Nigeria

Current development trajectory of Nigeria

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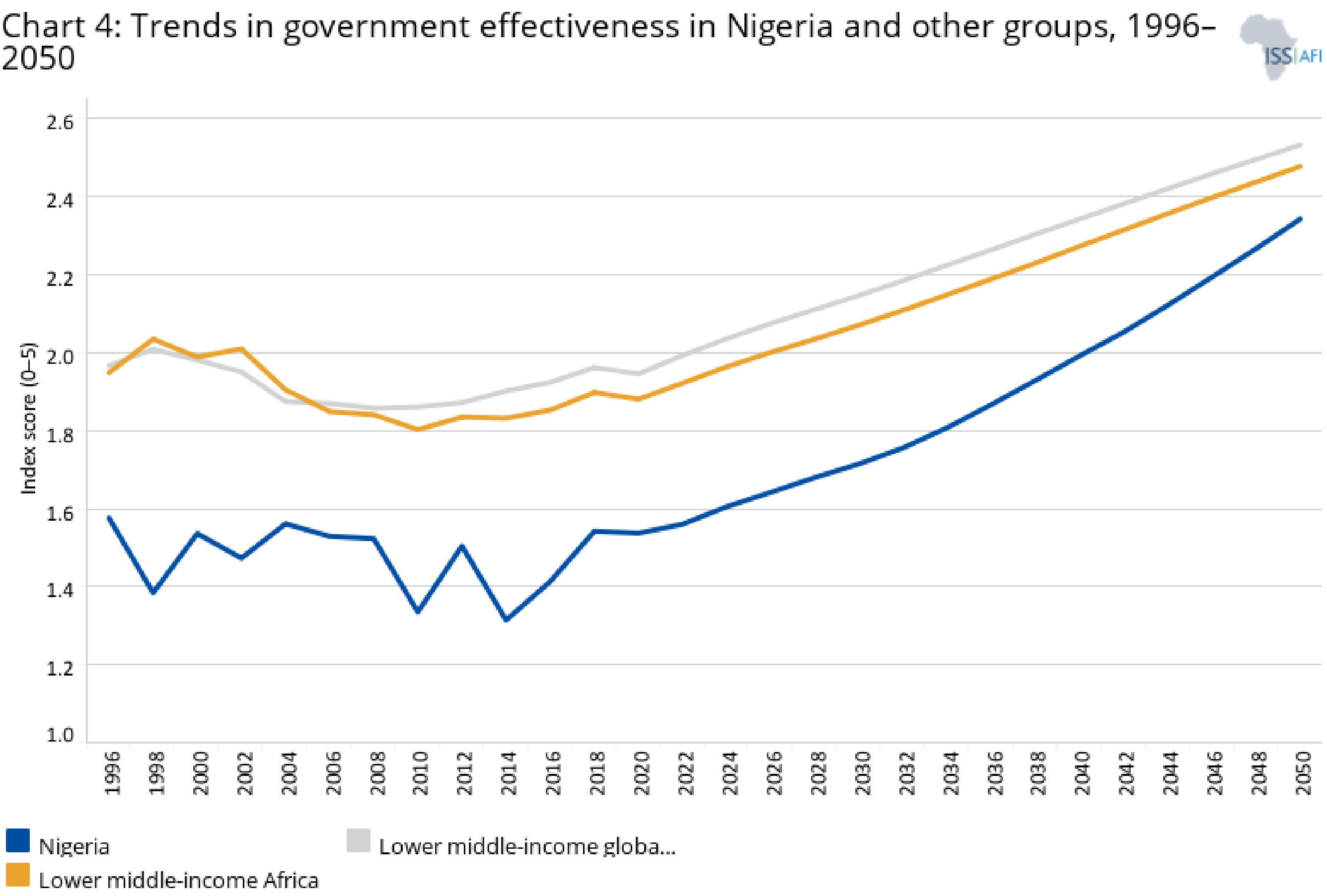

Source: IFs version 7.63, historical data from the World Bank

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This section answers the following questions: What are the trends that have shaped modern Nigeria and how do they compare with trends for other countries at similar levels of development? Given the current policies and environmental conditions, what will the situation likely be in 2050, in line with Nigeria Agenda 2050? To answer these questions, the following sections highlight the recent past, current state of development and the possible future of Nigeria along the Current Path forecast within IFs, namely in terms of governance, demographics, education, health, poverty, economy, infrastructure and agriculture.

Despite a well-educated elite, entrepreneurial verve and abundant natural resources, leadership failure, weak institutions and policy missteps have made Nigeria symbolic of unfulfilled potential. The ruling elite have failed to transform the country's potential into prosperity. As a result, six decades after independence, petroleum-rich Nigeria is still grappling with a high level of poverty, ailing infrastructure, socio-economic instability and underdevelopment.

Mismanagement, nepotism and favouritism characterise governance dynamics in Nigeria. The elite view politics as an avenue for wealth accumulation. Public office holders generally award contracts to cronies and personally held companies. As a result, governance and political leadership in Nigeria have been mainly driven by self-interest instead of collective well-being or national development.[1] Nigeria finds itself in the bottom half of the Mo Ibrahim African Governance Index, with a score of 43.6 out of 100, ranked 32 out of 54 countries in Africa in 2019.[2]

Chart 4 shows Nigeria's government effectiveness score compared with the average for African and global income-group peers and includes a forecast to 2050. With a score of 1.5 out of a maximum of 5 in 2019, government effectiveness in Nigeria is very low and remains below the average for its peers. This implies that the Nigerian government's performance in public services delivery and policy formulation and implementation is lower than the average for its income group. Although the forecast is that government effectiveness will improve, it will likely continue to remain below the average for its peer income groups across the forecast horizon.

Weak government capacity and corruption have undermined government effectiveness in service delivery. For instance, the tax-to-GDP ratio in Nigeria is about 6%, compared to 16% in Egypt, 18% in Ghana and Kenya, 29% in South Africa and 20% on average in sub-Saharan Africa.[3] This low domestic revenue mobilisation limits the government's ability to fund public goods and services to improve the dire social service delivery outcomes in the country. The structural corruption also compounds the inefficiencies in raising tax revenue.

Corruption is perhaps the Achilles heel of economic and human development in Nigeria. A study by the Carnegie Endowment for International Peace cites corruption as 'the single greatest obstacle preventing Nigeria from achieving its enormous potential. It drains billions of dollars a year from the country's economy, stymies development, and weakens the social contract between the government and its people'.[4]

The endemic corruption has led to the phenomenon of 'ghost workers' and 'ghost pensioners', terms used to describe people who do not actually exist but who are added to the payroll system, with their salaries and pension payments disappearing into the pockets of public officials.[5] This has a knock-on effect on the government budget and limits government capacity to invest in badly needed socio-economic infrastructure.

Successive Nigerian governments have made efforts to fight corruption in the country. These measures have included reform of public procurement and anti-corruption enforcement agencies such as the recent Economic and Financial Crime Commission, the Independent Corruption and Other Practices Commission and the Code of Conduct Bureau.[6]

However, progress has been slow. Profound political and institutional challenges, as well as inadequate funding, have undermined the credibility and effectiveness of these anti-corruption agencies.[7] As a result, corruption remains stubbornly high in the country. According to the global Corruption Perceptions Index (CPI) 2020 by Transparency International, Nigeria occupies 149th position out of the 180 countries surveyed, with a score of 25 out of 100. The twin problems of corruption and bad governance have made Nigeria a 'giant with clay feet', the largest economy with the largest number of poor people in Africa.

Nigeria is also facing multidimensional security threats, including insurgencies, terror acts, kidnappings, armed robberies and communal clashes, particularly between farmers and herders. Boko Haram and an Islamic State-affiliated splinter faction, the Islamic State West Africa Province (ISWAP), have spread terror in their strongholds in the north-eastern part of the country by increasing attacks and kidnappings. This violence has left more than 36 000 dead and more than two million displaced to date. Since 2018, Boko Haram has strengthened and increased its deadly attacks, targeting Nigerian military bases in particular.[8] As a result, Nigeria is ranked third out of 135 countries on the 2020 Global Terrorism Index (GTI).[9]

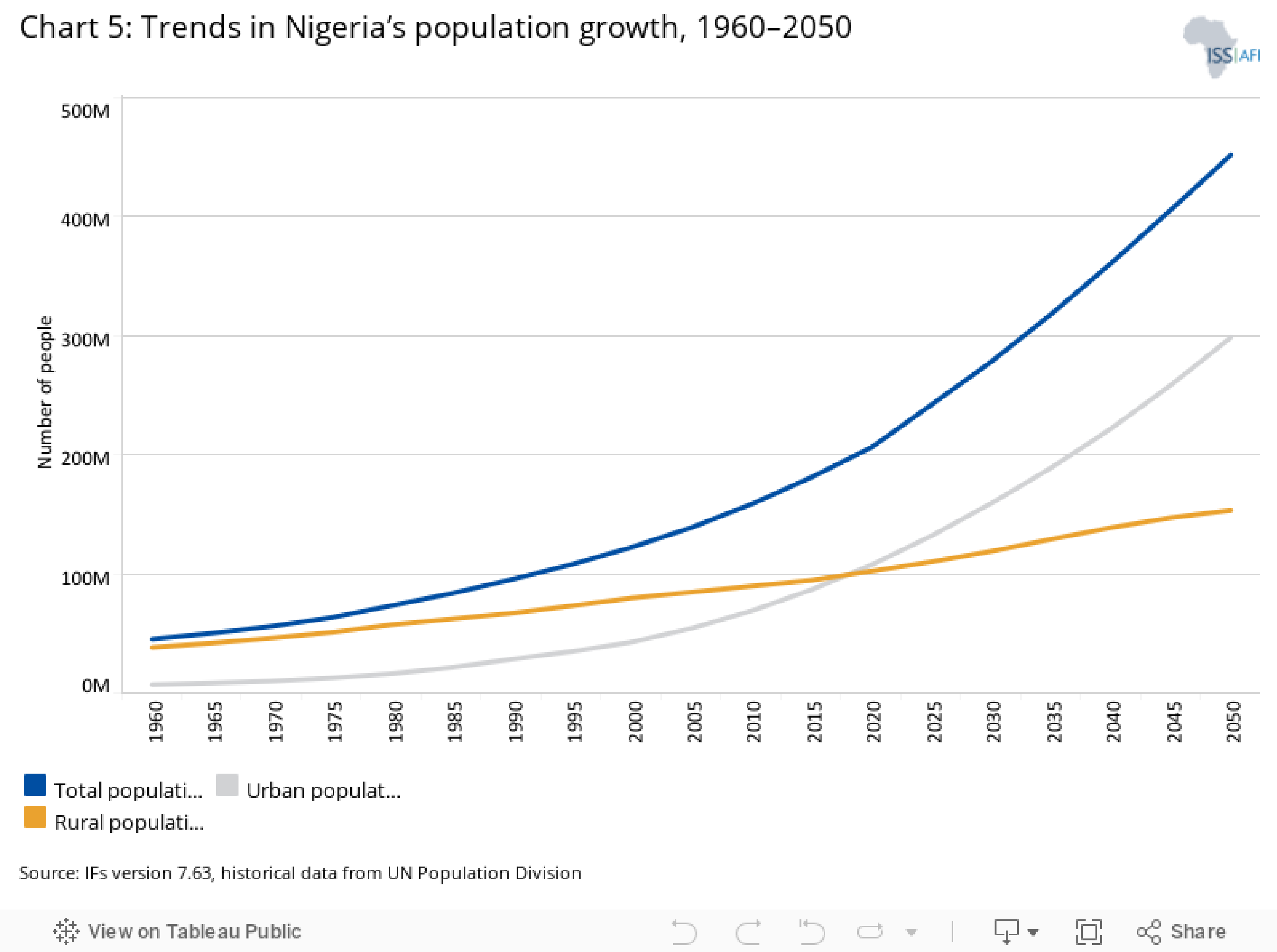
In addition to Boko Haram in the north-east, criminal gangs and other armed organisations are mushrooming in north-west and north-central Nigeria. Violence in north-west Nigeria has three dimensions. The first layer includes violence from competition between Fulani herders with their associated militias, known as *yan-bindiga* (gun owners), and Hausa farmers with their vigilantes, referred to as *yan sa kai* (volunteer guards), over land and water resources.[10] Farmer–herder conflicts in Northern Nigeria have gained momentum in recent years due to rising population pressures and diminishing water resources, as well as desertification caused by climate change.[11]

The second dimension is comprised of violence perpetrated by criminal gangs seeking to enrich themselves amid the proliferation of small arms in the region. These criminal gangs generate revenue by rustling cattle, pillaging villages and kidnapping people for ransom. At least US$11 million was paid in ransom between 2016 and 2020.[12] The third dimension of violence in Nigeria's north-west involves the infiltration of jihadist groups seeking to take advantage of the security crisis. Women and girls are paying a heavy price in these attacks by different armed groups in the region as they are also subjected to sexual violence, often abducted or gang-raped in the presence of family members.[13]

In addition to this multidimensional violence, a new separatist rebellion is emerging in the south-east, where a past secessionist attempt to create the republic of Biafra sparked a civil war between 1967 and 1970. Operations by Nigeria's security forces to dismantle these armed groups also have unintended consequences, as they push some of them to other regions in the country, further exacerbating insecurity countrywide.

In sum, corruption, bad governance and insecurity are threatening Nigeria's development prospects. Good leadership is needed to attain effective governance capable of addressing corruption, security and resource mobilisation for inclusive and sustainable development.

Demographics



According to the 2018 Nigeria Demographic and Health Survey,[14] Nigeria's population is 46% Christian (broken down between 10% Catholics and 36% Protestants) and 53.5% Muslim, with the remaining 0.5% being followers of traditional animist religions or not declared (atheists, agnostics).[15] The country is home to over 250 different ethnic groups. This ethnic and religious diversity is often the source of tension, and religious affiliation plays a role in shaping political and power dynamics in Nigeria.[16]

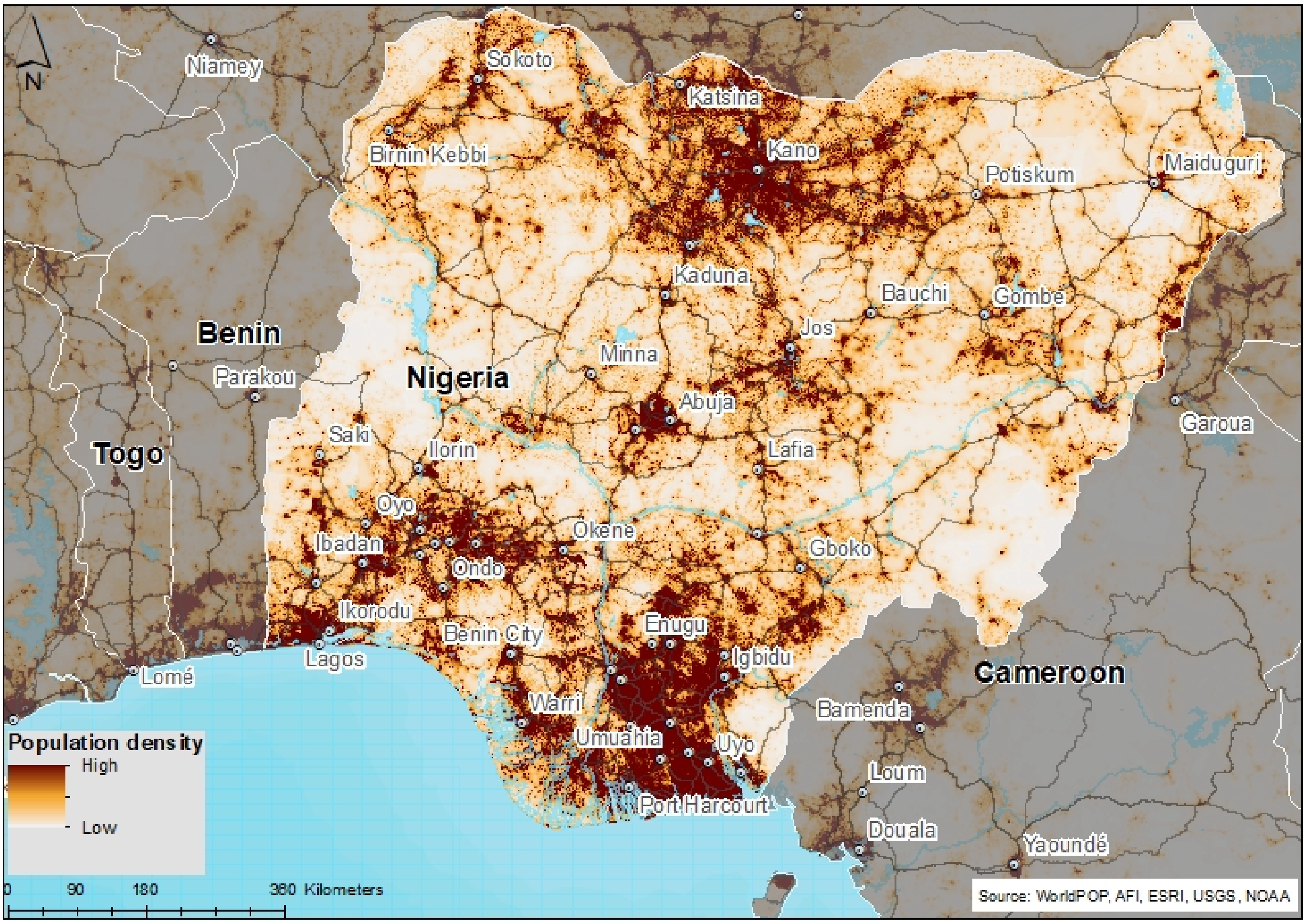
Nigeria is facing a significant population boom. According to IFs, from an estimated 45 million people at independence in 1960, Nigeria's population has more than quadrupled to 200 million people, making it the seventh most populous country globally. On the current development trajectory (Current Path), Nigeria's population is likely to increase from about 200 million in 2019 to about 452 million by 2050 (Chart 5). At that point, Nigeria will be the third most populous country globally, after India and China.

The fertility rate in Nigeria was 5.4 children per woman in 2020, a slight decline from 6.6 in 1990, making it currently ranked eighth globally. The Current Path forecast is that Nigeria's fertility rate will decline to 3.4 children per woman by 2050, making it the fourth highest globally. The population of the northern states is growing faster than that of the southern states. For instance, the average fertility rate in the south-west is about 3.9 children per woman while it is about 6.6 in the north-west.[17] By state, the fertility rate ranges from 3.4 children per woman in Lagos to 7.3 children per woman in Katsina.[18]

As evident in Chart 5, the high population growth in Nigeria goes hand in hand with rapid urbanisation. In 2019, about half of Nigerians, or 100 million people, lived in cities. The population of Lagos itself has grown from 300 000 inhabitants in 1950 to 15 million in 2018.[19] The urbanisation rate in Nigeria is one of the fastest in the world — the Nigerian urban population is growing at a rate of 4.2% per year, that is to say, twice the world rate, and is significantly higher than the Nigerian population growth rate of 3%.

On the Current Path, 66% of the population will be urban by 2050; this is equivalent to nearly 300 million people. The increasing size of the urban population is also associated with unemployment, poverty, inadequate healthcare, poor sanitation, urban slums and environmental degradation. It is estimated that more than half of the Nigerian urban population lives in slums.

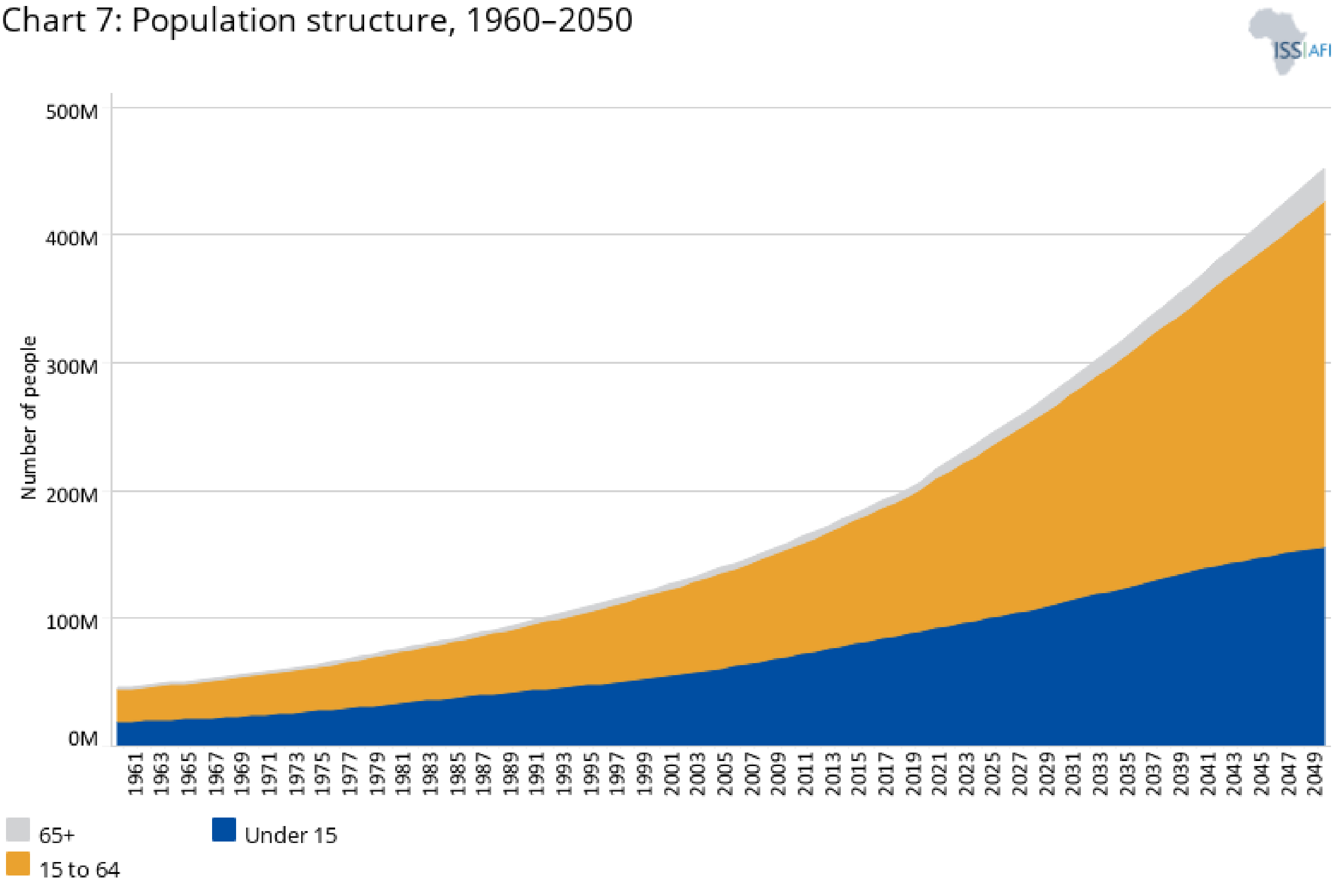
Chart 6: Geographical distribution of Nigerian population, 2020



The population is unevenly distributed across the country, concentrating along trade routes and natural resource locations. Average density ranges from five people per hectare in rural areas to 45 people per hectare in urban spaces. The highest rural densities are found in the south-west, while the highest urban densities are located in the cities of Lagos, Kano, Ibadan, Kaduna, Port Harcourt, Benin City and Maiduguri (Chart 6).

Successive Nigerian governments have recognised the necessity of reducing the rapid population growth, but efforts to implement a comprehensive demographic policy have often been met with religious objections.[20] Family planning policies are a topic of fractious debate among religious leaders in the country.[21] Nigeria's modern contraceptive prevalence rate is 12% among women aged 15–49; this is significantly lower than the average for its region (28%).[22]

Chart 7: Population structure, 1960–2050



Source: IFs version 7.63, historical data from UN Population Division

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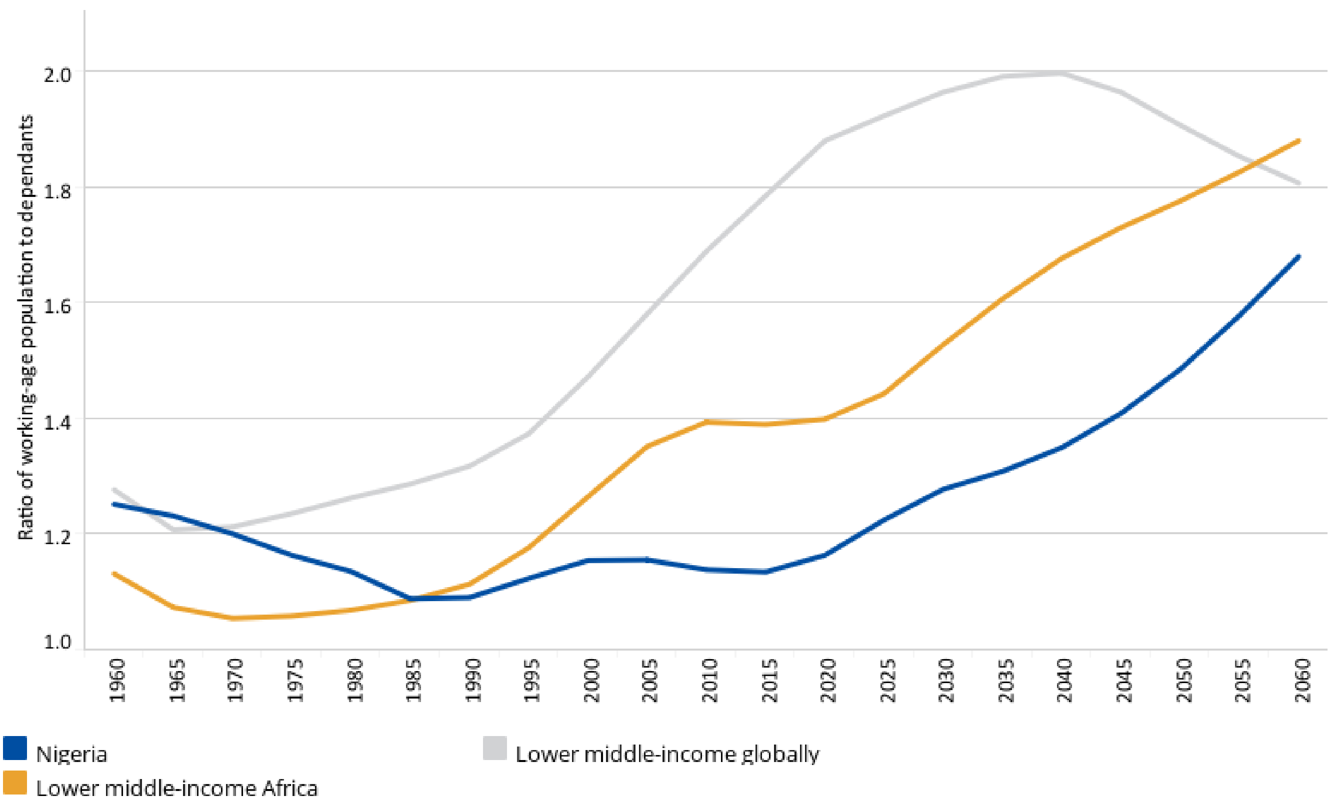
A country's population age structure plays a vital role in social, economic and political development. Nigeria is among the countries with the most youthful age structure, with a median age of 18. This means that half of the Nigerian population is younger than 18.

About 43.5% of the population is in the below 15 years of age dependency age group, while 2.7% are in the 65 and above dependency age group. On the Current Path, the share of these two dependency age groups is projected to be, respectively, 34.4% and 5.8% by 2050. About 54% of the Nigerian population is in the 15–64 working-age group, and this is forecast to increase to 59.7% by 2050. The structure of Nigeria's population is typical of countries with a low life expectancy and high fertility rates.

The large cohort of children below 15 requires more investment in education, healthcare and infrastructure. An increase in the working-age population relative to dependent children and elders can generate economic growth known as the demographic dividend.

Chart 8: Demographic dividend – Nigeria and other groups, 1960–2060



Source: IFs version 7.63, historical data from UN Population Division

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Generally, the demographic dividend materialises when a country reaches a ratio of at least 1.7 people of working age for each dependant.[23] When there are fewer dependants to take care of, it frees up resources for investment in both physical and human capital formation, and eventually increases female labour force participation. Studies have shown that about one-third of economic growth during the East Asia economic miracle can be attributed to the large worker bulge and a relatively small number of dependants.[24]

However, the growth in the working-age population relative to dependants does not automatically translate into rapid economic growth unless the labour force acquires the needed skills and is absorbed by the labour market. Without sufficient education and employment generation to successfully harness their productive power, the growing labour force could turn into a demographic 'bomb' instead of a demographic dividend, as many people of working age may remain in poverty, potentially creating frustration, social tension and conflict.

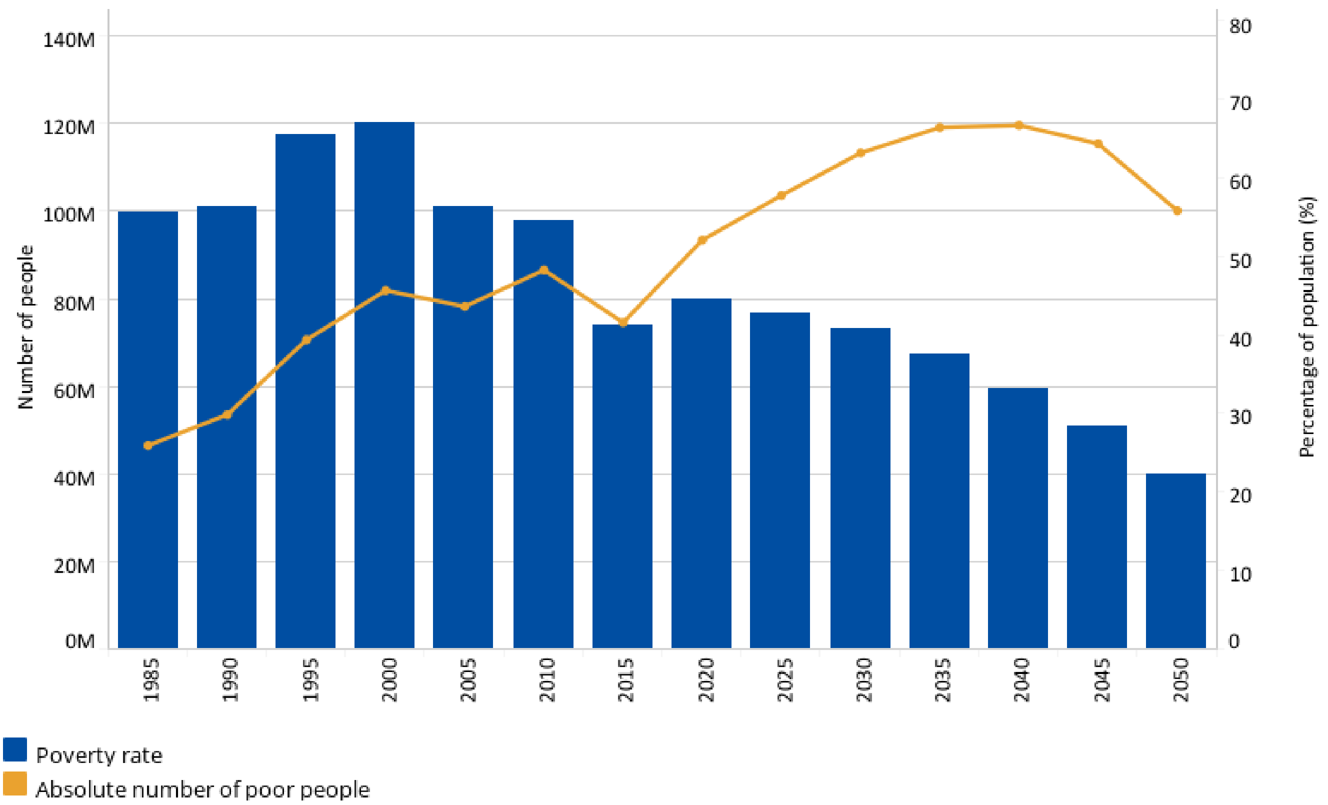
On the Current Path, the ratio of working-age people to dependants will improve slowly from its current level of 1.1 to about 1.5 by 2050, below the minimum threshold of 1.7 that a country should reach to expect the demographic dividend. Nigeria only gets to this positive ratio around 2060, implying that it will experience its demographic dividend almost two decades later than the average for lower middle-income Africa and five decades later than the average for lower middle-income globally (Chart 8).

Also, the youth bulge, defined as the ratio of the population between the ages of 15 and 29 to the total adult population, is currently about 47% for Nigeria, and it will remain above 40% across the Current Path forecast horizon. While this large youth bulge can usher in youth activism and positive political changes in a country, it can also increase the likelihood of criminal violence, conflicts and instability, mainly when the needs of the youth, such as employment, cannot be met. Nigeria has one of the highest youth unemployment rates: two-thirds of the youth are either jobless or under-employed, while one-third of the country's working-age population is unemployed.[25] Recently, the EndSARS protests which were initially against police brutality became a platform for the youth to express their anger with the leaders of the country, and demand change.

Better management of population growth is key to the development of a nation. Policymakers in Nigeria need to take much more urgent action to address the high population growth in order to speed up the country's demographic transition. A decline in the below-15 dependency age group helps governments and parents to invest more in each child in terms of education and health,[26] with positive implications for human capital formation.

Poverty and inequality

Chart 9: Monetary poverty in Nigeria (< US$1.90 per day and person), 1985–2050



Source: IFs version 7.63, historical data from the World Bank

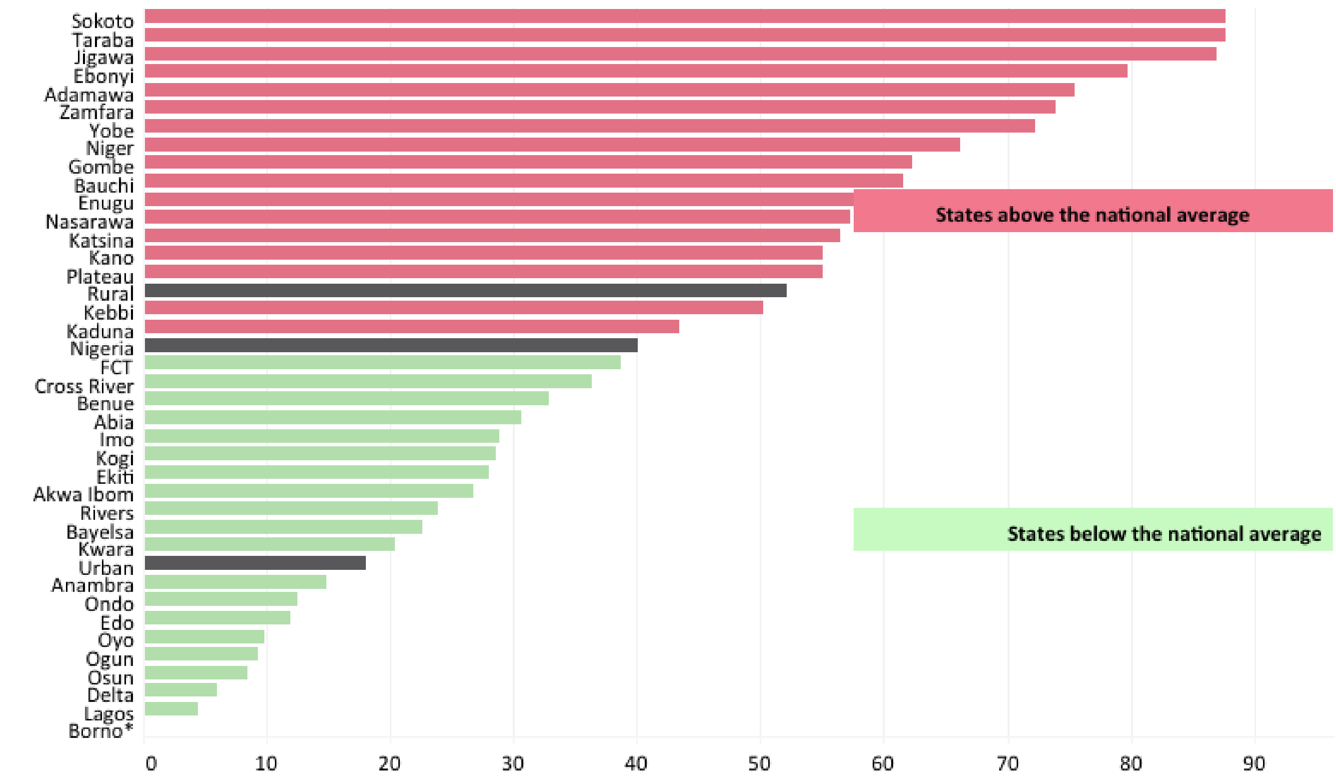
Like in the Democratic Republic of the Congo (DR Congo) and many other sub-Saharan African countries, poverty in Nigeria presents a paradox: the country is resource rich, but most people are poor. Chart 9 reveals that the rate of poverty and the number of people living in extreme poverty have been very high in Nigeria over time. The poverty rate in the country reached its highest levels over the period 1995–2000 (66.1% on average) before taking a downward trend to 40.1% in 2018 — its lowest level since independence in 1960. The average poverty rates for lower middle-income Africa and globally were 22.4% and 9.7%, respectively, in 2018.

According to the IMF, poverty rates have declined more slowly in Nigeria than in other sub-Saharan African countries with similar GDP per capita growth[27] because the ineffectuality of the various poverty-alleviation programmes, in part due to corruption.[28] Corruption can undermine the effectiveness of government poverty-alleviation programmes by diverting public social spending away from its targets, such as education and health.

On the Current Path, the poverty rate in Nigeria is forecast to increase from 42.8% in 2019 to 44% in 2021 before declining gradually across the forecast horizon. This is mainly due to the COVID-19 pandemic and the associated economic crisis, which has plunged millions more people into poverty. According to the World Bank, the COVID-19 crisis is expected to push an additional 10.9 million people into poverty by 2022 in Nigeria.[29] On the Current Path, the poverty rate in Nigeria is forecast to decline gradually to reach 22.1% by 2050, versus 9.1% and 2.5% for the projected averages for, respectively, lower middle-income Africa and lower middle-income globally in the same year.

However, the absolute number of poor people will continue to increase due to the rapid population growth. The number of poor people is projected to increase from 87.3 million in 2019 to peak at about 120 million in 2038 before slowly declining to 100 million by 2050. Therefore, unless the Nigerian government takes proactive measures in confronting poverty, the country will miss the Sustainable Development Goal (SDG) of eliminating extreme poverty by 2030 by a substantial margin. Indeed, on the Current Path, the extreme poverty rate in Nigeria is projected to be about 41% by 2030, while Goal 1 of the SDGs requires that less than 3% of every country's population should be living in extreme poverty by 2030.

Chart 10: Poverty rates (% of the population) by states of Nigeria (< US$1.90 per person/day)



Source: Data from Nigeria National Bureau of Statistics, '2019 poverty and inequality in Nigeria: Executive summary', May 2020
* Data for Borno state is not available

Also, Nigeria shows a characteristic pattern of poverty polarity between Northern and Southern Nigeria. Poverty in the country is more concentrated in the northern states. As shown in Chart 10, poverty rates in most northern states are above the national average. For instance, more than 87% of the population in the northern states of Sokoto, Taraba and Jigawa live in extreme poverty compared to only 6% and 4.5% of the population, respectively, in the southern states of Delta and Lagos.

The northern region performs poorly on almost all human development indicators when compared to the south. According to the World Bank, 87% of Nigeria's poor live in the northern region, with about half of them in the north-west.[30] The conflict between farmers and herders has contributed to the high level of poverty in Northern Nigeria. The violence has deeply affected the economy of the region. Agriculture, on which about 80% of the population of the region depends for livelihoods, has been particularly hit.[31] Thousands of hectares of farmland have been either destroyed or rendered inaccessible, a situation that has resulted in poverty and aggravated malnutrition.[32]

Chart 10 also reveals that Nigerian poverty is predominantly a rural phenomenon; the average poverty rate in rural areas is 52.1% versus 18% in urban areas. This indicates significant challenges with access and opportunities for Nigerians that live in rural areas of the country. For instance, about 78% of financially excluded adults in the country live in rural areas, compared to nearly 22% in urban areas.[33]

The above analysis of extreme poverty in Nigeria is based purely on a monetary measure. However, poverty is not only about money; it is increasingly being understood as a multidimensional phenomenon. Even households that are not monetarily poor may find it difficult to access food, clean water, housing, security and health and education services.[34]

The Multidimensional Poverty Index (MPI) complements monetary measures of poverty by taking into account the multiple deprivations faced by people in a country. Multidimensional poverty is more widespread in Nigeria and has been compounded by the COVID-19 pandemic. According to the 2020 global MPI, 46.4% of Nigerians are multidimensionally poor.[35] This is equivalent to about 95 million people living in multidimensional poverty. This is more than the entire population of the DR Congo. According to the World Bank, Nigeria is the largest contributor to multidimensional poverty in sub-Saharan Africa. This implies that meeting regional targets on monetary and non-monetary poverty hinges on Nigeria.

In addition to corruption and unemployment, inequality is another key driver of poverty in Nigeria. The wealth of the nation is concentrated in the hands of a few. For instance, about one-third of billionaires in sub-Saharan Africa are Nigerians, and there are 194 Nigerian multimillionaires whose fortune exceeds US$30 million, with 93% of them living in Lagos state.[36] According to Oxfam International, the combined wealth of the five richest Nigerians, US$29.9 billion, could end extreme poverty in the country.[37] Oxfam International revealed that a few wealthy elites had exploited the benefits of the nation's economic growth to the detriment of ordinary Nigerians.

Also, Nigerian women are subject to unequal treatment in terms of labour, education and property. The patriarchal society and deep-rooted traditions make life difficult for many women in Nigeria.[38] For example, low-skilled and low-wage jobs are predominantly occupied by women. In addition, they are five times less likely to own land than men. Widowhood is often a source of discrimination and can lead to losing property, land and any money saved before a husband's death.

According to the IFs database, the income inequality level measured by the Gini index was 0.42 in 2019 in Nigeria versus 0.39 for lower middle-income Africa and 0.37 for lower middle-income globally. Although Nigeria has the largest number of poor people among its lower middle-income peers, it has the lowest public spending on social protection (0.3% of GDP), which is also poorly targeted.[39] As a result, Nigeria ranked second to last among 158 countries assessed on Oxfam's 2020 Commitment to Reducing Inequality (CRI) Index,[40] which captures governments' actions concerning social spending, tax and labour rights.

A high level of inequality reduces the elasticity of poverty to economic growth and can cause socio-political instability in a country. The growing social discontent and the surge in criminal gangs involved in kidnappings for ransom in Nigeria in recent years are partly linked to unemployment, poverty, limited economic opportunity, social inequality, and unequal allocation and distribution of state resources.

Frustrated by living in abject poverty with no prospect of a job, some Nigerians may sympathise with the armed groups or get involved in criminal activities. According to the ICG, some girls and women living mainly in the north-east part of Nigeria chose to join Boko Haram voluntarily in the hope of a better life. Also, an empirical study by Adekoya and Abdul-Razak revealed a strong relationship between crime and poverty in Nigeria.[41]

Overall, Nigeria's poor are mostly rural, predominantly female, mostly illiterate and mainly in the informal sector.[42] Nigeria was declared the 'poverty capital' of the world a while ago[43] despite its abundant natural resources. To ensure peace and stability in the country, proactive measures need to be taken to break the cycle of poverty. The government should scale up social safety net transfers to a broader share of the poor, reduce corruption and improve employment and educational opportunities.

Education

Chart 11: Selected educational indicators

Gross enrolment rate: The number of students enrolled in a given level of education, regardless of age as a percentage of the official school-age population corresponding to the same level of education. Rates can therefore be above 100%.

Completion rate: The number of people in the relevant age group who have completed the final grade of the given level of education as a percentage of the population at the theoretical graduation age for the given level of education.

Source: UNESCO

The education system in Nigeria is administered at federal, state and local government levels. The Federal Ministry of Education oversees overall policy formation and ensures quality control but is mainly involved with tertiary education. Basic and senior secondary education remain primarily under the jurisdiction of the state and local governments. The Nigerian education system can be described as a '1-6-3-3-4' system: one pre-primary year (recently introduced) and six years of primary, followed by three years of junior secondary education, which together comprise the basic education. The next three years are senior secondary education, followed by four years of tertiary education for a basic degree.[44]

According to Nigeria's national policy on education, the language of instruction for the first three years of elementary school should be the 'indigenous language of the child or the language of his/her immediate environment', most commonly Hausa, Ibo or Yoruba. After that, English is used from Grade 4. This policy, however, is not always followed and instruction is often delivered in English.[45]

The education sector has not received enough attention in Nigeria, and this manifests in the chronically low public funding, decaying educational infrastructure, deteriorating teaching capabilities and high illiteracy, among other issues.

The national literacy rate improved modestly from 55% in 2003 to about 65% in 2019, 10 percentage points below the average for lower middle-income Africa and 20 percentage points below the world average. However, despite the progress made, more than 30% of Nigeria's population aged 15 years and older can neither read nor write. Moreover, the literacy rate is even lower in most of the northern states of the country. For instance, the literacy rate in north-west Nigeria is estimated to be about half the national rate.[46]

These distressing statistics imply that a significant proportion of Nigeria's working-age population is not employable in an economic environment where manual labour is becoming less important. The absence of appropriate knowledge and skills leads to poverty.

The mean years of education of adults is a good indicator of the general level of education or the stock of education in a country. In Nigeria, the average number of years of schooling for adults aged 15 years and over, according to 2019 data in IFs, is about eight years. However, when disaggregated by gender, males have about nine years and females seven years of schooling. This means that most adults in the country have barely completed basic education.

However, Nigeria performs slightly better than the average for its income group in Africa, which is about seven years. By 2050, the average years of education for adults 15+ will only be about nine years, nearly one year higher than the projected average for African lower middle-income.

Chart 12: Progress through the education pipeline (latest data – 2018, 2019)

Country/region	Primary		Lower secondary		Upper secondary		Tertiary	
	Enrolment (gross)	Completion	Enrolment (gross)	Completion	Enrolment (gross)	Completion	Enrolment (gross)	Completion
Nigeria	94.1	85.6	56.5	48.9	47.2	42.3	11.0	5.3
Africa LMICs	104.2	84.7	58.7	61.3	43.1	40.7	19.8	11.6
LMICs globally	105.1	84.0	58.7	70.0	43.1	45.8	28.5	22.5

Source: IFs version 7.63; historical data from UNESCO Institute for Statistics
Note: LMICs = Lower middle-income countries

Primary school enrolment in Nigeria has improved in recent years but remains below the average for its Africa income group. UNICEF reports that the net attendance at the primary level is only 70%. Also, the net primary enrolment rate (not shown in the table) is only 67%, implying that many children who are supposed to be in school are not. This means that Nigeria still has a bottleneck at the primary enrolment stage, as the number of learners that can get into and through primary school determines the size of the pool available for secondary and tertiary.

Consequently, educational outcomes for secondary and tertiary levels are very low in Nigeria, with the situation at the tertiary level significantly worse. The low educational outcomes at the tertiary level are also explained by the low-carrying capacity or intake level of the tertiary institutions. Only about 10% of applicants seeking admission into tertiary institutions are placed.[47]

Officially, primary education is free and compulsory in Nigeria, but the reality on the ground is quite different. According to UNICEF, Nigeria has the world's highest number of out-of-school children — about 10.5 million children aged 5–14 are not in school, with 60% of them in Northern Nigeria.[48] The rapid population growth and the youthfulness of Nigeria's population have brought many challenges to the education system.

With children under 15 making up over 40% of the 200 million people, the education system is unable to cope. North-west Nigeria has the highest number of out-of-school children in the nation. In states like Kano, Katsina, Sokoto, Zamfara and Kebbi, more than 30% of school-age children are not in school.[49] In addition to those who do not attend school, millions of children are in the poorly resourced and under-supervised Quranic school system (*almajiranci*), which is notorious for producing unskilled youth cohorts.[50]

Furthermore, a gender imbalance in the education sector also affects enrolment and educational outcomes. While the gender parity index for primary school and secondary school has improved to 1.00 and 0.97 respectively, UNICEF reports that about 60% of out-of-school children in the country are girls. Many girls are not in school due to stereotypes about education for girls, financial constraints and early marriages.[51]

However, the situation of female education varies by state or region. For instance, in the north-east and north-west states, girls' primary net attendance rate is 47.7% and 47.3%, respectively,[52] implying that more than half of the young girls in these states are not in school.

Girls in the southern regions have more than twice the chance to attend school than their peers in the north, where jihadist insurgency and poverty are rampant. Education in Northern Nigeria has become one of the casualties of jihadist insurgency and banditry as learners are frequently taken from schools in mass abductions. More than 1 000 learners have been abducted since December 2020 and the group Boko Haram, for instance, kidnapped over 270 schoolgirls from Chibok in 2014.[53]

On top of the alarming number of out-of-school children, the quality of education received by those who have the opportunity to be in school has slipped significantly. Getting more children into school is essential but ensuring that they actually learn is more important. Many empirical studies have reported that educational quality impacts economic growth more than educational quantity.[54] The quality of education is usually tracked using Harmonized Test Scores. According to the 2020 World Bank Human Capital Project report, learners in Nigeria score 309 on a scale where 625 represents advanced attainment and 300 represents minimum attainment.[55]

Dilapidated school infrastructure, obsolete educational materials, insufficiency of qualified teachers, limited STEM (science, technology, engineering and mathematics) training, and lack of high-quality technical and vocational education and training (TVET) programmes affect the quality of education and create a disconnect between graduates' skills and labour market needs.[56] The end result is the low employability of the labour force and high youth unemployment in the country.

Chronically inadequate public funding, corruption and bad governance are some of the key factors underlying the deterioration in public education outcomes across all levels in Nigeria. The resources allocated to the education sector have increased only modestly despite the exploding number of learners. The education budget increased from 6.4% of the national budget in 2003 to 8.2% in 2013 and 10.7% in 2014 before dipping below 10%.

In 2018, only about 7% of the national budget was allocated to the education sector while the 'Education 2030 Agenda' (Incheon Declaration) requires states to allocate at least 15% to 20% of total public expenditure to education.[57] As a result of insufficient funding, some public schools are highly dilapidated or have collapsed and learner-to-teacher ratios have significantly increased. It is common to see 100 learners for one teacher or learners learning under trees due to the lack of classrooms in some areas.[58] As parents seek better education than they find in the public schools, private education has mushroomed over the years in the country. In Lagos state alone, more than 18 000 private schools were operating in 2018.[59]

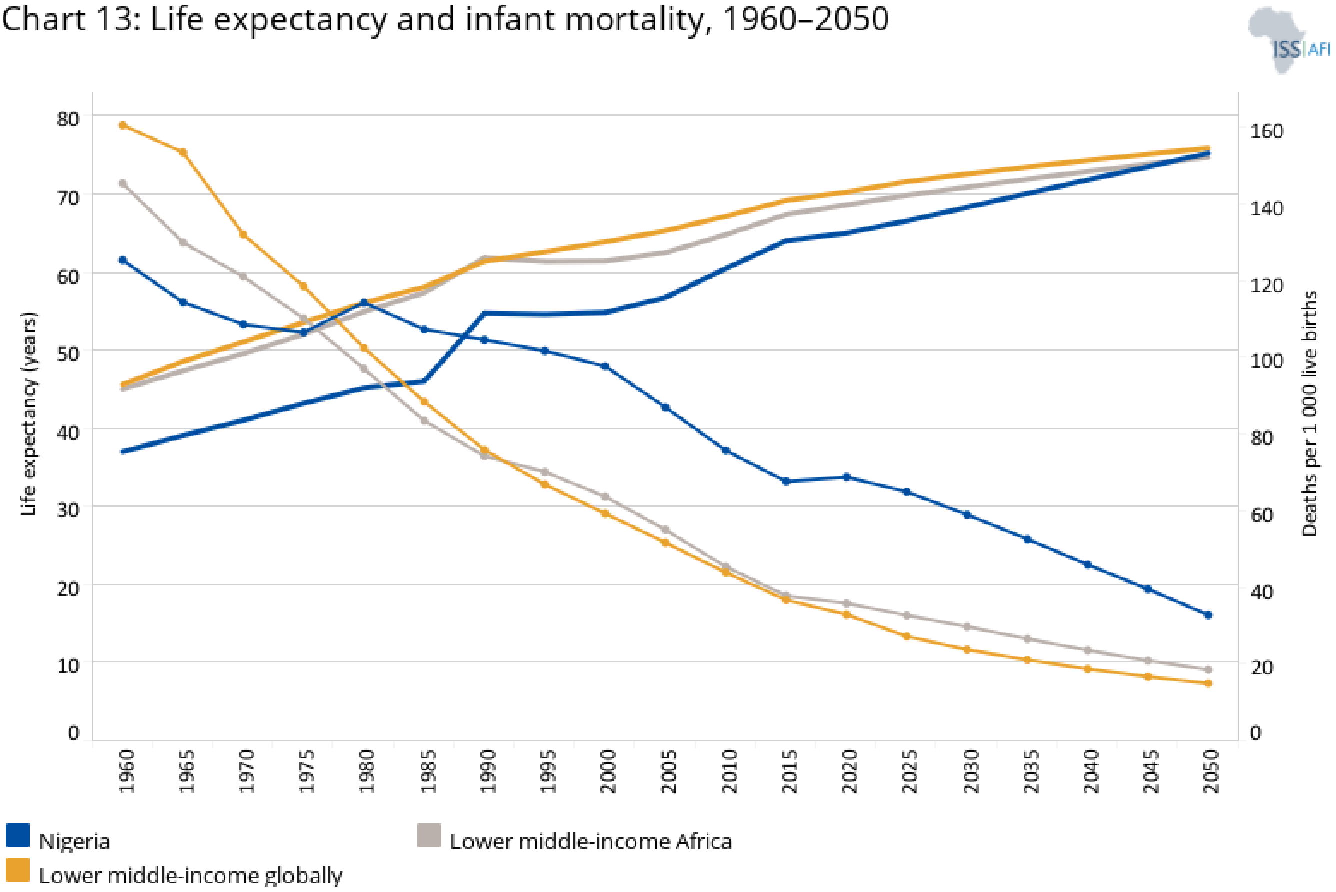
Corruption is another factor hindering the growth of the education sector and, in consequence, the development of a skilled labour force in Nigeria. Often, school funds meant for salaries, equipment and maintenance are diverted or mismanaged. This pushes teachers to strike in protest of low wages and late payments, which negatively affects their productivity and the quality of teaching they deliver.

In 2017, for instance, the University of Ibadan ranked at 801 and was the only Nigerian university listed among the top 1 000 in international university rankings, while universities from other African countries such as South Africa, Ghana and Uganda were ranked much higher.[60] Nigeria's deteriorating tertiary education condition has pushed many secondary school graduates to migrate, searching for quality education abroad. Nigeria's outbound tertiary students were estimated at about 85 000 in 2017, making Nigeria the largest African country of origin of international students.[61]

There are, however, promising efforts to improve the quantity and quality of education in the country. The number of recognised universities grew almost tenfold from 16 in 1980 to 152 in 2017, and the federal government has announced plans to build more classroom blocks and federal universities across the country and improve the teacher recruitment process.[62] There are also many reform projects to enhance vocational training to provide employment-geared education in the private sector.[63]

Health

Chart 13: Life expectancy and infant mortality, 1960–2050



Source: IFs version 7.63, historical data from the Institute for Health Metrics and Evaluation (IHME)

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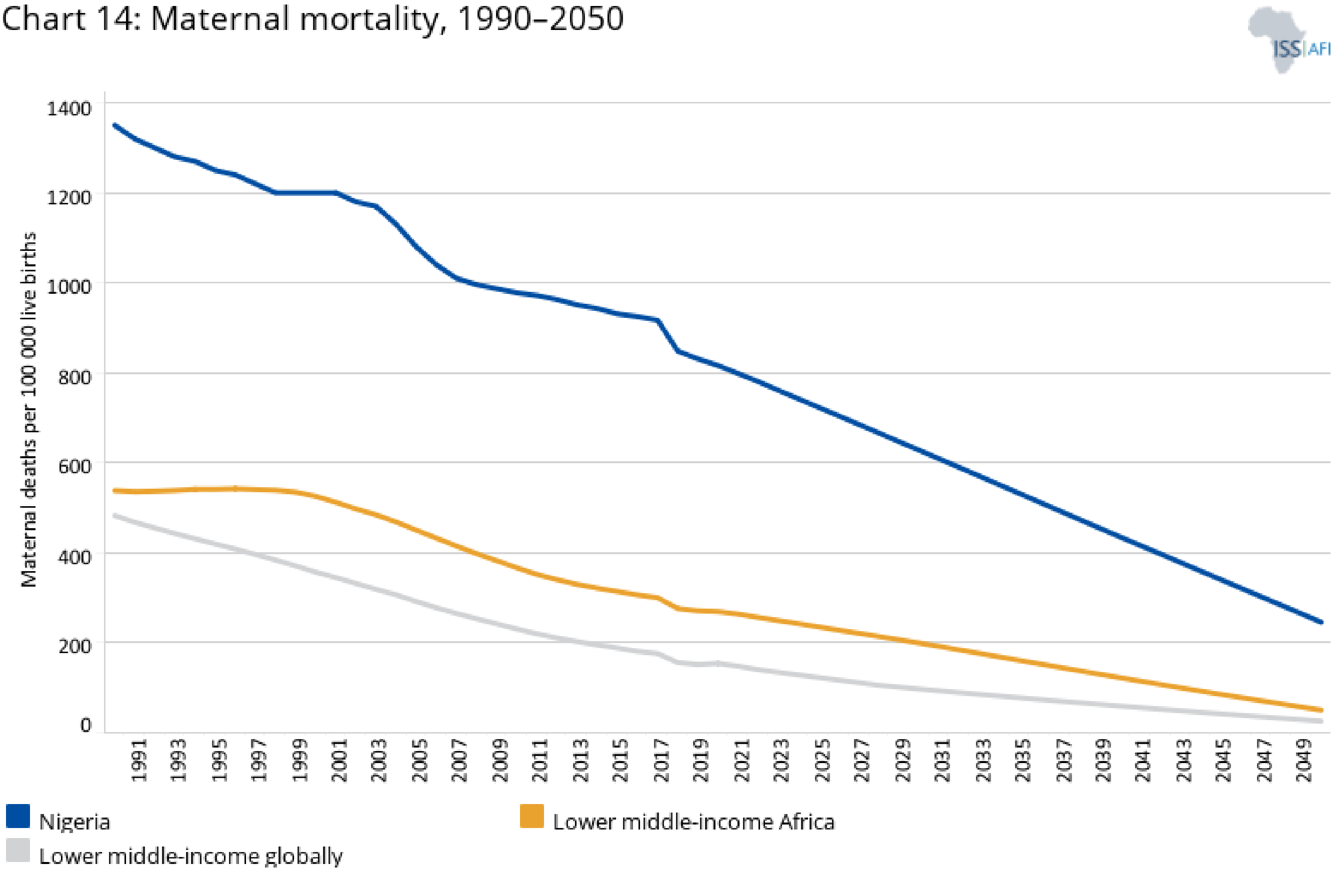
The public health sector in Nigeria is incapacitated by a cocktail of mismanagement, corruption and poor resources. As a result, Nigeria has very poor health outcomes, with some of the worst healthcare statistics in the world. In 2019, the country ranked 187th for overall health efficiency among 191 WHO member states.[64]

The efficacy of a country's health system can be assessed through several indicators such as infant mortality, maternal mortality and life expectancy. In 2019, Nigeria's infant mortality ranked as the highest among lower middle-income countries in Africa, with 67 deaths per 1 000 live births, and the under-five mortality rate of 23 deaths per 1 000 live births ranked as the third highest in the world, and the highest among all lower middle-income economies.

The SDG target regarding the infant mortality rate is below 25 deaths per 1 000 live births by 2030. On the Current Path, Nigeria is not on track to achieve this target as it is forecast to have an infant mortality rate of 59 deaths per 1 000 live births by 2030 and 33 deaths per 1 000 live births in 2050, significantly above the projected average of 15 deaths per 1 000 live births for global lower-income countries in the same year (Chart 13). Life expectancy climbed from 55 years in 1990 to 65 years in 2019, and in the Current Path forecast is likely to reach 75 years by 2050, on a par with the projected average for its income peers.

Chart 14: Maternal mortality, 1990–2050



Source: IFs version 7.63, historical data from the Institute for Health Metrics and Evaluation (IHME)

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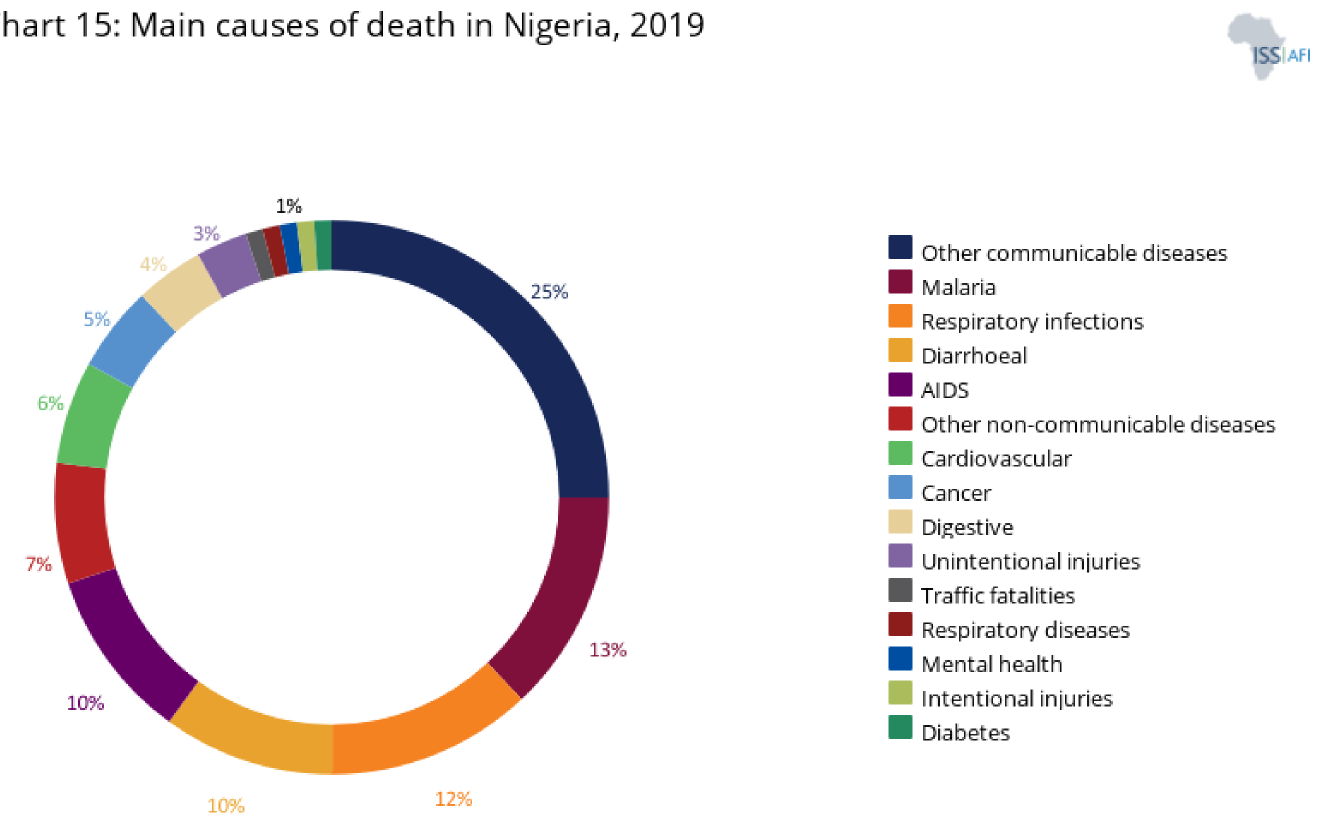
Nigeria has the highest maternal mortality ratio among lower middle-income African countries, with 831 maternal deaths per 100 000 live births. The SDG target for maternal mortality (SDG 3.1) is a ratio of less than 70 deaths per 100 000 by 2030, a target that will be unattainable on the Current Path trajectory of the country. In the Current Path forecast, Nigeria is forecast to reach a ratio of 246 deaths per 100 000 live births by 2050, well above the projected averages of 50 deaths per 100 000 live births and 26 deaths per 100 000 live births for lower middle-income Africa and global lower middle-income countries, respectively (Chart 14).

Nigeria is also battling with the highest incidences and prevalence of severe acute malnutrition on the African continent and an estimated two million children are affected.[65] Children in Nigeria are exposed to chronic malnutrition, with 44% of children,[66] the second highest burden in the world, considered stunted. Stunting prevalence in children has only marginally improved in the past three decades, dropping from a rate of 48.7% in 1990 to 36.5% in 2019. Most of the gains towards lowering stunting rates have been made in the southern states of Nigeria but of concern is a consistent increase observed between 2008 and 2015 in the north-western states.[66]

Nigerian children are experiencing a nutritional crisis.[67] A study by the World Bank found that only 23.7% of children had the benefits of exclusive breastfeeding during their first six months of life, while 30% had a vitamin A deficiency and 76% were anaemic.[68] These worrisome figures are the result of poor-quality food, unhygienic environments, a lack of education around child nutrition, inadequate access to health services and information and a lack of access to community-based programmes.[69]

Chart 15: Main causes of death in Nigeria, 2019



Source: IFs version 7.63, historical data from GBD-Institute for Health Metrics and Evaluation

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The most predominant causes of adult mortality are preventable, treatable and curable (Chart 15) and 13% of deaths in the under-five age category could have been prevented through vaccines that target diseases such as measles, pertussis and meningitis.[70] Vaccination coverage, however, remains low and has not changed much in the past 25 years.[71] Vaccine rates also vary significantly across states, with the highest vaccination rates in the southern and north-central states and the lowest observed in the north-east and north-west. The under-five mortality rate also remains highest in the northern states due to the lower vaccination rates.[72]

Nigeria has the highest malaria prevalence and mortality headcount in Africa, placing a huge economic burden on the country. The direct and indirect economic burden of malaria is estimated at about 13% of Nigeria's GDP.[73] Nigeria has, however, made significant strides in combating malaria and has seen death rates drop since 2008. Insecticide-treated net access increased from 1% in 2003 to 47% in 2016 and other interventions in the form of rapid diagnostic tests and treatment courses have all contributed to lower mortality rates.[74]

The new malaria vaccine approved by the WHO is viewed as a 'game-changer' in combating the disease in Africa, which accounted for 94% of the world's cases in 2019.[75] The Nigerian government needs to get ready in terms of the infrastructure and logistics required to roll out the vaccine when it becomes available.

The past three decades have also seen the country battling close to 60 epidemics. Diseases such as Lassa fever were responsible for epidemics in 1989, 2012, 2016 and 2018. Yellow fever caused epidemics in 1991 and as recently as 2019, and a devastating (and completely preventable) measles outbreak affected nearly 22 000 people in 2019. Cholera alone has been responsible for 20 epidemics in the country, a direct result of poor water, sanitation and hygiene (WaSH).[76]

Poor environmental health also directly affects the health and well-being of citizens. Nigeria's delta region has seen significant air, soil and water pollution as a direct result of oil spillage and gas flaring, with the latter leading to increased respiratory and dermal illnesses.[77] High rates of deforestation coupled with population increases pose an increased risk to the emergence and re-emergence of infectious diseases, while overexploitation of resources, such as the mining in the north-western states, has caused devastating and fatal lead toxicity in communities.[78]

Overall, communicable diseases are the leading causes of deaths in Nigeria (Chart 15). On the Current Path, this trend is forecast to change from 2044, when non-communicable diseases will become the leading causes of deaths. This will occur much later than the average for global lower middle-income countries. This has implications for Nigeria's healthcare system, which will need to invest in the required capacity as the treatment of non-communicable diseases is difficult and costly.

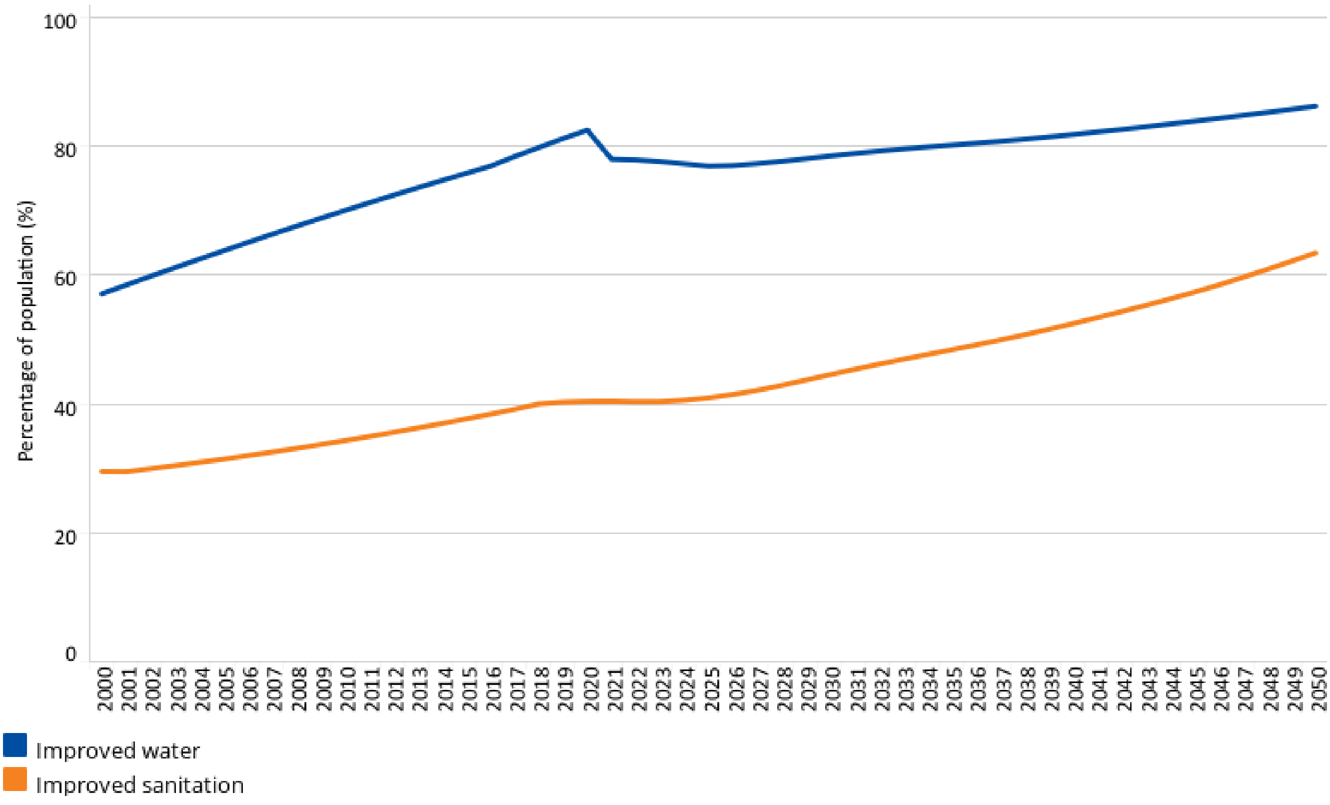
Nigeria is chronically underinvesting in its health sector, with health expenditure in 2019 at a mere 3.6% of GDP, the fourth lowest among low middle-income economies in Africa. The private health sector is responsible for about 60% of healthcare service delivery in the country.[79] About 67% of Nigerians can reach a health facility within a 30-minute walking distance.[80] However, households and individuals are unable to access quality and equitable services due to limited human resource capacities; poor equipment; poor coordination between the local, state and federal governments responsible for primary, secondary and tertiary levels of care, respectively; and excessive healthcare fees, among others.[81]

Due to poor working conditions, Nigeria is experiencing a medical 'brain drain'. It is estimated that about 2 000 doctors have left the country over the past few years to seek better work conditions and pay abroad,[82] a situation which, combined with inadequate funding, has led to a chronically under-resourced health system. High out-of-pocket health payments also limit the ability of poor households to access and utilise basic healthcare services in the country. Private healthcare expenditure accounts for 76% of total health expenditure, while out-of-pocket healthcare expenditure represents 73% of total health expenditure, the highest compared to other African countries.[83]

A well-fed and healthy population will aid in national development and productivity. It is therefore critical that the country addresses its poor healthcare outcomes. Corrupt practices should be eliminated through accountability measures. Investing in primary health facilities and community programmes will significantly reduce the nutritional risks faced by children. Ramping up vaccinations for preventable diseases and expanding basic WaSH infrastructure can also significantly reduce mortality rates.

Basic infrastructure

Chart 16: Safe water and improved sanitation access rates in Nigeria, 2000–2050



Source: IFs version 7.63, historical data from WHO/UNICEF JMP global database

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The role of basic infrastructure such as roads, electricity, information and communication technology (ICT) and improved water and sanitation in boosting productivity, growth and human development is well documented. The adequate provision of basic infrastructure affects inequalities by allowing the poor segment of the society to access core economic activities and services in a country. Nigeria's infrastructure gap has long been a drain on productivity, growth and competitiveness, especially in the non-oil sector.[84]

The provision of infrastructure in Nigeria has not kept pace with the continued rapid population growth. Nigeria's core infrastructure stock is estimated at 20% to 25% of GDP compared to the international benchmark of 70%.[85] In 2020, Nigeria ranked 24 out of 54 African countries on the African Development Bank's Infrastructure Development Index, with a score of 23.2 out of 100. The relatively good ranking of Nigeria despite its poor score reveals the extent to which infrastructure development is low in Africa.

Water, sanitation and hygiene

Improved water and sanitation infrastructure improves the human capital stock in a country through its positive impact on health outcomes. Better provision of clean water and improved sanitation will help to prevent the spread of communicable diseases, which is the leading cause of death in Nigeria. As stated by UNICEF, in Nigeria: 'The use of contaminated drinking water and poor sanitary conditions result in increased vulnerability to water-borne diseases, including diarrhoea which leads to deaths of over 70 000 children under five annually. 73% of the diarrhoeal and enteric disease burden is associated with poor access to adequate WASH. Frequent episodes of WASH related ill-health in children, contribute to absenteeism in school, and malnutrition.'[86]

Nigeria has, however, made significant progress in providing clean water to its population over the past 20 years. According to IFs, in 2000, only 57.1% of Nigerians had access to safe water, while the averages for lower middle-income Africa and global lower middle-income were, respectively, 73.5% and 83%. As of 2020, 82.5% of the Nigerian population had access to clean water against 83.8% for the average for African income peers. In other words, the absolute number of people with access to improved water sources increased from nearly 70 million in 2000 to 163 million in 2020, a 133% increase over 20 years.

Although the improvement is impressive, more needs to be done as nearly 43 million people still do not have access to improved water sources. This implies that 43 million people rely on unsafe water sources for their needs, thereby exposing them to malnutrition and communicable diseases such as cholera.

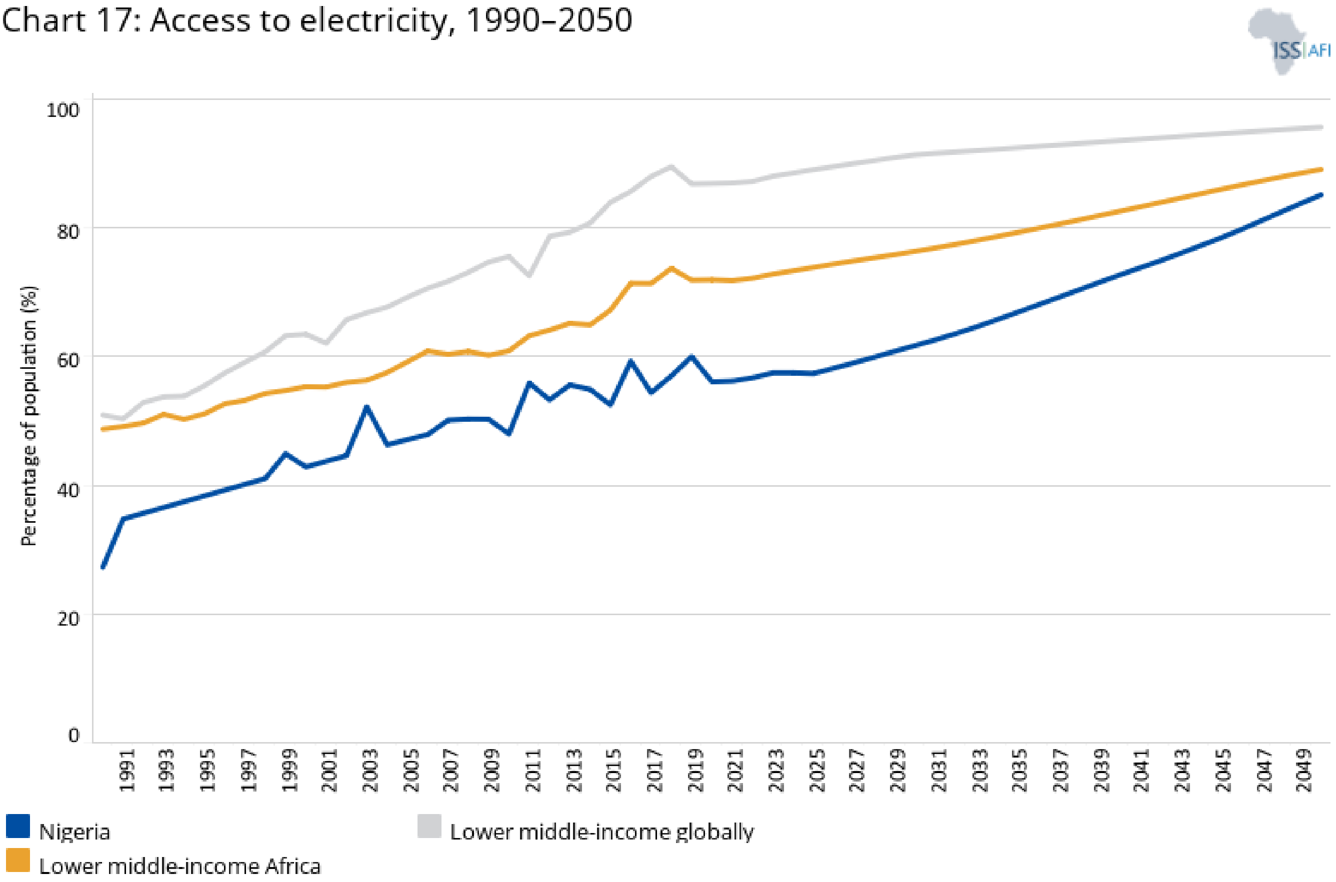
Access to drinking water is skewed towards urban areas, where 95.3% of the population has access to improved sources of water, against 68.8% in rural areas. This discrepancy between urban and rural areas can also be observed regarding access to basic hand-washing facilities. In 2020, only 25% of the rural population had access to a basic hand-washing facility compared to nearly 41% in urban areas.[87] Overall, nearly 138 million people are without access to a basic hand-washing facility in Nigeria.

On the Current Path, the access rate to safe water is forecast to decline in the short to medium term; it will only recover its 2020 level around 2042 before increasing to 86.2% by 2050 (Chart 16). This implies that nearly 60 million people will still be without access to clean water sources by 2050 in Nigeria. The slow growth associated with the long-term impact of COVID-19, compounded by the rapid population growth, might explain this slowdown in the water access rate. By 2050, the water access rate is forecast to be, respectively, 91.5% and 97% for Africa lower middle-income and global lower middle-income.

The access to improved sanitation in Nigeria increased modestly from 29.5% in 2000 to 42.5% in 2020, against 57.8% for the average for lower middle-income Africa, and 66.3% for the average for Nigeria's global lower middle-income peers. In rural Nigeria, only 33% of the population has access to improved sanitation compared to over 50% of the population in urban areas.[88] Nearly 30% of the population in rural areas practise open defecation,[89] a fraction that has changed marginally since 2000. The Current Path forecast is that access to improved sanitation will improve slightly to reach about 64% of the population by 2050 compared to nearly 75% and 89%, respectively, for Nigeria's Africa income peers and global income peers.

This overall low level of access to WaSH services is linked to Nigeria's high burden of communicable disease and malnutrition. With the support of the World Bank, the government of Nigeria has recently strengthened its commitment to improve access to WaSH to catch up with regional peers and ensure universal access by 2030 in line with the SDGs. In May 2020, the World Bank approved a loan of US$700 million for Nigeria to support its National Action Plan (NAP) for the Revitalization of the Water Supply, Sanitation, and Hygiene Sector.[90]

Chart 17: Access to electricity, 1990–2050



Source: IFs version 7.63, historical data from the World Bank

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Energy/Electricity access

Nigeria is endowed with large oil, gas, hydro, solar, geothermal and biomass resources. According to the International Energy Agency (IEA), currently, Nigeria has, respectively, 15% and 16% of Africa's oil and gas reserves.[91] However, Nigeria has one of the highest rates of energy poverty in the world and is unable to meet the energy demand of the population. While Nigeria's oil-refining capacity is estimated at 445 000 barrels per day (bpd), the actual output is only about 45 000 bpd, which is far below the domestic demand.[92]

As of 2019, about 60% of Nigerians (roughly 120 million people) had access to electricity in Nigeria (Chart 17). In other words, nearly 80 million people were without electricity in the country. The current electricity access rate in Nigeria is more than 15 percentage points below the average for lower middle-income Africa (71.8%), and nearly 30 percentage points below the average for Nigeria's global lower middle-income peers (86.1%).

After 2035, Nigeria will gradually narrow the electricity access gap with the average of its Africa income peers and show convergence beyond the 2050 time horizon. The electricity access rate in Nigeria is forecast to reach nearly 85% (or 384 million people) by 2050 compared to, respectively, 89% and 95.6% for the averages for Africa lower middle-income and global lower middle-income groups in the same time period. Over the next 30 years, an additional 274 million people will gain access to electricity in Nigeria.

Electricity provision is also skewed in favour of urban areas. According to IFs, in 2019, 86% of the urban population had access to electricity against only 34% in rural areas. In rural areas, many households rely on biomass (coal and firewood), which causes harmful indoor air pollution and deforestation. This causes respiratory-related illness and affects girls' education outcomes as they are generally tasked with domestic chores like collecting firewood, which limits their study time. IFs estimates that about 69% of households use traditional cookstoves, and it is forecast to steadily decline to 18% by 2050.

Access to reliable electricity is critical to economic growth and improvements in livelihoods. However, in Nigeria, getting connected to the national grid does not necessarily mean access to reliable electricity supply. Power cuts are the key feature of electricity supply in Nigeria. Currently, Nigeria has about 16 384 MW of installed generation capacity which mostly depends on thermal and hydro (11 972 MW of gas; 2 062 MW of hydro; 10 MW of wind; 7 MW of solar, and 2.3 MW of other/diesel).[93]

However, due to inefficiencies in the power sector, only 4 000 MW are eventually distributed to the end users, which is hugely insufficient for a country of over 200 million people. Poorly maintained or dysfunctional plants, deteriorating transmission lines, corruption and power theft are some of the key factors explaining this huge gap between installed capacity and capacity distributed. To remedy this situation, parts of the country's power sector were privatised in 2013 but this has not led to significant improvements in electricity provision in the country.[94]

As a result, households and businesses continue to constantly experience power outages with a negative impact on productivity. Nigeria's per capita annual consumption of electricity, estimated at 136 kWh, is one of the lowest in Africa.[95] In 2018, the typical Nigerian firm experienced more than 32 power cuts and these repeated power cuts have led to a heavy reliance on fossil fuel back-up generators across the country.[96]

The result is that Nigeria is the largest importer of electric generators in Africa, and among the global top six countries (Nigeria, India, Iraq, Pakistan, Venezuela and Bangladesh) that generate electricity through back-up generators.[97] According to a report by the International Finance Corporation (IFC), the amount spent every year in Nigeria on buying and operating small generators is about US$12 billion, and the collective installed capacity of generators is eight times more than the entire national grid.[98]

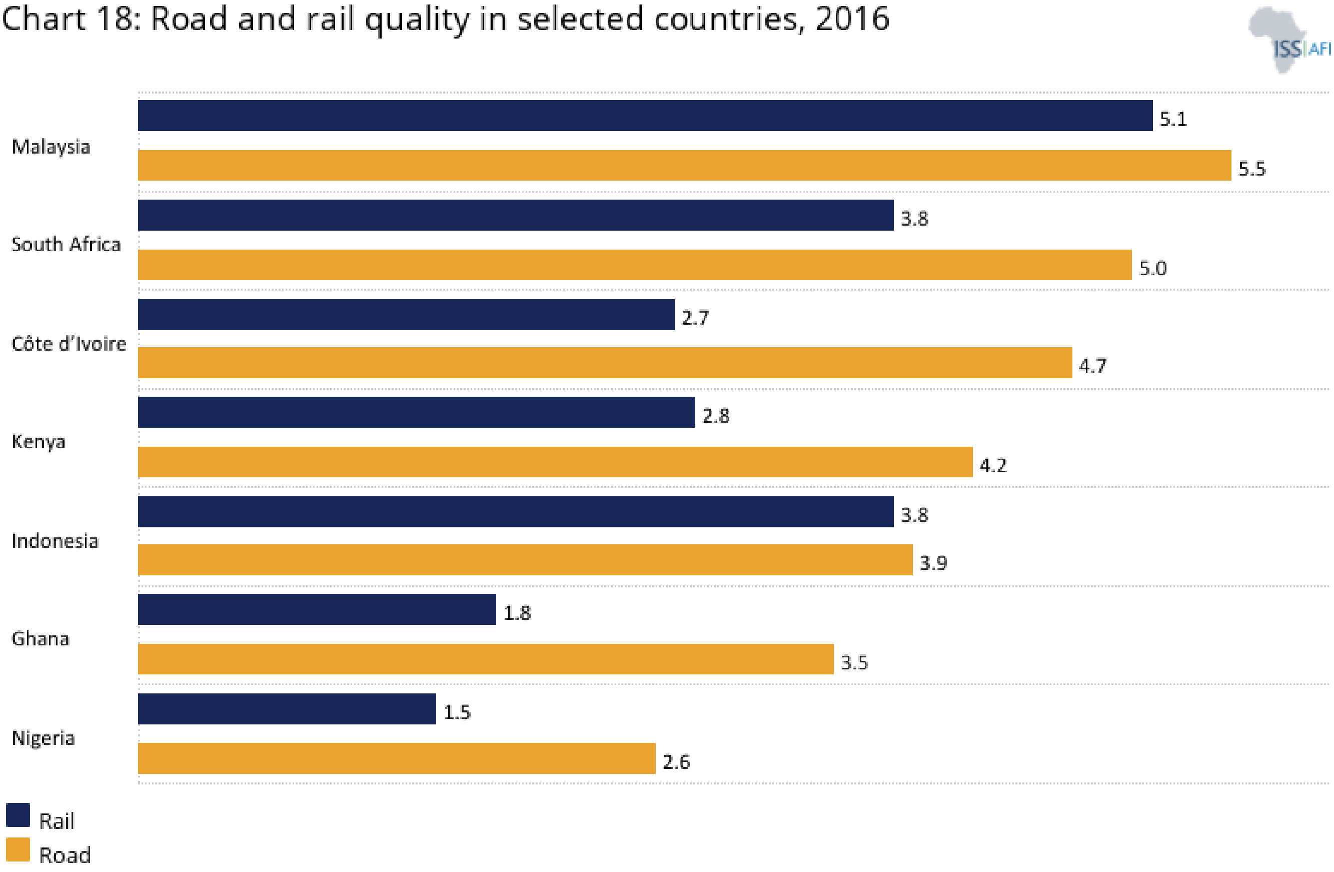
The operations of back-up generators come with high financial costs, often double that of grid electricity, and this is a huge burden on the small and medium scale enterprises (SMEs), which account for about 90% of businesses and over 80% of employment in Nigeria.[99] Also, these generators emit carbon dioxide and carbon monoxide that may pose serious risks to health and the environment.

In sum, Nigeria's power sector situation requires significant investment and capability building for a reliable electricity supply. It is estimated that the country needs investment worth US$100 billion in the power sector over the next 20 years to provide electricity to its rapidly growing population.[100]

With the support of international organisations, the government is trying to boost power generation in the country. For instance, the African Development Bank (AfDB), which is already working with the Nigerian government on a US$410 million transmission project, is pledging to invest an additional US$200 million through the Rural Electrification Agency (REA) to improve access to electricity in the country.[101] Also, the World Bank has approved a US$750 million Power Sector Recovery Operation (PSRO) loan for Nigeria to ensure the supply of 4 500 MW/h of electricity to the grid by 2022.[102]

The Nigerian National Integrated Infrastructure Master Plan (NIIMP) emphasises improving energy supply to meet the rapidly growing demand for energy in the country. In the plan, the government's ambitious energy sector targets by 2043 are: 350 GW of electricity generation; increase oil production to four million bpd; gas production to 30 000 thousand cubic feet per day (mcfpd); and oil-refining capacity to four million bpd.[103]

Chart 18: Road and rail quality in selected countries, 2016



Quality index ranked from 1 (worst) to 7 (best)
Source: Data from the World Economic Forum Global Competitiveness Report 2016–2017

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Roads and rail

Adequate transport infrastructure in good condition is an important requirement of economic growth and development as it cuts across all the sectors of a nation's economy. With a total road network of about 195 000 km in 2017, Nigeria has the largest road network in West Africa.[104]

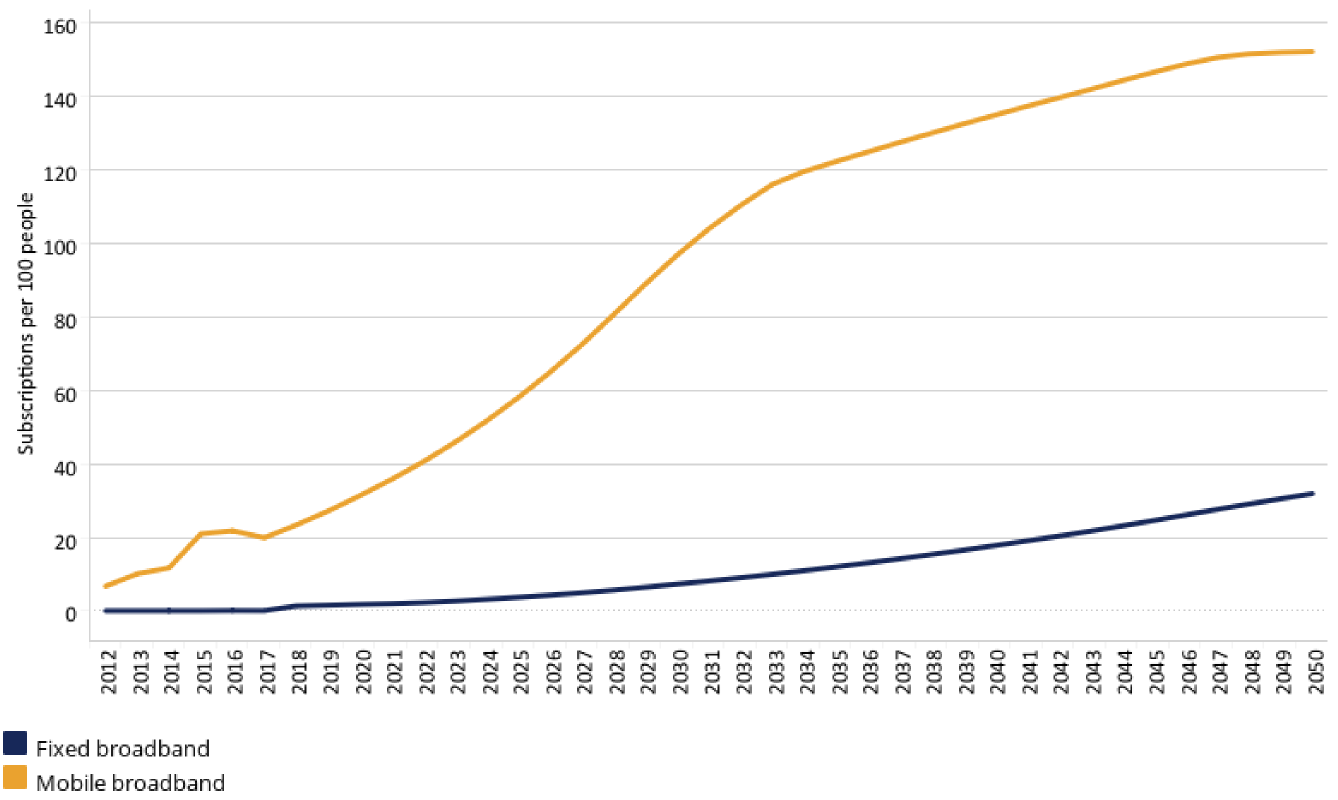
According to the NIIMP, federal roads account for 18% of the total road network but carry about 70% of the national vehicular and freight traffic. State roads make up about 15% while local government roads represent 67% of the total road network. The road sector accounts for nearly 90% of all freight and passenger movement in the country, mainly due to the inadequacy of other forms of transportation, especially rail.[105] For instance, in 2018, there were only six operational locomotives in Nigeria and most of the rail lines of 3 798 km are in a severe state of disrepair and need to be replaced.[106]

Nigeria lags behind its global income peers in terms of percentage of roads paved and road density. In 2019, about 31% (60 000 km) of Nigeria's road network was paved compared to the averages of 35.4% and 54.3% for Africa lower middle-income and global lower middle-income, respectively. As for road density, Nigeria has about 2.1 km of roads per 1 000 hectares of land area, ahead of Africa's lower middle-income average, but behind the average for global lower middle-income countries, which is estimated at around 4.1 km per 1 000 hectares.

As shown in Chart 18, most of Nigeria's roads are in poor condition and are often mentioned as a cause of the country's high rate of road fatalities. In the rainy season, travelling becomes very difficult, and sometimes almost impossible on many secondary roads. According to the NIIMP, in 2012, around 40% of the federal road network was in poor condition, requiring rehabilitation; 30% was in fair condition, hence in need of periodic maintenance; and 27% was in good condition, requiring only routine maintenance. The rest (3%) is unpaved trunk roads. As for the state roads and local government roads network, 78% and 87%, respectively, are in poor condition.[107]

There are, however, ongoing efforts to revamp and extend the road network to improve connectivity. For instance, in the 2018 federal government budget, 295 billion naira (nearly US$1 billion) were allocated for road capital works and maintenance.[108] On the Current Path, IFs estimates that the share of paved roads as a per cent of the total road network will be around 80% in 2050, on a par with the projected average for global lower middle-income countries.

Chart 19: Mobile and fixed broadband penetration rate, 2012–2050



Source: IFs version 7.63, historical data from the International Telecommunications Union (ITU)

Information and communication technology

ICT connectivity has been growing in recent years with continued effort to promote competition in the sector. Thus, Nigeria has the largest mobile telecom market in Africa, although it is subject to erratic electricity supply and vandalism of infrastructure.[109]

As of 2017, mobile phone subscriptions per 100 people were about 76 compared to 97 and 99.8 respectively for the averages for lower middle-income Africa and lower middle-income globally. Currently, there are four GSM (Global System for Mobile Communications) operators in the country: AIRTEL, a subsidiary of the Indian mobile group; MTN, a subsidiary of the South African MTN Group; 9mobile, a subsidiary of ETISALAT of the United Arab Emirates; and GLOBACOM, owned by a privately held Nigerian group. There are also two operators using Code Division Multiple Access (CDMA) technology, Visafone and Multilinks, but their market share is quite small.[110]

In 2017, mobile broadband subscriptions per 100 people in Nigeria were at 19.9. IFs estimates it at 27 in 2019, against 43 for lower middle-income Africa. Fixed broadband penetration in the country is very low, with a penetration rate of 0.04%, below the African average of 0.6% and well below the world average of 13.6%.

Overall, about 42% of Nigerians use the Internet and the connections are mostly via mobile networks. In absolute terms, Nigeria has the largest number of Internet users in Africa due to its large population; the country accounts for more than 30% of Internet users on the continent, with most of them in the urban areas.[111] The Current Path forecast is that mobile broadband will continue to be the most common and popular way through which people in Nigeria access the Internet (Chart 19). By 2050, mobile broadband subscriptions per 100 people are projected to reach 152, on a par with the average for global lower middle-income countries.

Nigeria scores better on ICT skills than the sub-Saharan African average but falls well below the global average.[112] The country is home to several high-growth digital companies. Lagos is a thriving digital hub in Africa and the centre of digital developments in Nigeria. It was the only city in Africa that featured in the 2019 Global Startup Ecosystem Report as a start-up ecosystem that could challenge the 30 leading global ecosystems led by Silicon Valley.[113] Digital entrepreneurship ecosystems are also growing in the cities of Abuja and Port Harcourt.[114]

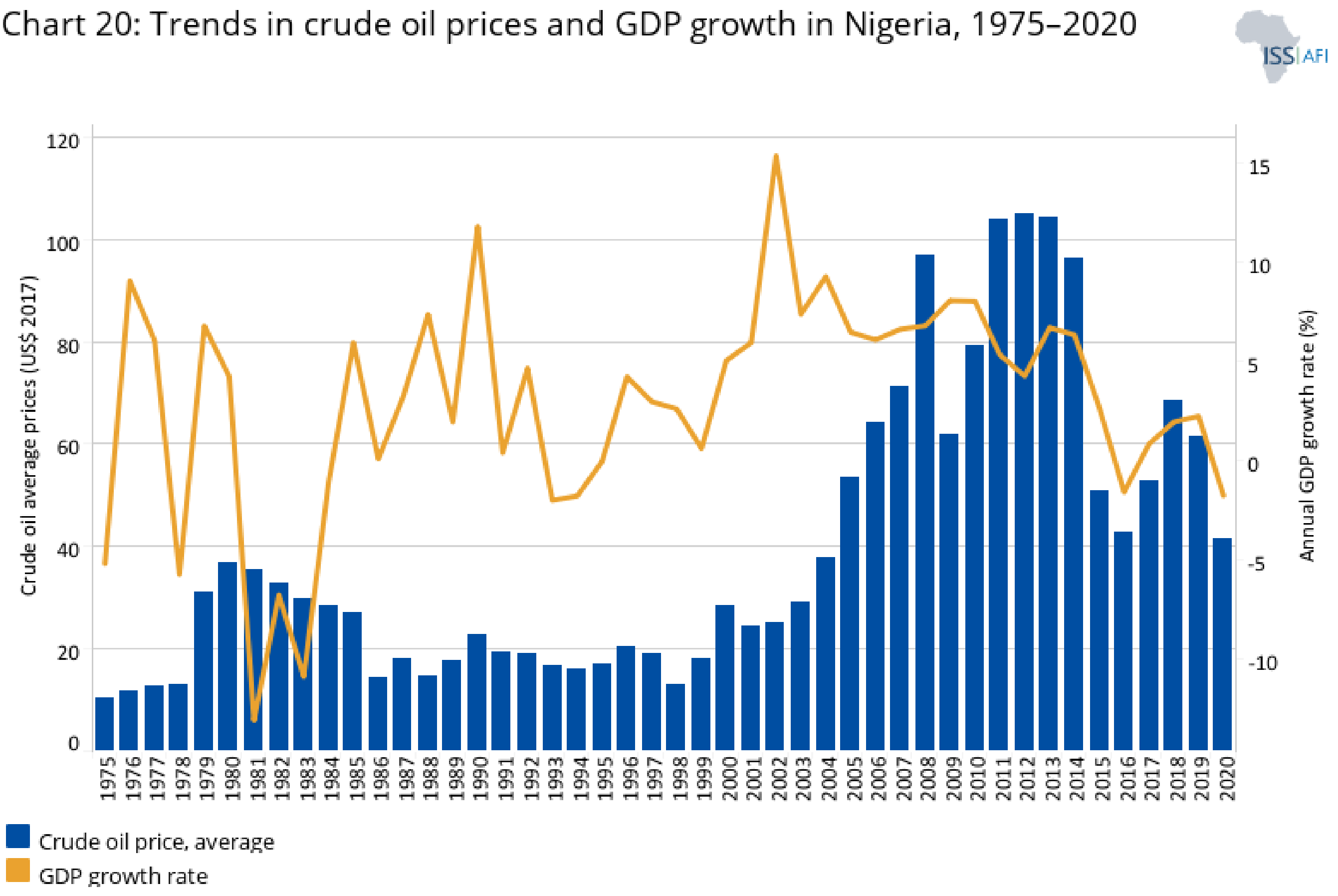
Also, Nigeria has the largest e-commerce market in Africa. In 2018, the e-commerce spending in the country was estimated at US$12 billion and was projected to increase to US$75 billion in revenues by 2025, with big homegrown players like Jumia and Kong.[115] According to the World Bank, there are 87 digital platforms operating in Nigeria and 66 of them are homegrown (76%); the remaining are from the US, Europe and the rest of Africa.[116]

However, Nigeria still has a long way to go to achieve widespread use of the Internet (broadband) due to infrastructural bottlenecks, particularly in rural areas. In 2017, Nigeria ranked 143rd out of 176 countries on the International Telecommunication Union's (ITU) ICT Development Index (IDI). It is a composite index that is used to monitor and compare ICT development in countries.[117] Nigeria's poor ranking reflects its low broadband subscriptions (fixed and mobile).

Widespread access to high-speed Internet has the potential to improve the country's socio-economic outcomes. Broadband can increase productivity, reduce transaction costs and optimise supply chains, with a positive effect on economic growth. A study by the World Bank revealed that a 10% increase in broadband penetration in developing countries leads to a 1.4% increase in GDP.[118] Cognisant of this economic growth opportunity offered by broadband technologies, the Nigerian government has designed a National Broadband Plan 2020–2025 to deliver data download speeds of about 25 Mbps (megabytes per second) in urban areas and 10 Mbps in rural areas; the target by 2025 is a penetration rate of at least 70%.[119]

Economy

Chart 20: Trends in crude oil prices and GDP growth in Nigeria, 1975–2020



Source: World Development Indicators, World Bank Commodity Price Data

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Nigeria's economy at independence showed great promise, with agriculture as its backbone. The country adopted import substitution as an industrialisation policy to produce most imported goods locally. The discovery of crude oil in commercial quantities changed the course of Nigeria's economy, however. With rising oil prices and increasing demand, extracting and exporting crude oil became the dominant economic activity. The abundance of petrodollars made it easier to import various goods and services. As a result, advances made in agriculture and manufacturing were neglected and these sectors have become less competitive over time.[120] Today, Nigerian exports remain undiversified; it is highly dependent on crude oil, which accounts for more than 80% of total exports, half of government revenues and the bulk of hard currency earnings.[121]

Economic growth and sectoral contribution to GDP

Since the shift from agriculture to crude oil and gas in the late 1960s, the growth performance of Nigeria has been driven by the repeated oil price boom-bust cycles. As shown in Chart 20, the country has over time recorded volatile and low average growth.

After recording an average growth rate of 7% between 2000 and 2014, a sharp drop in oil prices from mid-2014 to 2016 saw the Nigerian economy fall into a recession. The growth rate fell from 6.3% in 2014 to 2.7% in 2015 and -1.6% in 2016 and led to a budgetary crisis.[122] The economy was slowly recovering from the 2016 recession, with the growth rate rebounding to 0.8% in 2017, 1.9% in 2018 and 2.2% in 2019, when the COVID-19 pandemic struck. With the collapse of commodity prices associated with the COVID-19 crisis, the economy contracted by 1.8% in 2020, lower than the projected contraction of -3.2% at the pandemic's beginning.

This lower than expected contraction was due to the oil price recovery and the implementation of long-awaited policy reforms by Nigerian authorities to counter the economic shock.[123] The policy reforms include harmonisation of the exchange rate, adjustment of electricity tariffs, cutting non-essential spending, enhancing debt management and increasing public sector transparency, especially for oil and gas operations.[124]

Chart 21: Selected macroeconomic indicators, 2014–2020

	2014	2015	2016	2017	2018	2019	2020
Budget deficit (% GDP)	-0.9	-1.6	-2.6	-3.1	-2.8	-3.3	-4.0
Debt (% GDP)	13.7	15.8	19.0	20.9	23.5	25.4	34.6
Foreign exchange reserves (Billion US$)	34.2	28.3	26.9	39.3	42.6	38.1	36.5
Official exchange rate (Naira/US$1.00)	156.5	191.8	253.1	305.3	305.6	306.5	358.3
Inflation (%)	8.0	9.6	18.6	15.4	11.4	11.9	15.7
Current account balance (% GDP)	0.1	-3.1	0.6	2.7	0.9	-3.8	-3.6

Source: Central Bank of Nigeria; International Monetary Fund

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Nigeria's crude-oil-dependent economy makes the country's macroeconomic environment more vulnerable to commodity price shocks. Evident from Chart 21, some of Nigeria's key macroeconomic indicators deteriorated significantly following the oil price collapse in 2016 and 2020. Falling oil revenues increased the federal government deficit from 0.9% of GDP in 2014 to 2.6% in 2016 (Chart 21). Also, foreign exchange reserves declined from US$34 billion in 2014 to a record low of US$26.9 billion in 2016.

As a result, the naira lost almost half of its value against the US dollar by depreciating sharply from 156.50/US$1 in 2014 to 253.10/US$1 in 2016. Similarly, the inflation rate increased from 8% in 2014 to 18.6% in 2016. The decline in crude oil prices led to a fall in foreign reserves and put pressure on the exchange rate, thereby increasing inflation. This is because a weakening currency increases import prices, which are passed to the domestic price level.

Macroeconomic instability, infrastructure gaps, requisite skills shortage, corruption and an unfriendly business environment discourage private investment and constrain productivity and growth in the non-oil sector.

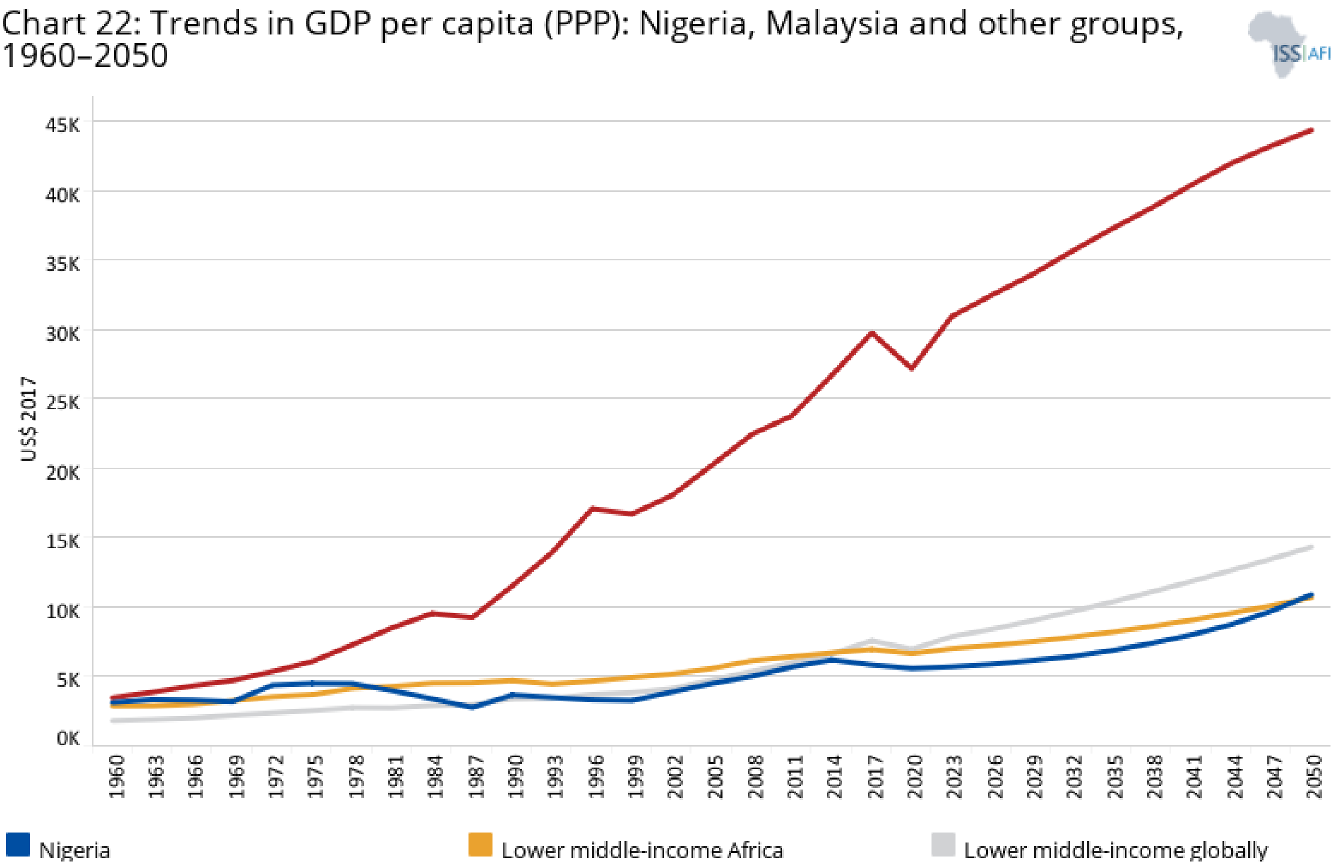
The structure of Nigeria's economy makes it unable to achieve inclusive growth. An empirical study by Ajide and Olukemi revealed that an inflation rate above 9% is harmful to growth in Nigeria,[125] yet it has been above that rate since 2015. Also, government intervention measures such as fuel subsidies, multiple exchange rates, import restrictions and tax exemptions have created market distortions and taken a heavy toll on state finances.[126]

Due to weak tax administration, corruption and high levels of non-compliance, Nigeria has one of the world's lowest tax revenues-to-GDP ratios, leaving little fiscal space for productive expenditure. As a result of these long-standing structural constraints, bad policy and poor implementation, Nigeria's economy continues to underperform despite the country's potential to become a global economic powerhouse given its large human and natural endowments.[127]

Unemployment, poverty and inequality are widespread. According to the World Bank, a 1% increase in economic growth leads to only a 0.1% increase in employment in Nigeria.[128] This low elasticity of employment to economic growth shows the extent to which the Nigerian oil-driven growth path is jobless. The informal sector has therefore become the lifeblood of millions of Nigerians.

A 2018 International Labour Organization (ILO) estimate shows that 93% of all employment in Nigeria is informal, with 95% of women working in the informal sector compared to 90% of men.[129] The World Bank, cited by ILO, estimates that Nigeria needs to create another 40 to 50 million jobs by 2030.[130] Unless the government takes bold actions to diversify the economy, the current economic model with heavy dependence on crude oil will certainly not allow Nigeria to achieve this target.

Chart 22: Trends in GDP per capita (PPP): Nigeria, Malaysia and other groups, 1960–2050



Source: IFs version 7.63, historical data from the International Monetary Fund

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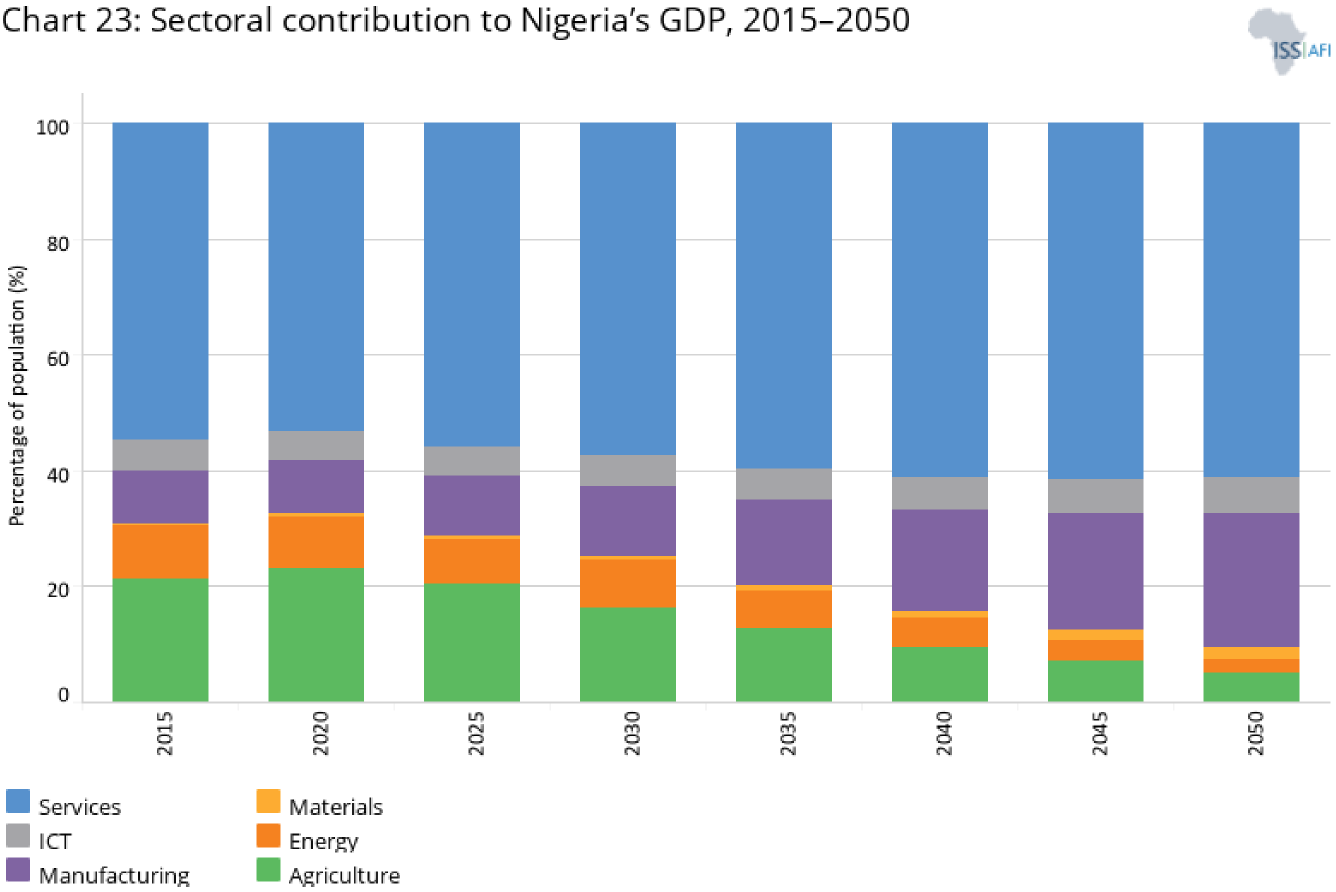
Nigeria has the largest GDP in Africa; however, in 2019, it ranked 16th out of Africa's 54 countries in terms of GDP per capita. Over the past five years, population growth in Nigeria has consistently outpaced economic growth, thus reducing the GDP per capita, which is now almost back to its 2010 level and is projected to continue to decline as the economy is forecast to grow more slowly than the population. The Current Path forecast is that the GDP per capita of Nigeria will remain below its level of 2015 until 2029 (Chart 22).

The country's inability to sustain economic growth and the rapid population growth dilute per capita income growth. On the Current Path, the GDP per capita of Nigeria is projected to increase from about US$5 830 in 2019 to US$10 891 by 2050, slightly above the projected average of US$10 684 for lower middle-income Africa in the same year. It is, however, below the projected average of US$14 333 for lower middle-income globally. Across the forecast horizon, Nigeria will continue to have the largest economy in Africa, with an estimated GDP of US$3.1 trillion by 2050, a more than fivefold increase from US$0.58 trillion in 2019.

The overreliance on crude oil, policy missteps, corruption and bad governance have impeded economic development in Nigeria. Malaysia, which was as poor as Nigeria in the 1960s, today has a GDP per capita about five times that of Nigeria. Between 1960 and 1975, Nigeria's GDP per capita was on a par with that of Malaysia (Chart 22).

The gap between Malaysia's GDP per capita and that of Nigeria widened sharply when Malaysia started to diversify its economy away from volatile commodity prices. In 1957, tin and rubber accounted for 85% of Malaysia's exports before the country took a significant step to diversify its economy from the 1970s through a solid commodity-based manufacturing sector.[131] As a result, the share of crude oil in Malaysian petroleum exports has declined from 95% to 20%, while processed palm oil exports increased from 0% in 1974 to 99% in 1994.[132] In contrast, Nigeria has continued to rely on crude oil export and today its manufacturing share in GDP is less than 10%.

Chart 23: Sectoral contribution to Nigeria's GDP, 2015–2050



Source: IFs version 7.63, historical data from the World Bank

View on Tableau Public Share

Chart 23 shows the structure of Nigeria's GDP according to IFs classification of sectors. The service sector is the dominant sector of the Nigerian economy and consists of several industries, such as banking, retail and wholesale trade, tourism, real estate, motion pictures (Nollywood), telecommunications and entertainment. With over 2 500 movies produced annually, the booming Nollywood is the world's second-largest film industry in terms of output and contributes around 2% to Nigeria's GDP.[133] With adequate investment, a supportive regulatory environment and capacity development, Nollywood could grow further and create more jobs for Nigerians.

Overall, in 2019, the service sector accounted for more than 50% of Nigerian GDP. Efforts to improve the productivity in the service sector will have positive spillover effects on the other sectors of the economy, such as manufacturing, which is dependent on external sourcing of essential inputs such as transportation, financing, design and communication.

Agriculture makes the second most significant contribution to Nigeria's GDP at about 22%. It is followed by the manufacturing industry and the energy sector (mainly oil and gas), which account for about 9% of GDP. ICT and materials accounted, respectively, for 4.9% and 0.5% of GDP in 2019 (Chart 23).

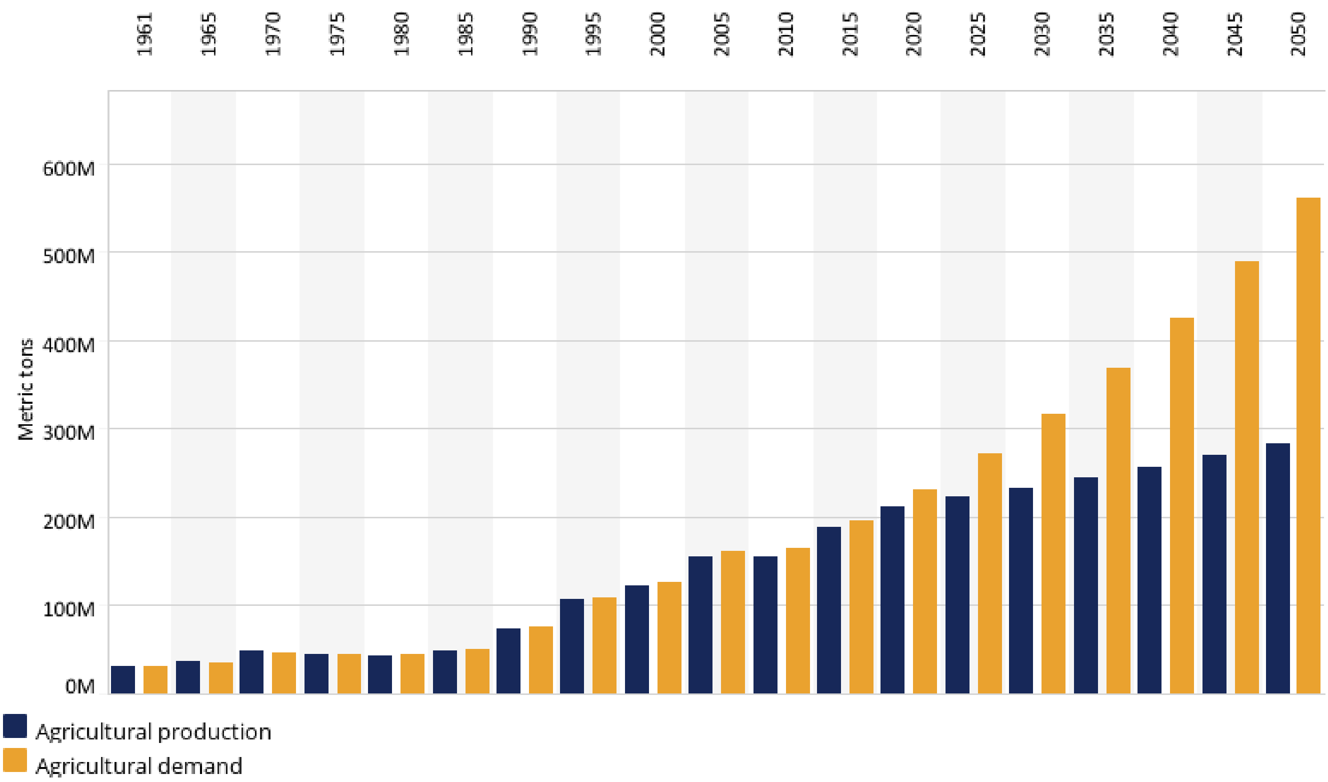
Due to sluggish growth in the non-oil sector, the oil and gas sector, which accounts for less than 10% of GDP, determines economic growth and contributes to over 90% of export earnings and more than half of government revenue. On the Current Path, manufacturing's share in GDP is forecast to be 23% and that of services to be over 60% by 2050. The share of agriculture is forecast to decline from over 20% in 2019 to 5% by 2050 (Chart 23), reflecting the structural transformation of the economy.

The global shift to greener energy is a wake-up call for Nigeria to take bold and transformative reforms to unleash the potential of the non-oil sector, which accounts for more than 90% of GDP, to hedge against domestic and external shocks stemming from the oil sector. The focus should be on agriculture and the development of the manufacturing industry to achieve sustained growth, reduce poverty and diversify the source of income and foreign exchange earnings. With rare exceptions, all the countries that have significantly improved their economic and social outcomes did so on the back of manufacturing.

Nigeria has had several development plans over the years, all of them stressing the necessity of diversifying the economy through a robust manufacturing sector. However, agreed industrial policies are not effectively implemented and, in some cases, implementation is not sustained, usually due to a lack of strong political will and commitment. Industrialists have raised this policy inconsistency as one of the key obstacles to their commitment to large capital expenditure in the manufacturing sector.[134]

Agriculture and climate change

Chart 24: Trends in agricultural (crop) production and demand in Nigeria, 1961–2050



Source: IFs version 7.63, historical data from Food and Agriculture Organization of the United Nations

View on Tableau Public Share

Nigeria is a country with great agricultural potential, yet cycles of inadequate financial investment, poor land-use management, slow adaptation to climate change and the slow adoption of new technologies have left the sector unable to meet the nutritional demands of a rapidly growing population.

At the onset of independence, Nigeria had a very productive agricultural export-oriented economy. It was the world's largest exporter of groundnuts and an important exporter of cocoa, palm produce, rubber and cotton.[135] The country produced surplus crops and exported nearly 1.5 million metric tons of agricultural produce.[136] The contribution of agriculture to GDP stood well over 60% and was the main source of export earnings and government revenue.[137]

In the first two decades post-independence the agricultural sector experienced a gradual decline in production. The change was brought on by the emergence of the oil sector in the 1960s and the commercial exportation thereof in the 1970s, which rapidly shifted attention and labour away from the agricultural sector towards the lucrative oil industry.

These trends, alongside a civil war at the end of the 1960s that channelled agricultural expenditure and budgets into military expenditure, started a downward curve in agricultural production. The end of the civil war was accompanied by a devastating drought that led to massive crop and livestock losses.[138] By 1975 Nigeria had effectively lost its net exporter status [139] and exported only 0.5 million metric tons of agricultural produce. [140]

The gradual decline in production sparked a season of heavy governmental interventions and the period from 1970 to 1986 saw many attempts to revive the agricultural sector and a plethora of policies and programmes were implemented and enacted.[141] Most of these interventions were aimed at reclaiming Nigeria's net-export status and ensuring food security by ramping up domestic production. Yet the agricultural import bill kept growing and by 1981 Nigeria was importing 5.8 million metric tons of agricultural produce, up from 0.4 million metric tons two decades earlier.[142]

The agriculture sector in Nigeria has seen numerous policies and programmes through the decades, all implemented with varying levels of vigour. Over the period 1980 to 2010, about 873 billion was spent on fertiliser subsidies; however, this did not lead to significant improvements in the sector.[143] It is estimated that about 90% of the money spent on fertiliser subsidies during this 30-year period was lost to corruption.[144]

The sector is still characterised by low productivity, food insecurity and slow adoption of modern technologies. It is largely dependent on rain and thus highly vulnerable to rainfall variability amidst low irrigation capacity. Currently, there is an average fertiliser usage of 7.3 kg/ha, which is significantly below the recommended optimal average of 400 kg/ha.[145]

Nigeria has about 71 million hectares of agricultural land area and the major crops are maize, cassava, guinea corn, yam beans, millet and rice. [146] The current crop yields of 5.7 metric tons per hectare, placing Nigeria in ninth position on the continent, are unable to meet the growing domestic demand. For instance, only 57% of the 6.7 million metric tons of rice that is consumed annually in the country is produced locally. [147] The gap of about three million metric tons is imported. To encourage local production, the government banned importation of rice in 2019. According to IFs database, in 2019, the country imported 19 million metric tons of agricultural produce and exported only 0.3 million metric tons. As a result, Nigeria has one of the highest prevalence rates of severe acute malnutrition.

Despite its gradual decline, the agricultural sector remains vital for the Nigerian economy and its people. It is the main source of livelihoods for the majority of rural Nigerians and contributes 22% to the GDP. Nigeria's workforce has more than tripled, from 18 million in 1960 to about 60 million in 2019, and the agricultural sector employs nearly 70% of this workforce (formal and informal sector).[148]

Farming activity is characterised by small-scale farmers producing subsistence-level output on small-holdings occupying 0.5 ha on average. [149] These subsistence farmers make up the bulk of food production, producing small volumes through rudimentary methods.

Many of the policies implemented to target production increase and growth stimulation came at a profound environmental cost. Millions of hectares of natural forests have been cleared for agricultural fields, grazing land or converted into commercial plantations, eroding the carbon sink capacity of the country and directly contributing to climate change, soil erosion, anthropogenic floods, the emergence of new pathogens and viruses and biodiversity loss. Poor land-use management, an inadequate land tenure system and overgrazing, increased chemical use and fertiliser abuse have led to soil degradation, desertification and diminishing grazing capacity. [150] Recent policies have given attention to catchment rehabilitation, reintroduction of forests and addressing the desertification of the northern savannas.

Natural resource conflicts are a great concern throughout the country and have vastly escalated in recent decades. Oil spills in the Nigerian delta have polluted arable soils and rivers, and diminished communities' ability to utilise soil for crop production and rivers for fisheries. [151] Desertification in the northern regions has increased the migration of pastoralists southwards, causing increased violent conflict with farmers, hindering production and affecting food security. Poor land tenure systems and inadequate management of land-use disputes, as well as desertification brought on by increased rainfall variability in the north of the country, have fuelled these conflicts. [152]

The sector lacks funding and innovation. Agricultural expenditure is extremely low and in 2020 represented only 1.8% of the budget. [153] Another concern is that rural access remains low and poor road conditions make accessing markets and partaking in economic activity very difficult.[154]

Current agriculture development plans aspire to obtain food security, reduce post-harvest losses and increase agricultural yields. They emphasise adequate funding for the sector and highlight the role of improving production systems and adopting new technologies. For instance, the fertiliser subsidy programme has been abolished and replaced with the Presidential Fertiliser Initiative (PFI), under which the government supplies discounted imported fertiliser inputs through the Nigeria Sovereign Investment Authority fertiliser fund vehicle. The inputs are then blended with locally sourced urea and distributed to farmers at 5 000 per bag, compared to imported fertilisers which can cost as much as 9 000. After recovering their costs and deducting their margins, the blending companies then remit the revenues to the government for re-investment into the next phase of production. [155]

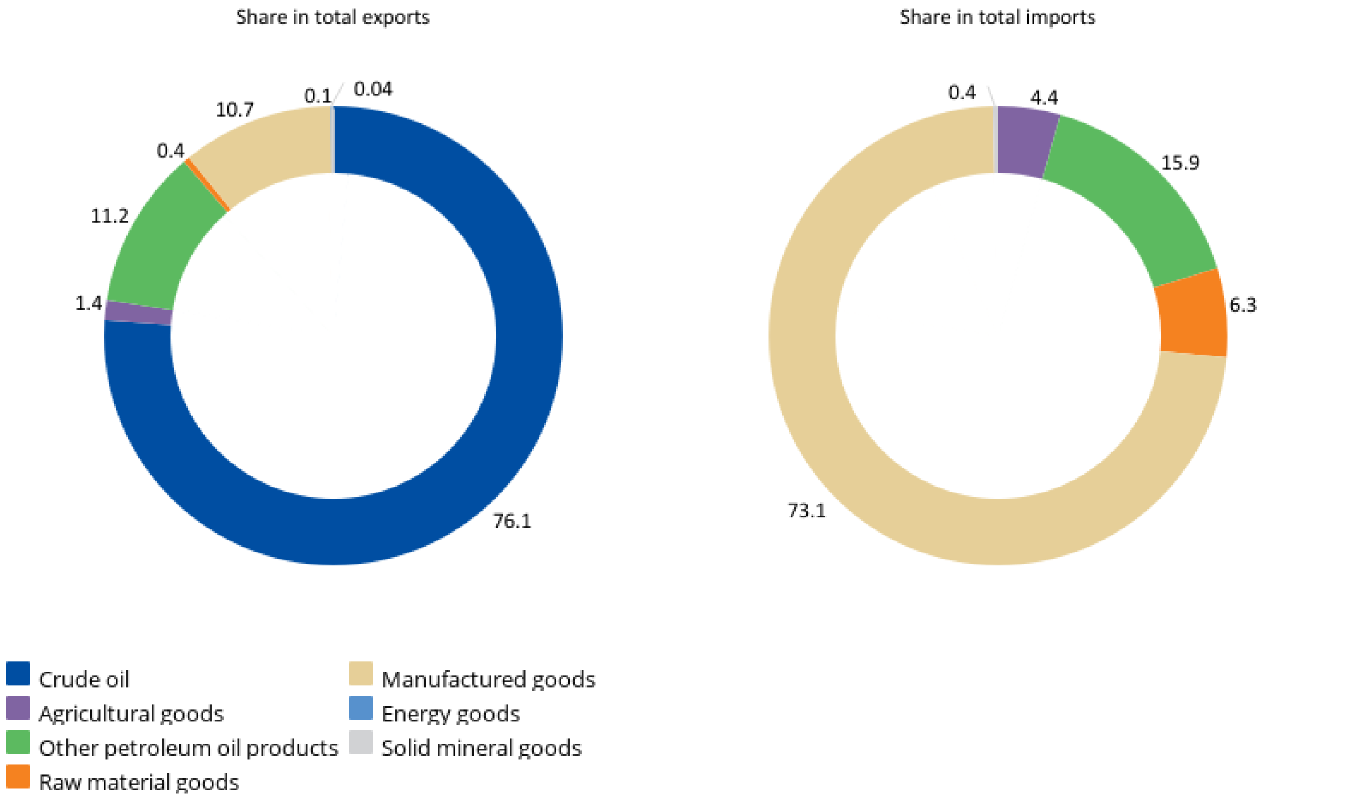
The new US$2.5 billion fertiliser plant owned by Africa's richest man, Aliko Dangote, is expected to produce three million metric tons of urea fertiliser per annum. [156] This will help Nigeria meet the domestic demand for fertiliser, a critical component of achieving food sufficiency for the country.

Going forward, the large and rapidly growing population will undoubtedly place enormous pressure on food production and land administration. As shown in Chart 24, in the Current Path forecast, agricultural demand is set to increase from 225 million metric tons in 2019 to about 560 million metric tons by 2050, while agricultural production is likely to only reach 283 million metric tons by 2050, resulting in a significant unmet demand of nearly 50% of total demand by 2050. This huge deficit will substantially increase the import bill with further pressure on foreign reserves and the exchange rate.

With the rapidly growing population, estimated at more than 400 million by 2050, enhancing agricultural productivity through adaptation of new technologies and innovations as well as climate-smart agriculture is crucial to ensure food security and nutrition in Nigeria. Support from all development partners for the efforts of the Nigerian government will be key to achieving this goal.

International trade

Chart 25: Export and import structure by product group, 2019



Source: Data from the Nigerian National Bureau of Statistics (NBS)

Nigeria's export basket is dominated by hydrocarbons (oil and gas), making the country's balance of payments vulnerable to volatile commodity prices. The country is relatively open to trade, with a foreign trade to GDP ratio of 33% in 2018. Like many African countries, Nigeria mainly exports crude oil and gas and imports manufactured goods and refined petroleum (Chart 25). Due to the weak domestic refining capacity, Nigeria relies on imported petroleum products despite being the continent's largest oil producer. To remedy this situation, the Nigerian government is taking initiatives to rehabilitate oil refinery facilities. For instance, the government has approved US$1.5 billion in funding to revamp the Port Harcourt refinery, which has a refining capacity of about 210 000 barrels of oil per day. [157] Also, the establishment of the Dangote Refinery with a daily production capacity of 650 000 barrels will enable Nigeria to meet its domestic fuel needs, reduce importing petroleum products, and eliminate fuel shortages, putting an end to the costly fuel subsidies.

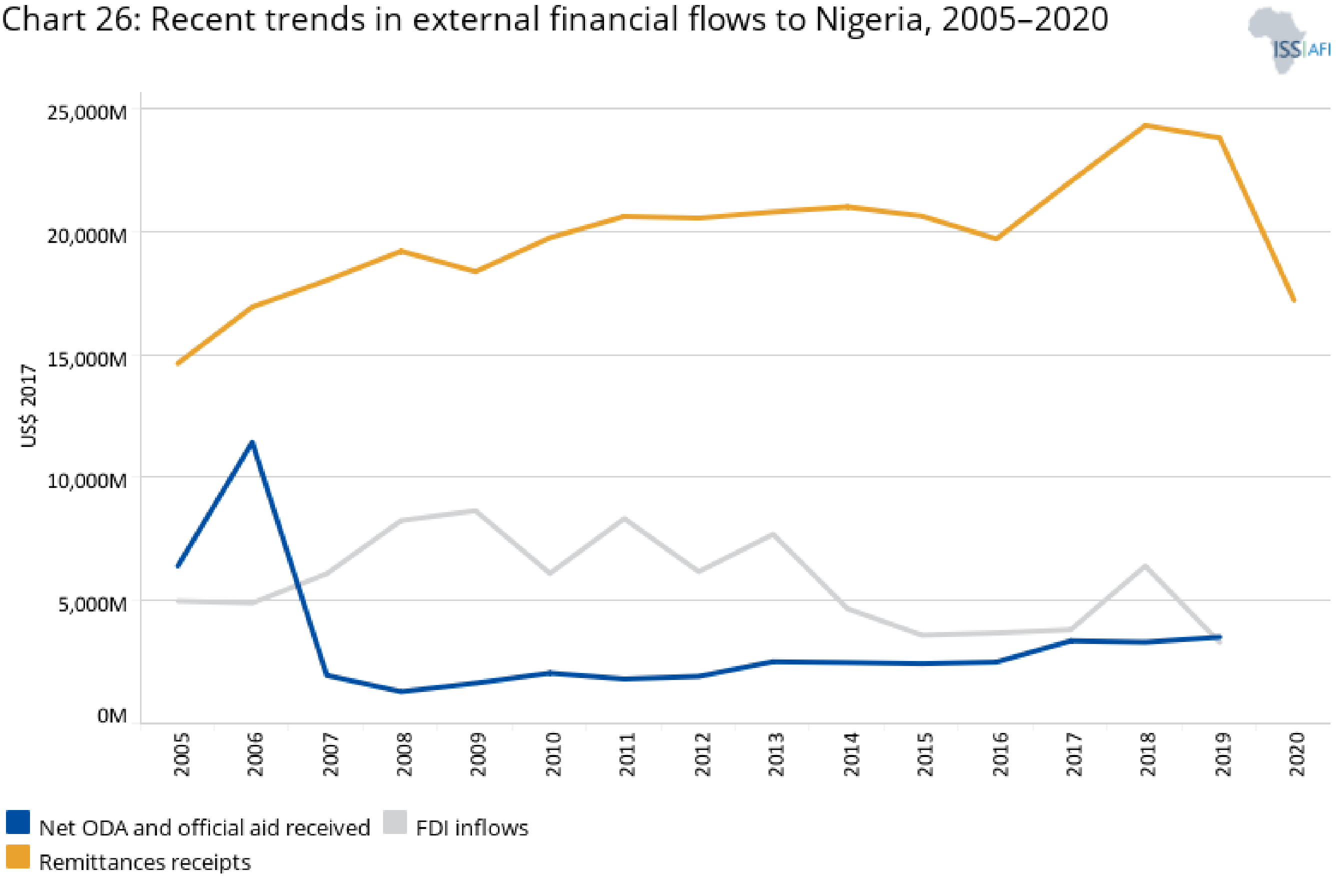
In 2019, crude oil and other petroleum products accounted for 87% of total export while manufacturing goods accounted for 73% of imports. India, Spain, France, the Netherlands and Ghana were the top five destinations of Nigerian exports in 2019, while imports were mainly from India, China, the United States, the Netherlands and Belgium in the same year.

Nigeria has signed trade agreements with a number of countries in Africa, the Caribbean, the Pacific and the European Union even though the country remains protectionist in specific sectors, such as agriculture. Also, Nigeria is the 34th member state to formally ratify the African Continental Free Trade Area (AfCFTA) agreement, a key decision given its position as Africa's largest economy and the continent's most populous country. [158]

In addition to formal trade, there are also significant informal trade flows between Nigeria and its neighbours, of which fuel may be the most significant. Given that Nigeria subsidises the retail price of refined fuel, the price in Nigeria is very low compared to the prevailing prices in neighbouring countries. This has triggered a vast cross-border informal trade between Nigeria and its neighbours, such as Benin and Niger, with large volumes being moved across the border, often on motorbikes loaded with jerry cans. [159] Recently, Nigeria closed its border with Benin to curb the smuggling of goods such as rice. Officially, Nigeria's shares in Benin export and import are, respectively, 6% and 2%, but these official statistics are highly misleading given the massive informal trade between the countries. [160]

Foreign direct investment (FDI) and overseas worker remittances

Chart 26: Recent trends in external financial flows to Nigeria, 2005–2020



Source: Data from the World Bank and UNCTAD

View on Tableau Public Share

Nigeria has enormous FDI potential. Apart from oil and gas, the country has about 44 solid minerals in commercial quantity. [161] Beyond natural resources, there are also tremendous opportunities for FDI in industries such as agriculture, tourism, consumer goods, textiles and entertainment given the vastness of the consumer market.

According to the UNCTAD 2020 World Investment Report, FDI to Nigeria amounted to only US$3.3 billion in 2019, an almost 50% decrease compared to the previous year due to a slowdown in investment in the oil and gas industry. [162] In Nigeria, oil and gas production faces threats from terrorism, vandalism and theft from criminal organisations that steal crude oil directly from pipelines. A recent report revealed that Nigeria loses about 200 000 barrels of oil per day to theft, amounting to nearly US$42 billion over the period 2009–2018. [162] This may discourage foreign investors from engaging in the oil and gas sector, negatively impacting overall FDI inflows into the country.

Nigeria was, however, the fourth largest host country for FDI in Africa in 2019, behind Egypt (US$9 billion), South Africa (US$4.6 billion) and Republic of Congo (US$3.4 billion). FDI to Nigeria is diversifying into other sectors such as manufacturing and services even though the largest share still goes to the oil and gas industry. Some of the key investing countries in Nigeria are the USA, China, the United Kingdom, the Netherlands and France.

Attracting more manufacturing FDI could help Nigeria diversify its economy away from oil by investing in a competitive manufacturing sector, which should contribute to sophisticating its exports and sustaining growth. However, infrastructural bottlenecks, corruption and a poor business climate curb this type of FDI inflow into the country. The government has recognised these constraints to private investment and growth, and efforts have been made under the Economic Recovery and Growth Plan (ERGP 2017–2020) to improve the business environment.

According to the 2020 World Bank Doing Business Report, Nigeria ranks 131st out of 190 countries, a significant leap from its position of 146th in the previous report. [163] The country has improved in many subcategories of the rankings, such as starting a business, dealing with construction permits, getting electricity, registering property, trading across borders and enforcing contracts. The report names Nigeria as one of the top 10 countries with the most notable improvements in business climate, and the target of the authorities is to get Nigeria in the top 70 countries on the Doing Business Index by 2023. This augurs well for manufacturing FDI to Nigeria in the near future.

Given its large diaspora, Nigeria is the largest destination of remittances in sub-Saharan Africa. They are the leading source of external finance in the country, far ahead of FDI and official development assistance (Chart 26). Remittances amounted to US$17.2 billion in 2020, a nearly 28% decrease compared to its pre-pandemic level of US$23.8 billion (5.3% of GDP) in 2019 as the incomes of Nigerians in the diaspora were severely affected by the COVID-19 pandemic. These official statistics may, however, be misleading, as a significant share of remittances to Nigeria occur via informal channels. According to the World Bank and the IMF, if remittances sent through informal channels are taken into account, total remittances could be as much as 50% higher than the official record. [164]

The contribution of remittances to poverty reduction and human development is well documented. Also, remittances tend to be less volatile to economic downturns than FDI and portfolio investment, and hence help boost foreign exchange reserves and mitigate the negative impact of the repeated oil price shocks on the Nigerian current account balance.

Efforts should therefore be made to offer cheaper and faster ways for remitters to send money to their relatives in order to boost remittance inflows into the country. Growth in remittances is one of the key objectives of the Central Bank of Nigeria (CBN), highlighted by its 'Naira for Dollar' initiative which incentivised Nigerians by paying them five naira for every US dollar received via the remittance channel. [165] The CBN digital currency (eNaira) introduced recently is expected to improve diaspora remittances through the official routes by reducing the cost of receiving and sending money.

In summary, the Current Path analysis has revealed that Nigeria faces monumental development challenges. Weak governance, corruption, insecurity, rapid population growth, infrastructure and human capital bottlenecks, environmental exploitation, and limited economic diversification are some of the key factors impeding Nigerian development progress. Although the country has made progress in recent years and is forecast to improve its economic and human development outcomes going forward, the improvement is not fast enough, and the country is likely to still lag behind its African and global income peers by 2050.

Without additional intervention, Nigeria will not fulfil its potential to become one of the major players in the global economy. It will likely remain the 'poverty capital' of the world or a 'giant with clay feet', with the world's highest number of poor people by 2050. Rigorous and targeted socio-economic policy interventions need to be undertaken to improve the country's current development trajectory.

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