to the International Renewable Energy Agency (IRENA), only 3.66 MW of solar photovoltaics (PV) had been installed by the end of 2017. Off-grid systems are usually easier and less costly to implement and offer a solution to the growing unmet electricity demand.

There are some promising actions to resolve the problem of electricity access such as the Grand Inga Dam, a proposed giant hydroelectric scheme with an expected capacity of 44 000 MW. It could meet the entire need of DR Congo and even supply half of the African continent with electricity. The project will cost US\$80 billion and is scheduled for completion in seven phases.^[11]

The first phase (Inga III), which is estimated to cost US\$14 billion, will generate 4 800 MW, initially scheduled for 2024 or 2025^[12]. However, the project execution has been significantly delayed. In 2016, the World Bank suspended its funding because the then president, Joseph Kabila, decided to bring the project oversight committee into his presidency, lacking transparency. The project is still ongoing, albeit at a very slow pace. It may come on stream in 2030 at the earliest, dependent upon a partnership between South Africa and DR Congo.^[13]

Authorities in DR Congo have taken several steps to overcome the infrastructure deficit, including entering into contracts with Chinese firms to modernise transport infrastructure. The country is continuing to implement reforms to make the energy and telecommunications sectors more efficient. Public-private partnerships have also been encouraged as a way to increase investment, including foreign direct investment (FDI), in infrastructure-related sectors.

Chart 16 presents cookstove usage in the Current Path and the Large Infrastructure and Leapfrogging scenario.

With the low access to electricity in DR Congo, many households use traditional cookstoves, such as wood-burning and coal stoves. In 2022, it is estimated that about 87.4% of households in DR Congo used traditional stoves for cooking, while only 4.6% used improved cookstoves and about 8% used modern stoves.

In the Current Path forecast, in 2043, 61.6% of households will be using traditional stoves, while 3.2% will be using improved stoves and 35.2% will be using modern stoves. The Infrastructure and Leapfrogging scenario will reduce the use of traditional cookstoves to 55.2%, improved stoves to 2.9% and increase the use of modern stoves to 41.8% of households by 2043.



Chart 17: Access to mobile and fixed broadband in Current Path and Infra/Leapfrogging scenario, 2019-2043

Chart 17 presents access to mobile and fixed broadband in the Current Path and the Large Infrastructure and Leapfrogging scenario.

Mobile broadband in Africa is expanding very rapidly, but fixed broadband lags. The mobile phone sector is perhaps the most dynamic and reliable infrastructure sector in DR Congo.

DR Congo has a very low fixed broadband rate relative to the average of its peers. In 2022, the country had about 0.3 subscriptions per 100 people, which was below the average of 1.8 subscriptions per 100 people average for low-income African countries. In the Current Path forecast, the subscription rate will increase to 17.4 by 2043—which will still be less than the average projected for its peer African group. In the Large Infrastructure and Leapfrogging scenario, fixed broadband subscriptions are set to increase to 26.5 per 100 people by 2043.

DR Congo had an estimated mobile broadband subscription rate of 26.2 per 100 people in 2022. The rate was significantly

below the estimated average of 32.6 subscriptions per 100 people in low-income African countries. Mobile broadband subscriptions in DR Congo will increase rapidly reaching 124.8 subscriptions per 100 by 2043. The Large Infrastructure and Leapfrogging scenario will increase the rate by 0.9 subscriptions per 100 people relative to the Current Path forecast by 2043.

Financial Flows scenario



Chart 18: Government revenue in Current Path and Financial Flows scenario, 2019-2043

The Financial Flows scenario represents a reasonable but ambitious increase in inward flows of worker remittances, aid to poor countries and an increase in the stock of foreign direct investment (FDI) and additional portfolio investment inflows. We also reduce outward financial flows to emulate a reduction in illicit financial outflows.

Visit the theme on Financial Flows for our conceptualisation and details on the scenario structure and interventions.

Many countries in sub-Saharan Africa are still heavily dependent on foreign aid to provide basic services like education and healthcare. This is the case for DR Congo, despite its immense natural resources. Aid constituted about 5.9% of the country's GDP in 2022 (a decrease from 10.3% in 2012), which was below the average of nearly 7.6% of the GDP of low-income African countries. Foreign aid inflows as a share of DR Congo's GDP will continuously decline in the business-as-usual scenario (Current Path forecast). In the Financial Flows scenario, foreign aid flows to DR Congo as a percentage of GDP will increase to 3.3% by 2043, a 0.3 percentage points increase relative to the Current Path forecast value of 3%.

The conflicts of the 1990s effectively kept foreign investors away from DR Congo. The government has recently implemented several policies and reforms to attract more FDI. The extractive sector accounts for most of the FDI flowing into DR Congo, followed by the telecommunications sector. In 2022, FDI inflows represented 4.4% of the country's GDP, which was an increase of about 1.3 percentage points relative to 2020 (the COVID-19 pandemic year). This (4.4%) share was 1.8 percentage points above the average for low-income African countries, which was estimated at about 2.6% of low-income Africa's GDP in 2022.

In the Financial Flows scenario, FDI inflows in 2043 will represent about 6.8% of GDP compared to nearly 5.7% in the Current Path forecast. FDI can act as a catalyst for economic development as it brings much-needed capital and technology to recipient countries. The Congolese government should continue its reforms to attract more FDI, especially in manufacturing.

Chart 18 presents government revenues in the Current Path and Financial Flows scenario.

Wagner's law, or the law of increasing state activity, is the observation that public expenditure increases as national income rises. It is, therefore, reasonable to expect that government revenues will increase as a per cent of GDP in the Financial Flows scenario compared to the Current Path forecast.

Measured as a per cent of GDP, government revenue in DR Congo stood at 11.8% of GDP (equivalent to about US\$5.8 billion) in 2022. In the Current Path forecast, government revenue will reach 17.3% (equivalent to US\$45 billion) of its GDP in 2043. In the Financial Flows scenario, however, government revenues will increase by nearly 0.5 percentage points of GDP to about US\$47.8 billion (equivalent to 17.8% of GDP) in 2043. Much of the increase is due to foreign aid and the effect of more inward investment on growth.

Governance scenario

Chart 19: Composite governance index in Current Path vs Governance scenario, 2019-2043



Despite its vast size, DR Congo, under the 2006 Constitution, transitioned from a highly centralized state with 11 provinces into 26 new territorial units, but the implementation of decentralization has been problematic, according to Zongwe:

The timing of the decentralisation policy has been significantly driven by political calculations rather than resource constraints, such as a recent attempt by the ruling government to further divide provinces. The process suffered complications, like delays in electing new governors, which in turn led to litigation before the Constitutional Court in September 2018. These difficulties take place in a broader context of even greater challenges, including insufficient capacity of provincial administrators, fiscal decentralisation, the questionable economic viability of most provinces, and repeated removal or resignation of governors.'^[14]

By starving the provinces of money, Kinshasa effectively manages the country from the centre. Between 2007 and 2013, for example, only 6%–7% of taxes were transferred instead of the 40% prescribed in the Constitution.^[15]

A report by Transparency International^[16] points out that, 'clientelism, rent-seeking and patronage have decimated fair competition, particularly in the sectors of public procurement and extractive industries in DR Congo'. The report notes that, 'the ruling elite has a direct stake in the country's economy, and often steer economic activities in accordance [with] their own personal opportunities.' Often these same state officials present themselves as private entrepreneurs or resort to their parents (or other family members) to obtain state contracts.^[17]

Corruption is endemic in DR Congo and permeates all sectors. It ranges from basic bureaucratic and administrative corruption to grand forms of corruption involving high-ranking members of the government and defence and security forces. The extractive (oil and mining) sector, tax and customs administrations, and the state-run enterprises are among the most affected. Significant amounts of mining revenues and taxes are not channelled to the treasury. Gécamines, the largest state-run company in the mining sector, is often cited as the main facilitator in the diversion of the mining revenue from the government budget.^[18]

As defined by the World Bank, government effectiveness 'captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies'.

Poor government effectiveness and the absence of strong institutional and legal mechanisms to ensure accountability hamper economic progress and further deepen corruption. In 2019, DR Congo ranked 168th of 180 countries on the Transparency International corruption perceptions index. This significantly affects domestic revenue mobilisation, and hence compromises the badly needed investment in basic socio-economic infrastructure.

Following pressure from the international community, a legal framework to combat corruption was established under Joseph Kabila's regime but remains ineffective. It often serves more as a political weapon than an actual indication of political will to tackle corruption. As pointed out by Matti, 'the rent-seeking elites in DR Congo generally lack the incentives and political will to build strong institutions to curb corruption.'

However, the new president has made a strong commitment to deviate from the inefficiency, corruption and political patronage that have characterised governance since Mobutu's era. Thus, a new commission to combat corruption has been created — l'Agence de prévention et de lutte contre la corruption (APLC) — and some high-level arrests have been made, such as the president's chief of staff, Vital Kamerhe, who was found guilty of embezzlement. However, Vital Kamerhe's supporters and some observers perceive his arrest as politically motivated given his presidential ambitions for 2023 rather than a step towards the establishment of the rule of law in the country.

This Goernance scenario assumes better governance consisting of stability, capacity and inclusion. It measures a state's progress using the average of these three indices. To this end, it includes an index (0 to 1) for each dimension, with higher scores indicating improved outcomes. A combined governance index is the average of these three indices.

Visit the theme on Governance for a full conceptualisation and details on the scenario structure and interventions.

The capacity index indicates that DR Congo had 33.8% less government capacity in 2022 than the average of low-income African countries. In the Current Path forecast, DR Congo will have 18% less capacity in 2043 than the average of its African peers. In the Governance scenario, DR Congo will have 19.3% more capacity than the Current Path forecast in 2043, which will be just 2.2% less than its peers compared to a margin of 18% in the Current Path forecast.

The inclusion index indicates that DR Congo had 37.3% less inclusion in 2022 than the average of low-income African countries. In the Current Path forecast, DR Congo will have 39.9% less inclusion in 2043 relative to its low-income African peers, whereas in the Governance scenario, DR Congo will have 27.5% less inclusion relative to the estimated average for its peers.

Chart 19 presents progress with the three governance dimensions by 2043 in the Current Path and Governance scenario compared to 2019.

The composite governance index is an average of the scores for security, capacity and inclusion. In 2022, DR Congo's governance index was estimated at 0.3, about 25.5% below the average of low-income African countries, indicating that DR Congo generally is more poorly governed than most low-income African countries. In the Current Path forecast, in 2043, the gap will decrease slightly relative to its peers, and the index will improve to 0.4, which will be 22.2% less than the average of its African peers. In the Governance scenario, at nearly 0.47, the gap will be reduced to 10.4% relative to the estimated average of its low-income African peers in 2043.

Endnotes

- 1. B Naughton et al, DRC survey: An overview of demographics, health, and financial services in the Democratic Republic of Congo, START Center, University of Washington, March 2017.
- 2. LS Ho et al, Effects of a community scorecard on improving the local health system in Eastern Democratic Republic of Congo: Qualitative evidence using the most significant change technique, Conflict and Health, 9:27, 2015
- 3. Republique Democratique du Congo, Ministère de la santé publique, Plan national de développement sanitaire 2016-2020, 2016
- 4. World Bank, Education in the Democratic Republic of Congo: Priorities and Options for Regeneration, World Bank Country Study, Washington, DC: World Bank, 2005
- 5. World Bank, Education in the Democratic Republic of Congo: Priorities and Options for Regeneration, World Bank Country Study, Washington, DC: World Bank, 2005
- 6. African Development Bank, DRC Green Mini-Grid Program, 2019
- 7. Nations Unies, Commission Economique pour l'Afrique, Profile de pays: République démocratique du Congo 2017, Addis Ababa: NU.CEA, 2018-03.
- 8. World Bank, Increasing access to electricity in the Democratic Republic of Congo: Opportunities and challenges, 2020
- 9. V Foster and DA Benitez, The Democratic Republic of Congo's Infrastructure: A Continental Perspective, Washington DC: World Bank, 2011.
- 10. African Development Bank, DRC Green Mini-Grid Program, 2019.
- 11. M Mateso, RD-Congo: la construction d'Inga, le plus grand barrage du monde, peine à démarrer, Geopolis, 16 March 2015.
- 12. M Mateso, RD-Congo: la construction d'Inga, le plus grand barrage du monde, peine à démarrer, Geopolis, 16 March 2015.
- 13. Congo Research Group, I need you, I don't need You: South Africa and Inga III, March 2020, Congo Research Group and Phuzumoya Consulting.
- DP Zongwe, Decentralization in the Democratic Republic of the Congo, Autonomy Arrangements in the World, March 2019, DOI: 10.13140/RG.2.2.20028.08321.
- 15. DP Zongwe, Decentralization in the Democratic Republic of the Congo, Autonomy Arrangements in the World, March 2019, DOI: 10.13140/RG.2.2.20028.08321.
- 16. Transparency International, Overview of corruption and anti-corruption in the DRC, 2010.
- 17. See for example: B Akitoby and M Cinyabuguma, Sources of Growth in the Democratic Republic of the Congo: A Cointegration Approach, IMF Working Paper WP/04/114, July 2004; International Monetary Fund, Democratic Republic of the Congo: Staff-monitored program and request for disbursement under the rapid credit facility, Press Release, Staff Report and Statement by the Executive Director for the Democratic Republic of the Congo, 23 December 2019.
- 18. Global Witness, Regime cash machine: How the Democratic Republic of Congo's booming mining exports are failing to benefit its people, 21 July 2017.

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

Blessing Chipanda (2025) DR Congo. Published online at futures.issafrica.org. Retrieved from https://futures.issafrica.org/geographic/countries/dr-congo/ [Online Resource] Updated 10 September 2024.



About the authors

Dr Blessing Chipanda joined the African Futures and Innovation (AFI) programme in January 2023. Before joining the ISS he worked as an assistant lecturer/ research assistant at the University of Pretoria, Department of Economics. He is particularly interested in tasks within the wider realm of international trade, development economics, public policy, monetary policy, and econometric modelling. Equally interested in economic and socio-economic activities that impact social welfare. Blessing has a PhD in economics from the University of Pretoria, South Africa.

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.