AFRICA 2025

PROSPECTS AND CHALLENGES

Handbook by the HSE University Center for African Studies

Edited by Andrey Maslov

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Africa 2025: Prospects and Challenges

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Handbook

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Africa 2025: Prospects and Challenges is to serve as a handbook on Africa's development, challenges and opportunities. Its target audience is government officials, businessmen, scholars and experts. The handbook aims to provide alternative positive vision on some issues that Africa faces, among them being fight for food and energy sovereignty, debt crisis, digital transformation, rapid urbanisation and population growth.

The book was prepared by the team of experts and scholars coordinated by the HSE University Center for African Studies (Moscow, Russia).

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The main points, conclusions and recommendations of the Handbook's chapters have been supplemented and nuanced based on feedback and advice from officials, industry experts and businessmen from Algeria, Egypt, Ethiopia, Kenya, Nigeria, Senegal, South Africa, Tanzania and Zimbabwe.

Foreword

Africa remains a space of opportunity, the flip side of that, as it has always been, that it is still unknown.

Although the African Union, AfDB, World Bank, UNECA and other UN entities, many research organisations and universities across the continent and beyond are working hard to collect and process data and research on what is happening in Africa, yet the tiny islands of reliable knowledge are being swamped by the unknown.

We do not know how many people live in most countries, how many diesel generators are installed and how much electricity they generate, how much it actually costs to service government debts, or where government reserves are kept, what is the real contribution of the creative industries to the economy. It is difficult to get data on rainfall or water levels in rivers or lakes. For many areas, it is difficult to even say whether they are increasingly suffering from water scarcity or excess.

The HSE University Center for African Studies is in its fifth year of operation. We are a group of researchers and consultants from a wide range of backgrounds, mostly young.

The work that has been carried out by our Center over the past four years has been very concrete and practical in nature. Basically, we prepare reports and proposals on the strategy for commercial vehicles operating or intending to operate across Africa. These were all based on the **identification of prospects and challenges**.

In solving those practical problems, we often enter the realm of the unknown. We always look carefully for a relevant piece of research, but we do not always find anything that we can rely on. We also come across some stereotypes that at first seemed to be just mistakes. So, we had no choice but to start our own research programme to fill some gaps.

The relationship between **population growth and hunger** was one of the first times we encountered such a gap. Overpopulation is commonly portrayed as the cause of many of Africa's troubles, especially hunger. The 1992 Club of Rome report Beyond the Limits was one of the first to impose such a framework. It has since been used to explain many of the continent's conflicts and crises, including the infamous Rwandan genocide.

At the same time, the case studies we have been able to conduct show that the relationship may be the opposite. The causes of hunger are the lack of infrastructure to store and transport food in remote areas, as well the lack of fertilisers, soil treatment, and water management in the vulnerable areas. Reports often underestimate these factors, while exaggerating the role of climate change and overpopulation.

As the population grows, the infrastructure gap is filled rather than expanded, local food markets develop, and undernourishment gradually decreases. A growing population also provides a more sustainable market for fertilisers and advanced agricultural technologies. The more people there are, the easier it is to achieve food self-sufficiency.

Moreover, Africa is still a sparsely populated continent and has vast underpopulated areas suitable for living, farming and community development. Their sustainable development is an important condition for continued economic growth and the formation of the continent's infrastructural cohesion and integrity. However, this requires maintaining a balance between human settlements and the environment.

In Tanzania, keeping a piece of land out of agriculture as a wildlife sanctuary brings in several times more income to the budget than the same piece of land used for agriculture. This means that land should be saved and developed intensively rather than extensively. While **population growth is a solution rather than a problem** for this strategy, it has to be complemented by technology transfer, infrastructure development and investment.

This was just one example, but an important one, that convinced us that our findings, based on practice, can significantly add to established perceptions, sometimes amending them. Therefore, their publication, further discussion and criticism can be of interest to a wide range of readers in Africa.

This **Handbook is intended for decision-makers** across Africa who shape government and corporate policies, and for those who might be interested in reviewing and challenging their decisions. It is also for our colleagues, the experts, from whom we expect to criticise and contribute to our hypotheses.

As an institution, we are interested in expanding our network across Africa. As the think-tank at the forefront of our own home market of 'Africa' expertise, our hope is that some of our knowledge could be also competitive in the African markets if refined and tailored duly in close cooperation with our colleagues on the ground.

Of course, Africa is not a country. From Algiers to Cape Town, from Dakar to Dar es Salaam, the diversity of cultures and civilisations is breathtaking. But the common history, the Agenda 2063, the African Union, UNECA, NEPAD, the Cup of African Nations and many other events and evidences prove that **Africa is a space** of communication **full of unity**. The diversity of cultures and forms of social life does not detract from the fact that it is all Africa. And there is room for more books about Africa.

Leopold Senghor and Nkwame Nkrumah spoke of Africa as a unified space. Africa teaches us that unity does not necessarily mean giving up anything of oneself. States do not have to give up their sovereignty, and people do not have to give up their rights to join unity. On the contrary, by becoming part of another whole, they gain new opportunities and new bonds. African civilisation deserves respect for its avoidance of artificial contradictions and imposed choices, for its ability to form alliances without compromising sovereignty, and for its ability to communicate despite all the obstacles.

As we have mentioned hunger, we may admit that the list of challenges facing Africa has not changed for a long time. But what is changing is the set of tools that are solutions. In recent years, **artificial intelligence** is emerging as an important option. Perhaps AI algorithms are what we have been missing to restore harmony between humans and ecosystems, as they are instrumental to defeat hunger and malnutrition.

The penetration of mobile payments in remote and rural areas has reached a level where big data can be collected on a wide variety of risk indicators, such as prices for food. The 'internet of environment' may also become a network for crisis prevention. Nature can speak to us in the language of big data – and so we may have a better chance of understanding it.

This book mentions experiences and options for the implementation of AI in various fields, and the issue of information and data sovereignty is central to the discussion.

Obviously, **sovereignty comes at a price**. Is it worth this price?

Attention is given to sovereignty in almost all chapters of this book. We talk about food sovereignty, information sovereignty, energy sovereignty and sovereignty of creative industries. By analysing African experience, we have tried to understand what sovereignty can consist of, how to achieve it and, just as importantly, how to measure it. This Handbook does not answer the question "How do you know when sovereignty has been achieved?", but rather starts a discussion on this issue.

Russia is not the focus of this Handbook. Although we are proud of our country's role in the liberation of Africa in the 1960s and 1970s, and of the traditions of friendship that have grown since then, this work does not artificially prioritise Russia and its interests in Africa. **This book is about Africa, its prospects, and challenges.**

We would be delighted if the Handbook, to which our friends from Algeria, Egypt, Ethiopia, Kenya, Nigeria, Senegal, South Africa, Tanzania, Zimbabwe have also contributed as its critical reviewers, proves useful and stimulates the further debate.

Measuring Africa's wealth and money

What is the real value of African money?

One of the main factors holding back Africa's development is a lack of data and information, and thus of knowledge relevant for decision-making. The unknown leads to overestimation of risk, and overestimation of risk leads to an inflated cost of capital. As a result, the cost of financing a business in Africa can be several times higher than in a developing country outside the continent - not to mention rates in the US or Europe. There is also 'cheap' money in Africa - international funds, banks and several countries offer low-cost financing to certain projects and sectors, providing them an additional, non-market competitive advantage driven by non-African interests and external agenda.

Africa is not a single capital market. Almost every country suffers from the capital drain, at the same time the most of them rely on external funding for balancing their budgets. Nevertheless, the individual capital markets in Africa share many common features, and investors often regard Africa or its subregions as destinations which are best looked at together. So, there are funds focused on investments in the continent. In addition, the role of Pan-African institutions is steadily growing, with AfDB, Afreximbank, the African Union and UNECA among them.

One of such common features on the continent is the dependence of budgets and economies on external borrowing and trade. Taxes on domestic transactions have played a lesser role. However, the banking sector is growing dynamically, and in many countries, banks play a key role in development acting as intermediaries for external capital markets. Below we examine these and a number of other phenomena that shape the financial dimension of risks and prospects for projects in Africa.

Income from the foreign trade and borrowings both are highly volatile and tend to dry up during crises due to the undiversified resource-based export structures and predominance of an external debt over domestic. Better comprehension of existing vulnerabilities could help governments, businesses to implement workable strategies and policies, and navigate among country-specific risks.

Our study examines the evolution of African debt throughout the 21st century and its distribution across the continent. The debt is reviewed in conjunction with issues regarding trade: trade balances, export diversification and national currencies. The research quantifies the existing debt burden and sheds light on the problem of credit rating agencies, finally offering directions for future research to enable an unbiased country classification.

African debt: what has changed?

As horrific as it may sound, the rest of developing countries experienced 2.5 times faster debt expansion during the same period.

Since the beginning of the 21st century African public debt has quadrupled and reached USD 1.8 trillion in 2022[1]

After a series of defaults in the 1980s and 1990s, African countries embarked on a path of debt deceleration, reducing the debt-to-GDP ratio from 65% in 2000 to 39.3% in 2008.[2] This trend was mainly supported by full-scale debt relief programmes of multilateral financial institutions. In 1996, the IMF launched the Heavily Indebted Poor Countries

1 UNCTAD. A world of debt report 2024. URL: https://unctad.org/publication/world-of-debt

2 Afreximbank. State of Play of Debt Burden in Africa in 2024. URL: https://www.afreximbank.com/reports/state-of-play-of-debt-burden-in-africa-2024-debt-dynamics-and-mounting-vulnerability/

initiative (HIPC) which was targeted at low-income countries with unmanageable levels of debt. Since then, 31 African countries have graduated from HIPC and received full debt forgiveness, reaching USD 70 billion. In 2005, HIPC was supplemented by the **Multilateral Debt Relief Initiative** (MDRI), which guaranteed debt relief on the claims of the IMF, World Bank and African Development Bank for 29 African states at the cost of more than USD 30 billion.

Though HIPC and MDRI were effective in nominal terms, their impact on the long-term debt sustainability may be contradictory. To enter both programmes, a state needed to commit itself to structural reforms (more political than economic), thereby delegating decision-making to G8 (now G7) countries. Also, since the IMF offered a bailout, more and more countries started to account for the future prospect of similar debt relief, applying riskier debt management practices.

Then came the global financial crisis of 2008 when the modern history of African debt began. In response to weakening economic activity, the Fed and the ECB lowered interest rates which resulted in yield decrease on developed markets and triggered a search for higher returns elsewhere. Being less involved in global finance and thus less affected by the crisis, Africa had demonstrated an average annual GDP growth rate of 5.3% during 2000-2008 and offered a substantial risk premium, which was not perceived as that risky anymore after the collapse of what seemed to be solid western banks.

Since 2008, the African debt-to-GDP ratio has sharply increased, reaching 69% in 2023; yet the expansion was asymmetrical in regard to external and internal obligations. In the early 2010s, most sovereigns did not have capacity or credibility to accommodate capital in their own bond markets. Little has changed since then.

In 2023, two-thirds of the total African debt or USD 1.2 trillion was external

By 2022 the domestic debt has reached a notable level in five countries: **Egypt** (USD 258 billion), **South Africa** (USD 116 billion), **Nigeria** (USD 83 billion), **Algeria** (USD 95 billion), and **Morocco** (USD 30 billion).

Unlike internal debt which depends mostly on the national economy's performance and can be 'printed' during times of hardship, external debt relies heavily on global macroeconomic conditions and has to be paid back in hard currency. The large share of external debt along with the overexposure of many African countries to commodity prices and a limited capacity to deal with disasters and crises are a volatile combination as was seen during the 2014 commodity price plunge, global pandemic in 2020 and crisis of 2022.

However, the African debt-to-GDP ratio has soared not only due to the rise of the debt itself. It can be attributed also to a slowdown in economic growth (3.2% on average in 2010-2022) and currency depreciation (35% devaluation relative to USD since 2014 for emerging economies[3]) as the debt is mostly external.

While comparison to GDP exposes the increase of the debt level as the main trend, it fails to reveal the magnitude of the change. Debt is very heterogeneous as it comes on different terms from different sources: other governments, multinational financial institutions or private banks.

The private sector has become the main source of African debt, shifting from 25% in 2000 to 54% in 2023, leaving 27% to multilateral creditors such as the IMF or World Bank and less than 19% to bilateral loans from other countries[4]

3 Federal Reserve Bank. Nominal Emerging Market Economies U.S. Dollar Index. URL: https://fred.stlouisfed.org/series/DTWEXEMEGS
4 Afreximbank. State of Play of Debt Burden in Africa in 2024. URL: https://www.afreximbank.com/reports/state-of-play-of-debt-burden-in-africa-2024-debt-dynamics-and-mounting-vulnerability/

Among the top lenders are private bondholders (i.e. eurobond market participants from all over the world), Chinese (USD 24 billion) and British (USD 14 billion) investors. Although this is indicative of improved investment attractiveness, it poses a number of challenges for African countries.

Firstly, private debt is more expensive than bilateral or multilateral, meaning higher interest rates, lower grace periods and less space for restructuring. The UNCTAD report entitled A World of Debt 2024 shows that in 2020-2024 the borrowing costs of African countries were ten times higher than in developed economies, 44% higher than in the LATAM region and 85% higher than in Asia and Oceania, even though the share of private debt in Africa is lower than average for developing countries.[5]

Secondly, flows of private debt are more volatile and tend to reverse in times of crisis as foreign investors' main concern is short to middle-term profit but not long-term and also not the abstract financial stability of a certain country. In 2022, developing countries experienced a net outflow of USD 49 billion on external public debt, among them were 21 African countries – five more than in 2021 and 11 more than in 2019.[6]

An issue with African external obligations is the 'wall of debt' – portions of eurobonds that were actively issued last decade and mature mainly in 2024-26

Thirdly, in case of default on private debt it may take longer to restructure it with a greater number of counterparties, who are not always willing to cooperate. At least 15 African countries have become targets of 'vulture funds' that specialise in purchasing distressed debt on the secondary market at a substantial discount and trying to recover the premium, usually through litigation and delays of the overall restructuring process.[7] For example, in 2007 a vulture fund received USD 15.5 million from Zambia after buying a debt of USD 3.2 million, meaning that the fund's return was 484%.[8] After a series of legal patches the activity of vulture funds in Africa has diminished; however, a new wave of defaults may attract more sophisticated parties seeking to profit from distressed debt.

It should also be considered that a large proportion of lenders labelled 'private' are in fact government affiliated. This is particularly true of lending from the Middle East and China.

Africa's external debt

The debt landscape is not homogenous across Africa. Two-thirds of the external debt is concentrated in ten countries: **South Africa** (USD 172 billion), **Egypt** (USD 163 billion), **Nigeria**, **Morocco**, **Mozambique**, **Angola**, **Kenya**, **Tunisia**, **Côte d'Ivoire**, and **Ghana**. Almost all these countries are within the Top 10 in terms of GDP, with only Tunisia and Mozambique standing out. As local financial markets grow and become more interconnected, debt distress in one of these heavyweights may trigger a wave of defaults across the continent.

Eurobonds are issued in foreign currency outside the country of origin and have several benefits: they do not entail any policy changes; they are liquid relative to other types of debt, and they can be repurchased or bought back on the secondary market. However, issuing countries rely heavily on the global interest rates and their own credit rating as most eurobonds are paid off by issuing new portions of debt. Nowadays, both global and African interest rates remain high due to the tight monetary policy adopted by developed countries in the post-Covid era, currency depreciation and climate shocks. The frequency and magnitude of these shocks for Africa is increasing

5 UNCTAD. A world of debt report 2024. URL: https://unctad.org/publication/world-of-debt
6 Ibid.
7 African Development Bank Group. Vulture Funds in the Sovereign Debt Context. URL: https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/african-legal-support-facility/vulture-funds-in-the-sovereign-debt-context
8 BBC. Zambia pays 'vulture fund' $15m. URL: http://news.bbc.co.uk/2/hi/business/6589287.stm

faster than anywhere else on Earth, and many countries are trying to address the problem by issuing climate-related catastrophe bonds.

In 2024, there are USD 10.3 billion in eurobonds maturing, a sharp increase from USD 3 billion in 2023. Some countries have already re-entered the eurobond market in 2024 to refinance maturing obligations: **Côte d'Ivoire** issued USD 2.6 billion in January and **Kenya** raised USD 1.5 billion in February. Large portion of maturing debt is still held by **Egypt** (USD 3.3 billion), **South Africa** (USD 1.5 billion), **Morocco** (USD 1 billion) and Ethiopia (USD 1 billion). **South Africa** and **Morocco** are not likely to face challenges paying off their debt, but Egypt may need new lines of credit including one with the IMF, while Ethiopia might end up in default by the end of 2024.[9]

In 2025 African countries will face USD 10.2 billion in maturing eurobonds, with USD 3 billion being held by **Egypt**, USD 2 billion by **South Africa**, USD 1 billion by **Tunisia**, USD 864 million by **Angola**, USD 750 million by **Namibia**, USD 700 million by **Gabon** and USD 500 million by **Nigeria**.

Luckily, as inflationary expectations are decreasing worldwide, the Fed and ECB are starting to cut interest rates gradually which will lead to cheaper debt. However, defaults in countries with the most vulnerable debt level are very likely to occur in the next two-three years.

Market sentiment is useful to define the probability of default on a debt. In 2023, the yield on Ethiopian eurobonds maturing in December 2024 increased by 16 percentage points and reached an astonishingly high 50.5% – i.e. eurobonds were sold for half of their face value.[10] Ghana's bonds maturing in 2026 had an even greater yield — 54.4%, an increase by 8.2 percentage points from 2022. Ethiopia and Ghana are the main candidates to default in 2024 and 2026 respectively, adding a new portion of arrears to the existing debt in default and further limiting their ability to borrow on the international market. At the same time, both countries can find ways to limit the scale of the debt crisis through their political leverage. For example, Ethiopia's debt service costs are low relative to the size of its debt, and restructuring options can be found with new BRICS partners or competing sources of financing.

China remains a major bilateral lender to Africa with over USD 90 billion in active debt commitments (fourfold increase from 2012), constituting 11% of the total external debt.[11] Chinese loans to Africa started to grow from USD 100 million in 2000 and reached its peak in 2016 (USD 28.8 billion). Since then, the trend has reversed – lending dropped to just USD 1 billion in 2022.[12]

From a cumulative USD 180 billion, 80% was attributed to infrastructure projects such as power plants, roads and railroads, port facilities and cell networks implemented by the supply of goods and services from China. Technically the money often doesn't leave China, only the financial liabilities being recorded for the African states.

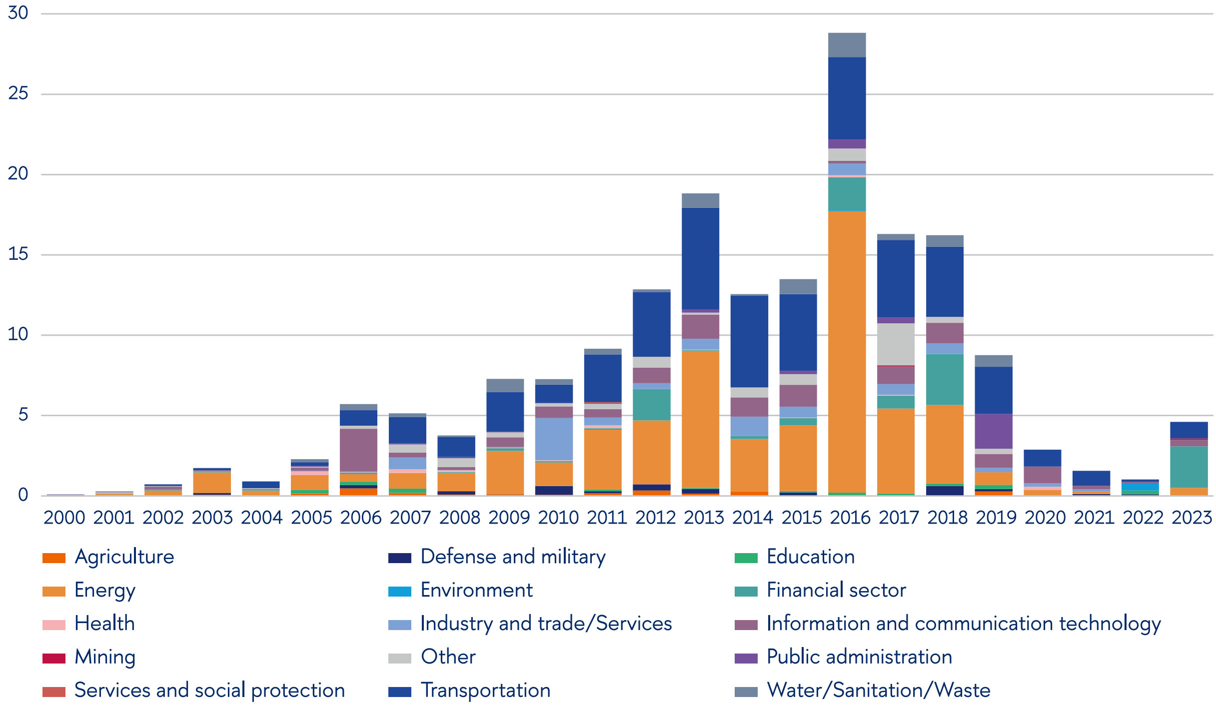
China has often used resource-backed lending in countries such as Angola, Democratic Republic of Congo, Guinea and Ghana, pursuing also the goal of securitisation its strategic imports from these countries.

In 2024, the top debtors to China were Angola (USD 21 billion), Ethiopia (USD 7 billion), Kenya (USD 7 billion), Zambia (USD 6 billion) and Egypt (USD 5 billion), some of them in default or being on the edge of debt distress. Yet, it remains unclear whether Chinese loans have deteriorated the debt profiles of African countries or China was just more willing to accept greater risks.

However, in 2023 China demonstrated renewed interest in Africa with USD 4.5 billion in loans, mainly in finance and infrastructure. USD 1.3 billion was provided to Egypt as a line of credit, with the same

9 Gregory Smith. Africa's eurobond wall revisited. URL: https://www.linkedin.com/pulse/africas-eurobond-wall-revisited-gregory-smith/
10 Cytonn. Sub-Saharan Africa (SSA) Eurobonds Performance in 2023. URL: https://cytonn.com/topicals/sub-saharan-africa-ssa-4
11 World bank. International Debt Report 2023. URL: https://openknowledge.worldbank.org/entities/publication/02225002-395f-464a-8e13-2acfca05e8f0
12 Boston University. Chinese Loans to Africa Database. URL: https://www.bu.edu/gdp/chinese-loans-to-africa-database/

New Chinese loans to Africa, 2000-2022, USD billion



Source: prepared by the HSE Center for African Studies based on Boston University Global Development Policy Center data.

amount being spent on facilitating trade with Africa. Nigeria received USD 1 billion to construct the Kaduna-Kano section of the Lagos-Kano railway, more than USD 250 million was offered to Madagascar, Uganda and Angola on energy and telecommunication projects. What seemed to be a Chinese retreat from Africa could be strategic realignment before reevaluating risks and entering new markets.

Main defaulters

In 2023, African debt in default totalled USD 130 billion, 13% lower than in 2022 but still 30% more than 2020. Four countries account for 90% of the defaulted debt: **Ghana** (USD 44 billion), **Sudan** (USD 43 billion), **Zimbabwe** (USD 16 billion) and **Zambia** (USD 14 billion)[13]. Significant stocks of debt in arrears are also held by **Mozambique**, **Libya**, **Tanzania**, and **Ethiopia**.

Sudan owes most of its debt to Paris Club countries (23%), Saudi Arabia (13%), Kuwait (7%), China (6%) and the IMF (8%). In 2021, Sudan entered the HIPC initiative and was planning to restructure 90% of its USD 55 billion in debt. However, in 2022 IMF suspended the programme after the military coup and removal of the transitional government.[14]

Ghana's 60% of debt in arrears is attributed to eurobonds which complicates the restructuring as it involves many private lenders and non-Paris Club countries. After defaulting on a debt of USD 30 billion in 2022, Ghana entered the G20 Common Framework in January 2023, which helped to facilitate the restructuring process with China and India. In June 2024, Ghana stated that it had reached an agreement on USD 13 billion of eurobonds with private lenders; yet the remaining debt remains high. With the current yield on eurobonds maturing in 2026,

13 Afreximbank. State of Play of Debt Burden in Africa in 2024. URL: https://www.afreximbank.com/reports/state-of-play-of-debt-burden-in-africa-2024-debt-dynamics-and-mounting-vulnerability/

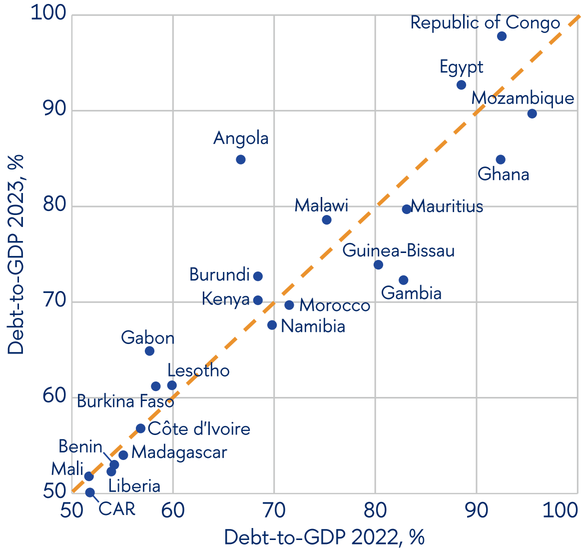
14 Al-Monitor. Western creditors suspend debt relief to Sudan over coup as country's economy sinks. URL: https://www.al-monitor.com/originals/2022/06/western-creditors-suspend-debt-relief-sudan-over-coup-countrys-economy-sinks

Ghana will not be able to roll over the debt and default is most likely to occur without massive support from the external lenders.

Zimbabwe's debt in default is mostly owed to bilateral creditors (67%), in particular to China. Chinese lending is opaque relative to other bilateral creditors to the level that the fact of technical default may not be disclosed. Little visible progress has been made to restructure Zimbabwe's debt: in January 2023, the US left the restructuring programme[15] "due to lack of progress on democratic reforms, alleged voter fraud and political violence targeted at opposition parties"[16].

In 2023, **Zambia** reached an agreement with creditors including China to restructure USD 6.3 billion of debt and is planning to complete its restructuring programme in 2025.

Public debt to GDP in 2022–23



Source: prepared by the HSE University Center for African Studies and Intexpertise based on World Bank data.

Quantifying the debt burden

Debt-to-GDP ratios above 100% are common among developed economies with well-capitalised markets, diversified sources of credit and hard domestic currency. Usually, for developing countries debt greater than GDP is a crisis that has already occurred.

In 2023, only three states had public debt level above GDP: Cabo Verde (113%), Sudan (256%) and Zambia (110%) with Sudan and Zambia being among top defaulters. 11 countries fell in range between 75 and 100% and 22 sovereigns resulted in 50-75% debt-to-GDP bracket.[17] Overall, 19 out of 51 countries with available data demonstrated debt-to-GDP ratios above 70%.[18] However, in 2023, only 22 countries experienced debt-to-GDP ratio increase.

In theory, external debt had to be paid in foreign currency earned mainly through trade. Thus, another dimension of debt sustainability can be obtained by comparing external debt with exports and primary income (profits from investments in other countries and residents' remittances from abroad). In 2022, 15 countries surpassed the 240% debt-to-exports threshold, and 9 more sovereigns breached the 'medium' target of 180%.

In the long term, greater importance for debt sustainability of developing export-oriented African economies attached to **export diversification**, since fluctuation of individual commodity prices are common and may question economic growth for years, which is the case with, for example, oil-rich Angola. The diversification of the exports is a target recognised by many governments, yet there is a lack of measurable indicators to follow the achievements.

If the export is grouped by main categories, the sectoral Hirschmann index may be used to measure the distribution of a country's exports across different sectors of the economy.[19] The index was calculated by for 54 African countries for the year 2022 based on the data taken from the two-digit

15 The US does not have a great presence in Zimbabwe's bilateral debt, however, their influence on the overall restructuring progress should not be underestimated since a large share of banks and credit rating agencies are located in the US.

16 VOA Zimbabwe. United States Suspends Role in Zimbabwe's Debt Restructuring Program Citing Electoral Fraud. URL: https://www.voazimbabwe.com/a/united-states-suspends-role-in-zimbabwe-s-debt-restructuring-program-citing-electoral-fraud/7463023.html

17 Afreximbank. State of Play of Debt Burden in Africa in 2024. URL: https://www.afreximbank.com/reports/state-of-play-of-debt-burden-in-africa-2024-debt-dynamics-and-mounting-vulnerability/

18 International Monetary Fund. The Debt Sustainability Framework for Low-Income Countries. URL: https://www.imf.org/external/pubs/ft/dsa/lic.htm

19 Calculated by the authors on the basis of World Bank and ITC Trade Map data using the formula: $\sqrt{\sum_i \left[\frac{\sum_d x_{isd}}{\sum_d X_{sd}}\right]^2}$, where *s* is the country of interest, *d* – other countries, *i* – sector of interest, *x* – the commodity export flow, *X* – the total export flow of country *s*.

level of the Harmonised System and grouped by categories by expert assessments.

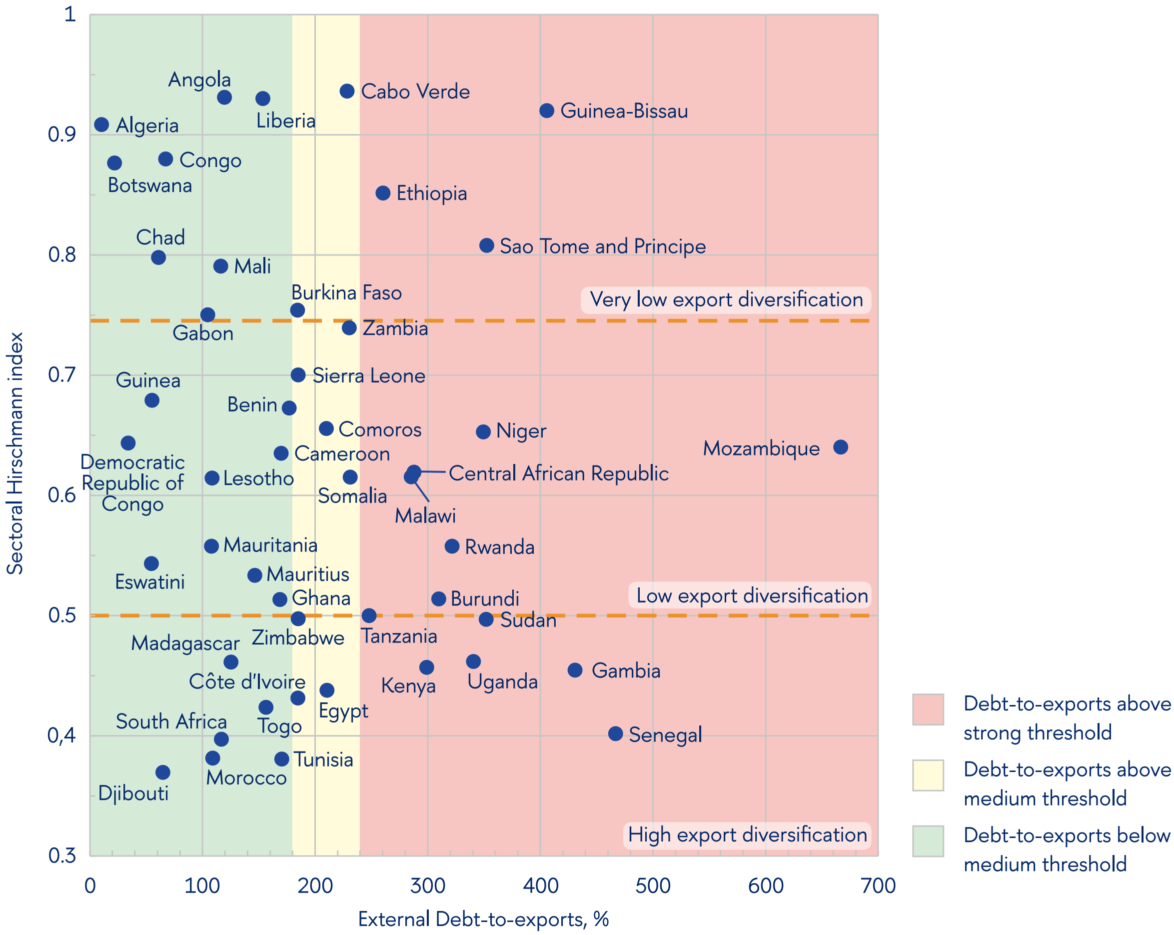
The index ranges from 0 to 1, with higher values indicating that exports are more concentrated in fewer sectors. Conventionally, we can assume that values between 0 and 0.25 represent a 'very high' level of export diversification, values between 0.25 and 0.5 represent a 'high' level, values between 0.5 and 0.75 represent a 'low' level, and values between 0.75 and 1 represent a 'very low' level of export diversification.

The cost of servicing debts also matters in this regard, although it is more difficult to account due to lack of data. Nevertheless, what is more important in the long run, that debt can stimulate the development of new industries and export diversification (which is needed almost everywhere in Africa). If this does not happen, and debt accumulates without diversification effects, the economy is likely to approach a crisis.

Very low export diversification and above medium threshold debt-to-exports ratio are observed for Cabo Verde, in turn above strong threshold debt-to-exports and low export diversification can be seen for Mozambique, Niger, Central African Republic, Rwanda, Malawi and Burundi.

In this regard, the most vulnerable countries are those with high debt-to-exports ratio and very low export diversification, namely Guinea Bissau, Sao Tome and Principe, and Ethiopia

External debt and trade diversification



Source: prepared by the HSE University Center for African Studies and Intexpertise based on World Bank data.

In case commodity prices plummet or international trade stops, which was the case during pandemic, currency inflow dries up and governments appeal to central banks for currency reserves to finance external debt. From now on, time is ticking as reserves are getting thin (15-20% decrease of reserves in month-of-imports ratio from 2019 and 50% from 2007) and more investors are betting on national currency depreciation (10% since 2019 for developing countries). In 2022, precariously low levels of reserves relative to external debt had Zimbabwe (4.3%), Mozambique (4.5%), Chad (5.9%), Ethiopia (10%), Zambia (10.3%) and Ghana (11.6%).[20]

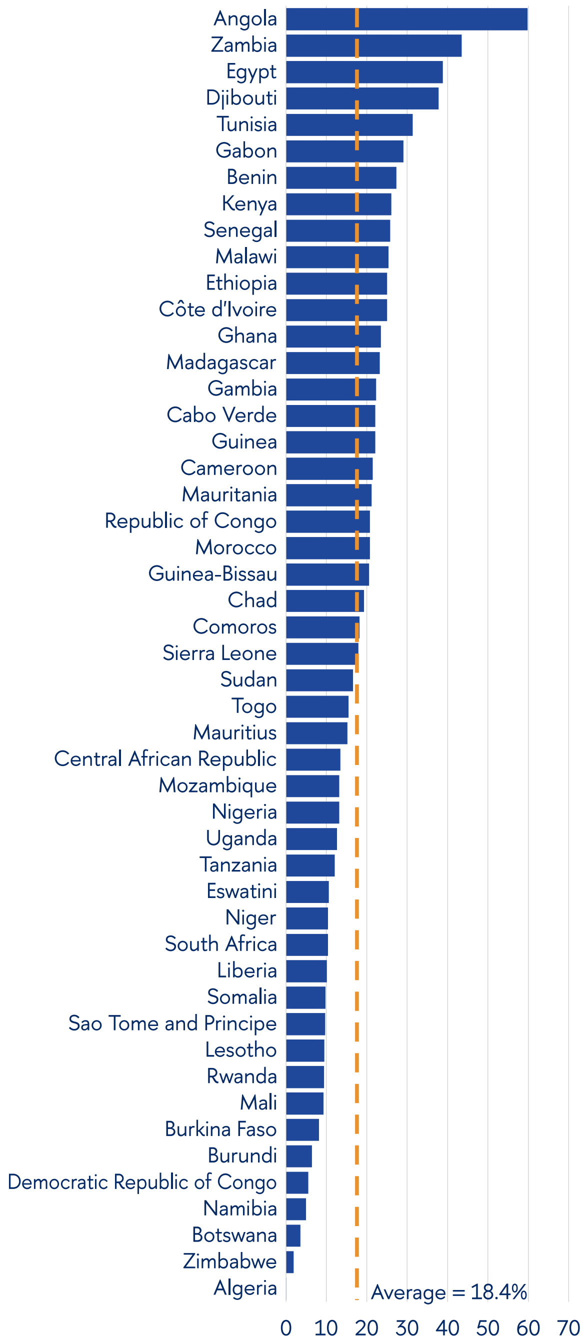
Abstract debt level directly affects the social sphere. In theory, countries invest borrowed money in lucrative projects and use their proceeds to pay off debts while both national income and standard of living improve.

In Africa, however, debt service accounts for 16% more expenditures per capita than education and 79% more than health, which often leads to the opposite of an improved standard of living[21]

In 2024, payments on external debt are expected to take more than 23% of government revenues in 14 countries.[22] A particularly dramatic share of revenues is spent on debt service in Angola (60%), Zambia (43.5%), Egypt (39%) and Djibouti (38%).

Internal lending between African countries is conducted mainly through the African Development Bank. Borrowing from government to government is vastly underdeveloped and is carried out in foreign currency, mainly US dollars. Private lending via establishing branches of national banks abroad is untraceable and often depends on the policy of foreign investors since they represent a significant share of ownership of African banks.

Debt service to government revenues, %



Source: prepared by the HSE University Center for African Studies and Intexpertise based on World Bank data.

20 World Bank
21 A world of debt 2024: A growing burden to global prosperity
22 Debt data portal. URL: https://data.debtjustice.org.uk/

The exceptions prove the rule, with some politically driven deals: Libya has offered loans to Chad (USD 277 million), Angola to Sao Tome and Principe (USD 18 million), Guinea (USD 15 million), Guinea Bissau (USD 5 million); Côte d'Ivoire to Burkina Faso (USD 100 million).

Rating agencies and African premium

International credit rating agencies (CRA) still play a vital role in accessing credit risk. Major rating agencies like S&P, Moody's and Fitch have limited coverage with only 30 African countries included. However, rating agencies are not only observers: in fact, they determine the cost of borrowing, and it is their decision which may exacerbate the debt burden. Recent studies question credibility of the CRA towards Africa: according to the UNDP.

African countries have lost USD 74.5 billion because of biased credit ratings[23]

Researchers from UNDP have found that African countries have lower credit ratings on average than non-African states with the same level of GDP per capita. For instance, Tunisia has a 2.5 times lower rating than Philippines, Egypt has a 1.8x lower rating than Indonesia, Mauritius has a 30% lower rating than Chile. Advocates of CRA associate the disparity with underdevelopment of political institutions in African states, which sometimes may be difficult to capture statistically. In turn, their opponents remind about the country of origin of all widely accepted ratings (the US) and the resulting overuse of western-centric financial power.[24] In 2022 Moody's purchased a controlling stake in leading African CRA Global Credit Rating, further consolidating its leadership on the continent.[25]

Another important problem lying in the same dimension is risk perception of Africa among foreign investors. The existence of an "African premium" – i.e. higher borrowing cost solely because of the geographical affiliation with Africa – is a highly controversial issue. While according to traditional models it may seem irrational, the lack of transparency and structural challenges as was mentioned previously could explain elevated yields.[26] From a behavioural perspective, there are several interpretations: ambiguity aversion based on the lack of relevant information about most of the African states and their economies, the presence of foreign bias as a result of the greater distance between Africa and its main investors' countries of origin or, finally, simple overestimation of probabilities of shocking events such as wars and natural disasters.

Taking into account the role that CRA played in the global financial crisis of 2008, their opinion may be far from objective as their main incentive remains their own profit. Several initiatives among African countries were announced as alternatives in the field of credit ranking like **Sovereign Africa Ratings** (SAR) or **African Credit Rating Agency**. However, SAR has published reports only for Ghana, South Africa and Kenya. Until 2019, the Chinese **Dagong Global Credit Rating**[27] published ratings of 16 African countries. They were significantly different from western agencies' estimations and favoured borrowers and trade partners of China. In 2019 Dagong was nationalised after a series of corruption stories and stopped updating African ratings. In any event, the insightful supervision and suitable methodology matter more for debt sustainability than the final rating.

23 UNDP. Reducing the cost of finance in Africa. https://www.undp.org/sites/g/files/zskgke326/files/2023-04/Full%20report%20-%20Reducing%20Cost%20Finance%20Africa%20Report%20-%20April%202023.pdf

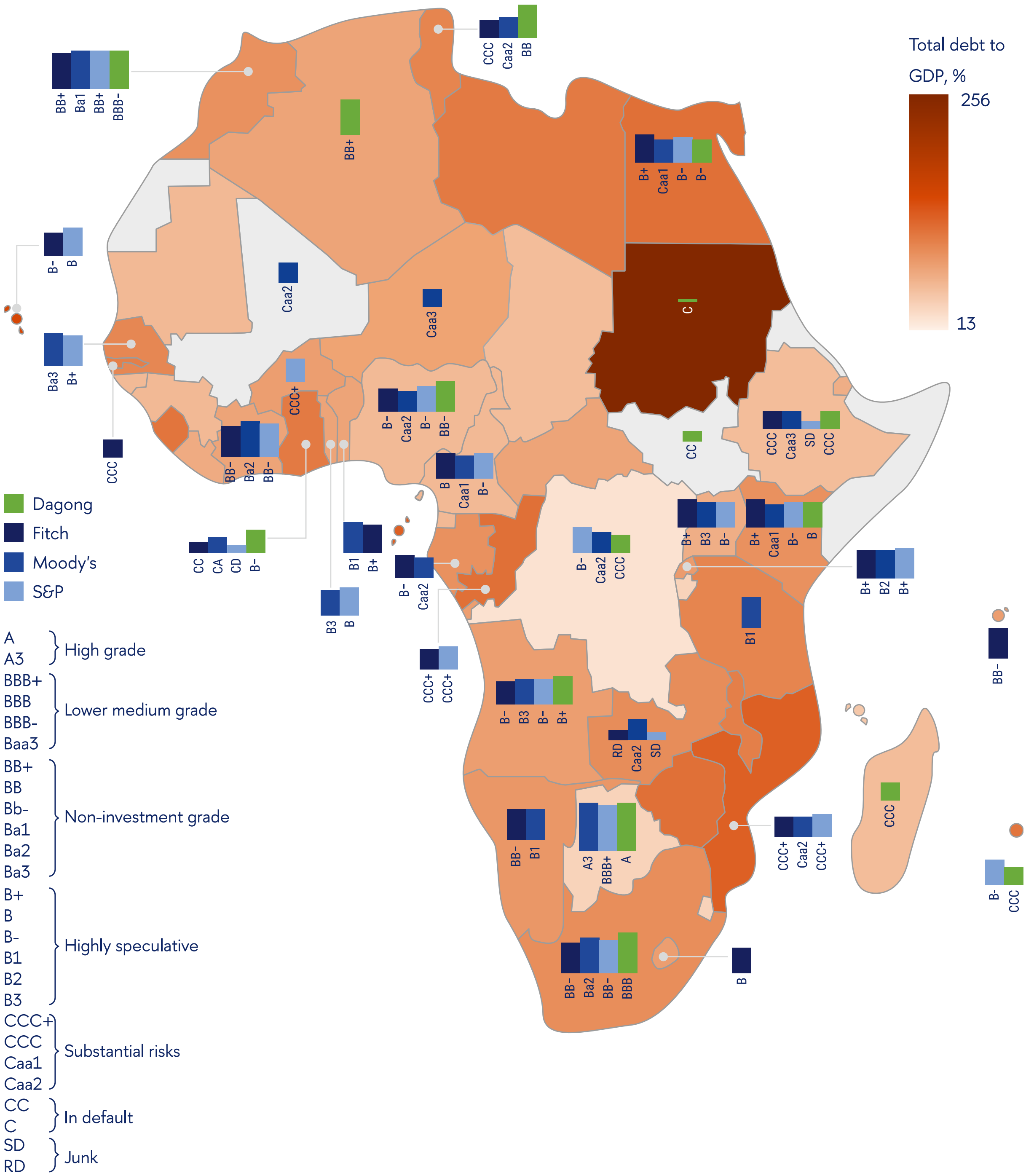
24 Reuters. How Africa's 'ticket' to prosperity fueled a debt bomb. URL: https://www.reuters.com/investigations/how-africas-ticket-prosperity-fueled-debt-bomb-2024-08-01/

25 The conversation. Moody's has bought a leading African rating agency: why it's bad news. URL: https://theconversation.com/moodys-has-bought-a-leading-african-rating-agency-why-its-bad-news-176827

26 William Gbohoui, Rasmané Ouedraogo, Yirbehogre Modeste Some. Sub-Saharan Africa's Risk Perception Premium: In the Search of Missing Factors. URL: https://www.imf.org/en/Publications/WP/Issues/2023/06/23/Sub-Saharan-Africas-Risk-Perception-Premium-In-the-Search-of-Missing-Factors-534885

27 Note that Dagong Global Credit Rating is a Chinese state-owned credit rating agency with headquarters in Beijing, while Global Credit Rating also known as GCR Ratings has become affiliate of Moody's with offices in Mauritius, South Africa, Nigeria, Kenya and Senegal.

African countries investment grade



Source: prepared by the HSE University Center for AfSource: prepared by the HSE University Center for African Studies and Intexpertise based on Dagong, Fitch, Moody's, S&P and World Bank data.rican Studies and Intexpertise based on Dagong, Fitch, Moody's, S&P and World Bank data.

External debt country classification

Any linear rating of countries takes into account many heterogeneous factors with different weights. If it claims to be unbiased, it is likely to be manipulated. A linear rating can only be correct in relation to the interests of a single actor who orders this rating - for their own decision-making or for influencing markets through publications. But some components are unbiased and worth considering, so that everyone can make their own rating weighing these components their own way.

Indicators reviewed in this chapter (sectoral Hirschmann index, debt-to-GDP, debt-to-export, reserves-to-debt, debt-to-service and service-to-revenues ratios) might be summarised and adjusted to reflect heterogeneity caused by restructuring practices as well as country's debt repayment discipline.

Four countries are considered **solvent under most scenarios**, namely **Algeria**, **Botswana**, **Mauritius** and **Morocco**. Their strong debt indicators and impeccable repayment history guarantee future performance on the external debt. 19 more countries are solvent under normal conditions – i.e. if no abrupt hikes in global interest rates or highly unexpected domestic shocks like civil war appear.

15 countries are sensitive to adverse trade shocks equivalent to pandemic or severe currency depreciation as their debt greatly exceeds their export revenues which are often poorly diversified and backed by small amounts of foreign currency reserves.

Ten countries have significant risk of debt distress even under current conditions. Either their expansionary debt dynamic causes concern, future debt repayments, poor fiscal performance or political uncertainty.

Finally, 4 countries are in default on most of their external debt. They participate in restructuring programmes and are mainly excluded from the international capital market.

This external debt classification requires further research, adjustment and validation, including the use of tools based on artificial intelligence. Such research is highly recommended as this preliminary assessment reveals that there are significant discrepancies between unbiased calculations and publicly available ratings.

With some exceptions, fast-growing Eastern African economies demonstrate less sustainable debt levels in comparison with slower-developing Western African countries. Three explanations can be drawn to attention:

Monetary. Western African countries use the CFA franc, which is pegged to the euro, thus alleviating currency and inflationary risks and resulting in a sustainable debt profile. However, the usage of national currencies in Eastern Africa may have a positive impact on overall growth since countries are free to conduct independent monetary policy.

Geopolitical. Eastern Africa gravitates towards market-oriented China and cultivates corresponding values such as competition and pursuit of revenue, while Western Africa is more attached to the Paris Club countries, promoting transparency but giving the best offers to the most loyal governments with a lot of loans being politically driven.

Reciprocal. Key trading partners of Eastern African countries are rapidly developing Asian economies willing to allocate capital to cover future demand. Overall positive expectations backed by strong demographics and economic indicators fuel the debt expansion process.

The domestic debt of Africa

Most African countries have traditionally relied on external debt in the form of long-term, concessional financing from multilateral and bilateral lenders or non-concessional private financing. In an effort to diversify their financing sources and reduce the risk of external debt vulnerability, they have turned to domestic debt markets in recent decades. Although, the amount of external financing continues to exceed that of domestic funding.

Domestic debt refers to the portion of a country's total debt that is owed to creditors within its own borders. Domestic debt can therefore be described as debt which is issued in the sovereign's local currency, or debt which is governed by the domestic sovereign laws. It can also be defined as debt which is held by residents of the issuing sovereign.

Significant share of the domestic debt is held by the entities borrowing themselves from abroad. Most of the domestic debt issued by low-incomes sub-Saharan African countries is held by commercial banks which, in turn, often have foreign shareholders. In 2022, the size of domestic debt in **Egypt** was estimated at 72% of GDP, while in **Zambia** it was 40% of GDP and in **Zimbabwe** it was 12% of GDP.

The structure of domestic debt also differs. In Benin, government bonds account for 91% of the domestic debt, in Senegal it is 67% and in Zimbabwe it is 30%. Government bonds and eurobonds account for a significant portion of Egypt's domestic debt. In Rwanda, they make up 50% of the total, in Mauritania 68%, and in Nigeria 79%. In Mali, they account for an even larger percentage – 92%.

The detailed structure of the holders of domestic debt is rarely disclosed. For example, in Kenya, 43% of the debt is owed to commercial banks, 33% - to pension funds, while 7% to insurance companies, and 4% is held by the Central Bank[28]. The main buyers of Tanzanian government bonds are pension funds, commercial banks and the Bank of Tanzania. Together, these three financial institutions account for almost 80% of the total volume of loans on the financial market. Approximately 29% of this volume is accounted for by commercial banks and pension funds, with the Bank of Tanzania accounting for 22%[29].

Domestic debt has several advantages, especially for African countries. First of all, most of the domestic debt in Africa is denominated in local currencies, which means that it is shielded from exchange rate fluctuations and currency mismatches. In addition, issuing debt in domestic currency gives central banks and governments the flexibility to use monetary policy tools for domestic debt management. For decades, businesses and households have preferred to invest money abroad, and capital flight remains a critical issue for most African economies, co-existing with extensive external borrowing. Investing in domestic debt is a good alternative, especially if intermediated by strong local banks.

Domestic debt defaults are less common than external debt defaults

The reason is that authorities have more options for dealing with domestic debt, such as inflating it away, rather than resorting to outright default. In the event of a debt default, domestic debt is usually easier to restructure, as it is subject to domestic court jurisdiction. A case study conducted by the IMF on debt restructurings between 1988 and 2020 concluded that domestic debt restructuring took considerably less time to complete compared to external debt restructuring, largely due to a greater sovereign control of the terms and laws governing domestic debt[30]. Moreover, by restructuring domestic debt, countries can avoid the potential reputational costs associated with external debt restructurings and, in some cases, maintain access to international financing.

Well-developed domestic public debt markets offer local investors opportunities to invest in government securities, providing a two-fold advantage. First and foremost, domestic investors have the opportunity to participate in the economy and receive a reasonable return on their investments, given the relatively low risk associated with government securities.

28 REPUBLIC OF KENYA THE NATIONAL TREASURY AND PLANNING. Annual Public Debt Management Report For Financial Year 2022/2023. URL: https://www.treasury.go.ke/wp-content/uploads/2024/01/Annual-Public-Debt-Report-2022-2023-Sept-2023.pdf

29 World Bank. 20th Tanzania Economic Update. URL: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099031124044543127/p1796101f356d10fa1b47215b969e1205b2

30 UN. World Economic Situation and Prospects: April 2024 Briefing, No. 180. URL: https://www.un.org/development/desa/dpad/publication/world-economic-situation-and-prospects-april-2024-briefing-no-180/

Levels of development in local capital markets differ[31] – from more than 100% of GDP in Egypt, Morocco, Mauritius and South Africa to below 40% in Cameroon, DR Congo, Ethiopia, Madagascar and Uganda[32]: in the more developed economies, governments have more opportunities to raise funds domestically.

Secondly, by attracting financing from the domestic market, governments provide residents an alternative for capital outflows. Some countries combine borrowings with the measures to reduce capital outflow exposure. For example, Zambia, which has a relatively higher level of non-residents participating in the domestic debt market (above 20%), has enacted measures to limit non-residents' participation in the government bonds primary market to 5%.

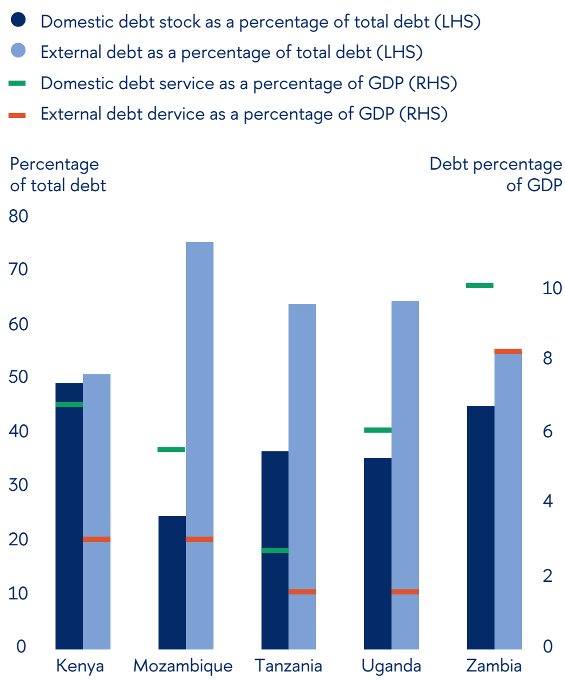
Nevertheless, domestic debt can have several long-term implications that can negatively impact the economy of a country. One of the main disadvantages of domestic debt is that it can lead to significant crowding out effects for the domestic private sector. This is because when the government is a major borrower, the credit available to the private sector from banking and non-banking financial institutions can decrease.

Another challenge is the maturity structure of domestic debt instruments, as many governments are unable to issue long-term instruments at reasonable interest rates. In 2022, in Zambia and Kenya short- and medium-term securities comprised 78.5% and 78% of the domestic debt portfolio respectively. The proportion was even higher in Ghana, where short- and medium-term securities accounted for approximately 90%. This short-term debt structure increases the risk of rollover, where governments continuously borrow to pay off maturing debts.

In leading economies like Egypt, Ethiopia, and Nigeria the financial sector is partly publicly owned. Consequently, the authorities may attempt to maintain the debt at a manageable level through various financial measures. However, the side effects can include crowding out lending to the private sector with long-term detrimental effects on economic performance and competitiveness.

In some countries, the high burdens of domestic debt service place a heavy strain on government finances, leading to further reductions in spending that could be allocated to investments in crucial sectors. For example, in **Kenya**, **Mozambique**, **Tanzania**, **Uganda** or **Zambia** domestic debt service cost was higher than external debt service, despite domestic debt stock being lower than external debt stock. In 2023, the cost of servicing domestic debt in Uganda was 2.8% of GDP, while external debt was only 0.9%.

Debt service payments in selected economies in Africa, 2022



Source: prepared by the HSE Center for African Studies and Intexpertise based on IMF and UN DESA data.

31 The size of the financial system can be determined by various indicators, such as the total assets of the banking sector, market capitalisation of banks, credit facilities, insurance, and investments. Other indicators include the financial transactions of capital markets, the ratio of private credit to GDP, and the percentage of adults who have formal bank accounts. Additionally, the stability of financial institutions is also a factor in determining the size of the system.

32 S&P Global. African Domestic Debt: Reassessing Vulnerabilities Amid Higher-For-Longer Interest Rates. URL: https://www.spglobal.com/research/articles/231101-african-domestic-debt-reassessing-vulnerabilities-amid-higher-for-longer-interest-rates-12900489

Ghana's debt default (external and domestic) and the subsequent restructuring has put the spotlight on domestic debt in Africa. Domestic debt grew from 22% of GDP in 2015 to approximately 40% of GDP in 2021 mainly because of government borrowing to finance the energy sector and to bail out the finance sector following the 2018–2019 financial crisis.

At the time of default in December 2022, domestic debt stood at 46% of GDP. Some of the factors contributing to the default included an inflated import bill due to effects of the Ukrainian crisis, drastic depreciation of the Ghanian cedi and increased cost of debt service. At the same time, external shocks triggered significant capital outflows, which diminished access to international financial markets. Moreover, foreign exchange reserves dwindled to 2.7 months of import cover at end-December 2022, down from 4.3 months at end-December 2021.

In December 2022, the Ghanian government initiated a domestic debt exchange programme, aimed at restoring sound public finance management and debt sustainability. Domestic bondholders were offered an option to exchange their holdings with a fresh issuance of bonds with longer average maturities and lower coupon rates. New bonds were issued at a coupon rate between 0% and 10%. Before the exchange, interest rates for two-six years notes ranged between 21.5% and 29.85%. Although the programme managed to lower interest rates on government securities and lengthen their maturities, analysis by the country's financial sector regulators showed that it adversely affected the solvency of some banks and insurance companies. The government formed the Ghana Financial Stability Fund to minimise impacts of the restructuring process to the financial sector and to avoid risks of a potential financial crisis. The restructuring also took a relatively short time, with the domestic debt exchange programme concluded in 2023. Inflation declined from 54% in December 2022 to 23% in February 2024. The economy also grew at an average of 3% in 2023.

Since 2020, two African countries (Ghana and Mozambique) have defaulted on domestic obligations, while five (Angola, Ethiopia, Kenya, Uganda, and Nigeria) have engaged in non-commercial debt exchanges.

Africa's trade: a terrible scarcity or a huge opportunity

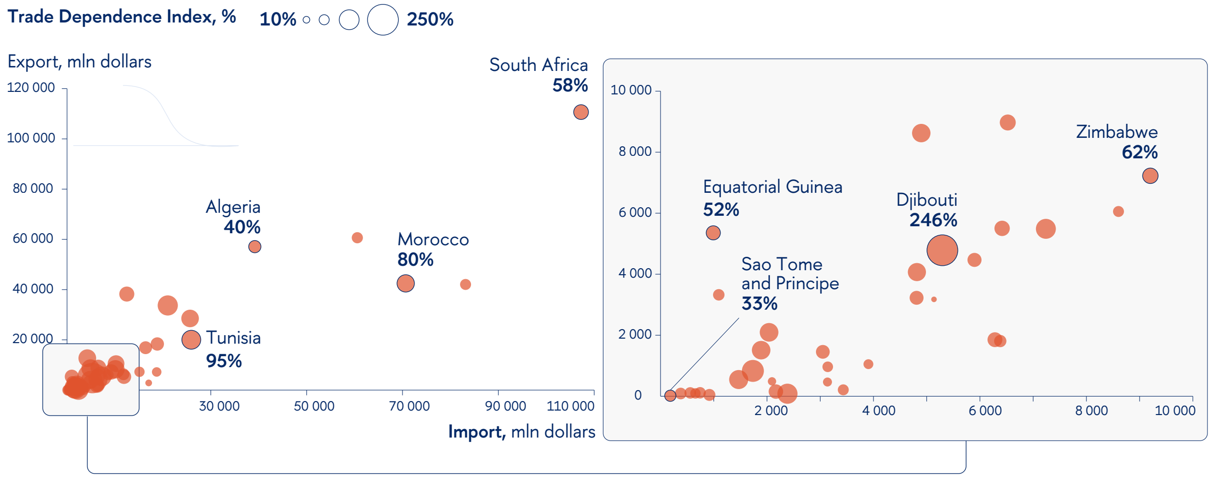
Africa relies heavily on international trade, and this reliance has increased over the past decades. Trade serves as a source of foreign exchange, which is needed to import the capital goods required by local producers. Additionally, it has the potential to enhance productivity and to contribute to job creation and economic growth. In 2000, Africa's total trade was around USD 500 billion. By 2023, it had grown to over USD 1.3 trillion.

The trade dependence index[33] has increased significantly in all regions of the world, including Africa, over the past three decades. The trade dependence index demonstrates the importance of trade for a particular country and also characterises the degree of openness of the economy, which involves both, risks and opportunities. Africa's average trade ratio has increased from 45% in 1991-2000 to 59% between 2020 and 2023. However, there is a wide variation in index ratios among economies, ranging from 8% in **Sudan** to **Djibouti** and **Lesotho** with their ratios of 264% and 125%, respectively, in 2023.

For 25 countries the trade dependence index is still below 50% level, for 22 it ranges from 50% to 100%. In Djibouti, Lesotho, Libya, The Gambia and Namibia the index exceeded 100% in 2023. While Djibouti, Lesotho and the Gambia are re-exporting extensively to the neighbouring countries, Namibia and

33 Calculated by the authors on the basis of World Bank and ITC Trade Map data using the formula: $\frac{\sum_s X_{ds}+\sum_s M_{sd}}{GDP_d}\times 100$, where *d* – country under study, *s* – is the set of all other countries, *X* – total bilateral exports of country *d*, *M* –total bilateral imports of country *d*, *GDP* – gross domestic product of country *d*.

Trade dependence index for African countries, 2023



Source: prepared by the HSE Center for African Studies and Intexpertise based on ITC Trade Map data.

Libya are both the exporters of natural resources with relatively small populations.

However, the increased role of international trade in African economies was accompanied by growing **trade deficits** in many countries on the continent.

The increasing trade deficits pose challenges for job creation and poverty reduction efforts especially when the deficits are caused by rising imports of consumer goods that can be produced by domestic industries. The trade deficit often co-exists with the current account deficit, which in turn may increase debt burden. Growing current account deficits often presage disruptive economic trends such as sudden stops in capital flows, severe decreases in credit and spending and sharp economic slowdowns, which generate high unemployment and poverty.

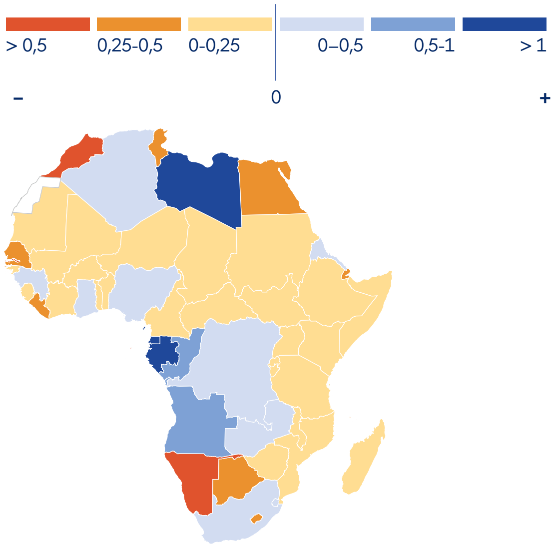
A trade deficit is sustainable as long as there are sufficient funds to finance it. In last decades African countries had probably better access to international finance than ever. However, with growing interest rates and slowing growth, the continent faces risks of much more complicated access to finance which will make financing of the deficits increasingly challenging.

In 2023, the overall external trade deficit of Africa amounted to USD 84.8 billion. Although some countries experience a high surplus in their trade balance, the large deficit recorded by most negates these surpluses, resulting in a deficit trade balance for the continent. In 2023, the sum of the trade deficits was USD 169.5 billion.

Only 15 out of 54 countries on the continent recorded a trade surplus, their total was 84.9 billion. The top five countries with the largest trade surpluses in 2023 were **Angola** (USD 25.8 billion), **Algeria** (USD 17.9 billion), **Libya** (USD 12.7 billion), Gabon (USD 8.5 billion) and **Equatorial Guinea** (USD 4.4 billion). All these countries are oil and natural gas exporters.

On the other hand, the five largest countries in terms of trade deficit were **Egypt**, **Morocco**, **Ethiopia**, **Kenya** and **Tanzania**. Collectively, these five countries recorded the total trade deficit of USD 102.8 billion. Among the deficit countries, there has been a deterioration in the trade deficits over the time. Between 2013 and 2023, the trade deficit in Morocco increased by 26%, in **Ethiopia** by 21%, in **Senegal** by 75% in **Uganda** by 44% and in **Niger** by 124%.

Africa's trade balance per capita, 2023



Source: prepared by the HSE Center for African Studies and Intexpertise based on ITC Trade Map data.

In per capita terms, three countries had significant surpluses: **Gabon** (USD 3,469 per person), **Equatorial Guinea** (USD 3,469 per person) and **Libya** (USD 3,469 per person). In 2023, **Nigeria**'s per capita trade surplus was USD 0.3. The island countries had the highest trade deficit per capita, with Seychelles, Mauritius and Cabo Verde topping the list.

Exports and imports of most countries are highly volatile as they depend on commodities. So, the **accumulated trade balances** of the individual countries would provide a clearer picture of their role in international trade.

Africa's cumulative trade deficit over the period from 2014 to 2023 amounts to USD 839 billion

Over this ten-year period, **Angola** has been a significant leader with a trade surplus of USD 234.3 billion. By a wide margin, **Libya** (USD 83 billion), **Nigeria** (USD 81 billion), **South Africa** (USD 62 billion), **Equatorial Guinea** (USD 50 billion), **Djibouti** (USD 48 billion), and **Gabon** (USD 46 billion) were the next on the list of African countries with a trade surplus. Most of the countries that have a trade surplus are resource-rich (Angola, Libya, Equatorial Guinea, Gabon, Nigeria, etc.) or serve as the logistics hubs for neighbouring countries (Djibouti, Ghana). In total, only **16 countries** on the continent were identified with a long-term positive trade balance.

However, the number of countries with persistent trade deficits is considerably higher. **Egypt** accounts for almost half of Africa's total trade imbalance, which amounts to USD 455 billion. **Morocco** (USD 217 billion), **Ethiopia** (USD 127 billion), **Kenya** (USD 112 billion), **Tunisia** (USD 64 billion), **Tanzania** (USD 55 billion), **Sudan** (USD 44 billion), **Senegal** (USD 42 billion) and **Uganda** (USD 41 billion) have also become leaders in the cumulative trade deficit.

A number of African countries have recorded relatively low trade deficits, up to USD 5 billion: **Guinea-Bissau** (USD 0.8 billion), **Democratic Republic of the Congo** (USD 1.1 billion), **Sao Tome and Principe** (USD 1.5 billion), **Comoros** (USD 2.3 billion), **Central African Republic** (USD 4 billion) and Botswana (USD 4.7 billion). But if 1.1 billion in 10 years seems to be close to nothing for DRC, 1.5 billion for São Tomé is huge.

The most balanced trade[34] over a ten-year period is recorded for **Nigeria** (0.08), **Côte d'Ivoire** (0.05), **Zambia**, **South Africa**, **Eswatini** and **Ghana** (with 0.3 for each country), as well as **Algeria** (-0.02), **Botswana** (-0.03), and **DRC** (-0.04). Guinea, Angola, and Chad have a tendency towards a large surplus in their accumulated trade balance. In contrast, Gambia, Cabo Verde, Sao Tome and Principe, Liberia, Somalia and the Comoros tend toward a deficit in their trade balances.

Persistent and increasing trade deficits are explained differently from country to country. Chronic trade deficits can be evidence that domestic producers cannot compete with imports and/or their competitors in the global markets.

34 The index is compiled by the authors. It is calculated according to the formula: export+import/ (export-import) for a 10-year period.

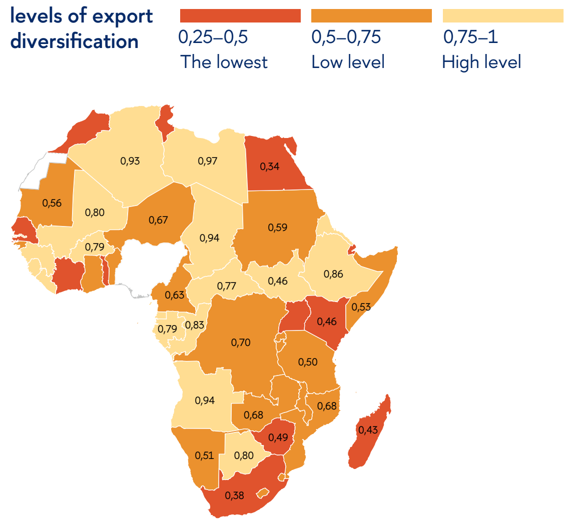
Trade deficit in some cases results from a country investing in physical capital (through imports of intermediate goods) and productive capacity, which has the potential of boosting employment and reducing poverty, provided the investments are effective and allocated to job-creating activities[35]. The top ten importers of capital goods in Africa in 2023 were: South Africa, Egypt, Morocco, Nigeria, Algeria, the DRC, Angola, Tunisia, Ethiopia and Tanzania. Of these countries, one half experienced a trade deficit in 2023.

Although Africa's share of manufacturing value added to GDP is expanding, Africa's market share in manufacturing exports lags far behind the global average, accounting for roughly 1.3% of world exports. This gap in exports is largely responsible for the widening trade deficit. While the end of the commodity super cycle in 2014-2016 highlighted the cost of external imbalances, the lockdowns triggered by Covid-19 underscored the risk of depending excessively on imports for manufactured products. The above mentioned sectoral Hirschmann index fits well to measure the level of diversity in African exports.

In 2023, a group of 13 countries on the continent recorded a relatively **high** level of export diversification. This includes both major players in trade, such as Egypt (0.34), Morocco and South Africa (0.38 each), Tunisia (0.39) and Senegal (0.41), as well as transit hubs like Djibouti (0.36), Mauritius and Togo (0.43 each) alongside Uganda, Kenya (0.46 each) and Zimbabwe (0.49) having shown impressive performance in implementing their export diversification strategies.

In 2023, a total of 21 African countries recorded a low level of export diversification. The index in this group ranged from 0.50 in Tanzania, 0.55 in Ghana and Rwanda, and to 0.7 in the DRC to 0.73 in Guinea-Bissau. In 2023, 19 countries recorded the lowest levels of export diversification. This group included countries such as Central African Republic (0.77), Burkina Faso (0.79), Botswana and Mali (0.8 each), Republic of Congo (0.83),

Sectoral Hirschmann index of African countries, 2023



Source: prepared by the HSE University Center for African Studies and Intexpertise based on ITC Trade Map data.

Ethiopia (0.86), Algeria (0.93), Angola (0.94), Libya and Eritrea (0.97 each).

The exports of these countries mainly consist of minerals such as oil, gas and gold, as well as agricultural crops like coffee. Among primary commodities, exports are concentrated in products with relatively low levels of value-added or processing, which further limits the low potential for employment typical of commodity outputs. Consequently, the fluctuations in global commodity prices can severely impact their trade balance.

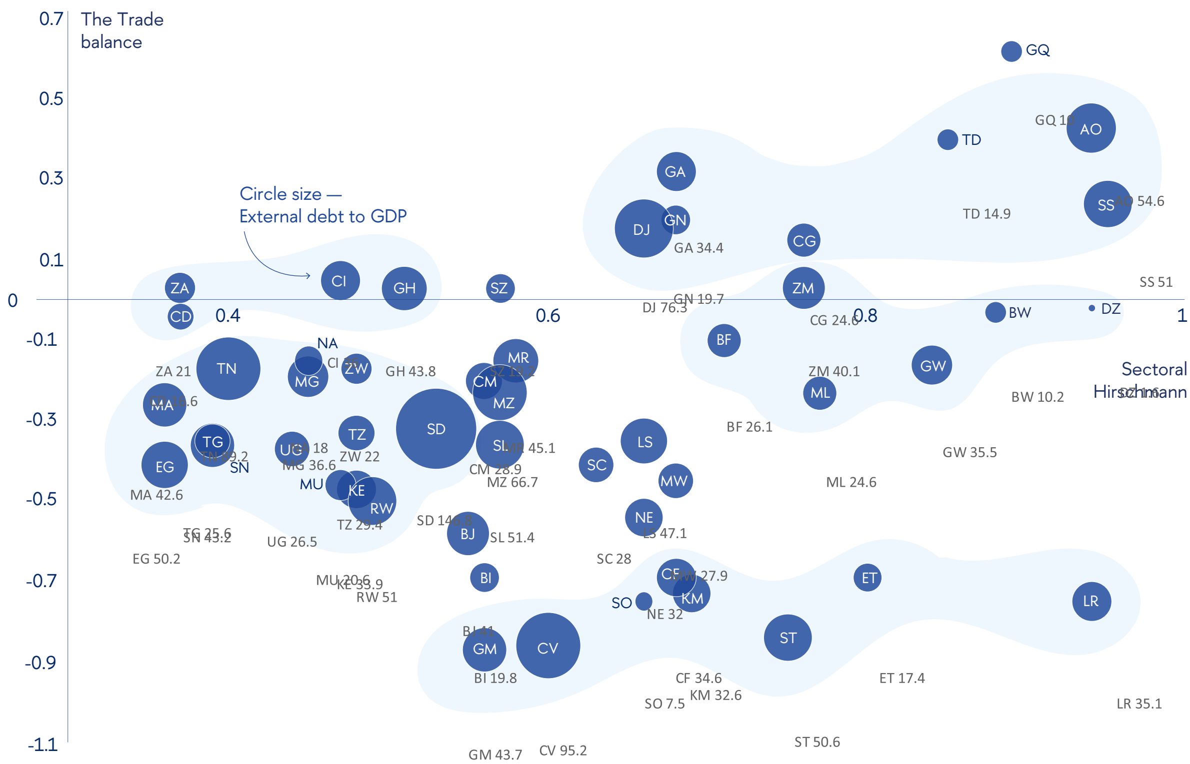
If we take the average value of the sectoral Hirschmann index over ten years and the trade balance index, we will get the following picture.

Firstly, a group of oil and gas exporting countries with a low level of export concentration and a high trade surplus can be clearly distinguished. A relative trade surplus above 1.05 (Côte d'Ivoire level) can only be found in countries with an export concentration of 0.7 or higher. The high level of export

35 UNCTAD. Trade and Current Account Balance in Sub-Saharan Africa: Stylised Facts and Implications for Poverty. URL: https://unctad.org/system/files/official-document/webaldc2016d2_en.pdf

Trade balance index and sectoral Hirschmann index of African countries

The trade balance index and the sectoral Hirschmann index value over a ten-year period from 2014 to 2023 are used. The index ranges from 0 to 1, with higher values indicating that exports are more concentrated in fewer sectors.



Source: prepared by the HSE Center for African Studies and Intexpertise based on ITC Trade Map data.

concentration also leads to a significant capital outflow, as there are less export-oriented promising industries to invest in. This group includes, inter alia, Angola, Libya and Equatorial Guinea.

The second group includes Ghana, South Africa, DRC and Côte d'Ivoire. These are exporting countries with relatively well-developed industries and a high degree of diversification, as well as a trade surplus. However, Ghana was in default due to economic policy distortions and government waste.

The third group includes small economies, such as Liberia, Central African Republic, the Comoros and Somalia. These countries are vulnerable due to high trade deficits and lack of export diversification. As a result, they are at risk and need to either reduce their trade deficits or diversify their exports in order to ensure their economic stability.

The fourth group also includes countries that are almost exclusively dependent on exports of raw materials. Botswana, Algeria, Mali and Burkina Faso spend a significant amount of money on imports. Therefore, their governments may need to carefully monitor their imports, as they should focus on investments aimed at import substitution or the development of new export industries.

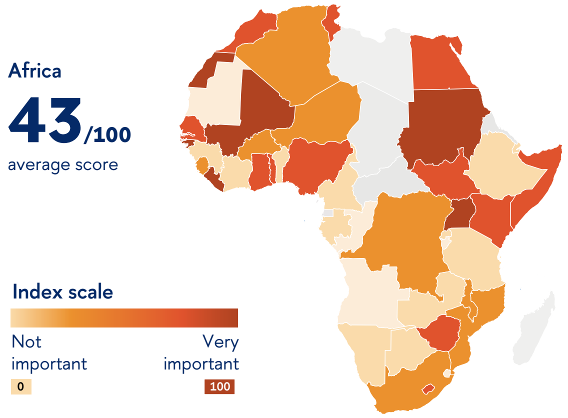
The larger economies like Egypt, Kenya, Tanzania and Morocco have relatively diverse exports and experience a relative trade deficit.

It is also worth considering how African countries cover their trade deficits.

Unilateral transfers (both current and capital) have been the main source of external finance in Africa for decades. Their weight increased during the 2000s from 2.6% of GDP in the 1990s to 4.4% in 2013 – driven by the strong rise of workers' remittances and capital transfers that more than compensated for the decline in current transfers in the form of aid, donations and official assistance.

In 2022, remittances accounted for an average of 7.6% of GDP in Western Africa, 6.8% in Eastern Africa, 4.4% in Northern Africa, 3.7% in Southern Africa and 1.4% in Central Africa[36]. In 2022, the World Bank remittance inflow data reported that **Egypt** is the largest recipient market (USD 32 billion), followed by **Nigeria** (USD 21 billion) and **Morocco** (USD 11 billion). These three markets account for 65% of all remittances to African countries. Most in the top 12 in terms of remittances in 2022 have chronic trade deficits, with the exception of Nigeria and Ghana.

The importance of remittances index



Source: prepared by the HSE Center for African Studies and Intexpertise based on World Bank data.

In 2023, the total amount of remittances sent by migrants to and within Africa was almost USD 95 billion[37]

The high reliance of most African countries on unilateral transfers reflects their increasing dependence on external sources. It is clear that for some countries remittances are vitally important to their economies. This particularly applies to **Gambia** (27% of GDP in 2022), **Somalia** (23%), **Comoros** (22%), Lesotho (20%), **Cabo Verde** (16%) and **Guinea-Bissau** (11%). Although these transfers represent a substantial source of external finance that can be an important tool for poverty alleviation, they also entail significant costs. The strong reliance on income generated from external sources increases the economic vulnerability of recipient countries and exposes them to the economic cycle of the source countries.

Beside unilateral transfers, **Foreign Direct Investment** (FDI) is also one of the main sources of external finance for Sub-Saharan Africa. FDI is often seen as the preferred and safer alternative source of private foreign capital for developing countries because of its 'non-debt' character. In addition, as FDI inflows do not involve the direct payment of principal and interest charges, they are a preferred method of financing deficits, especially in developing countries, where these deficits can be large and sustained[38].

Since 2000, FDI flows replaced "other investments" (mainly foreign loans) as the main source of external finance other than unilateral transfers. Net FDI flows more than doubled their share to GDP from 0.9% in the 1990s to 2% in 2013, while net flows of foreign loans registered a drastic fall, reaching high negative values as a consequence of the debt relief initiatives.

In 2021, there was an all-time high inflow of FDI into Africa, reaching USD 82 billion, but this decreased to USD 53 billion by 2023[39]

36 RemitSCOPE. Africa. URL: https://gfrid.org/wp-content/uploads/2023/06/RemitSCOPE_Africa_preliminary_release.pdf

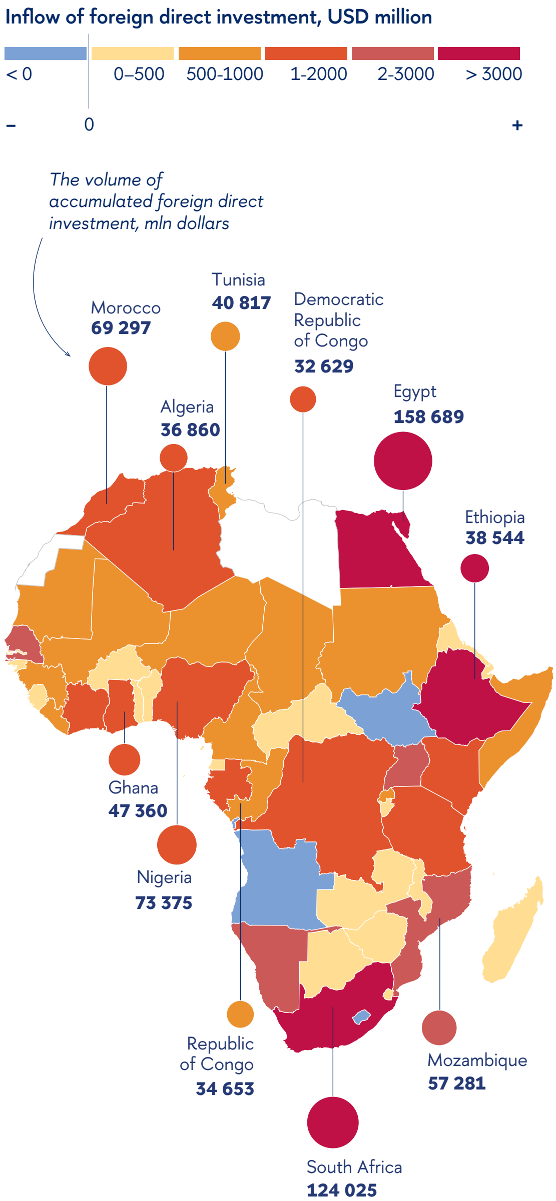
37 IFAD. Improving the management of remittances and their use for development impact in Africa. URL: https://www.ifad.org/en/prime-africa#:~:text=Remittances%20sent%20by%20migrant%20workers,quarter%20is%20invested%20or%20saved

38 Demekas et. al., 2005, p. 209.

39 UN. 2024 World investment report. URL: https://unctad.org/system/files/official-document/wir2024_en.pdf

In 2023, almost 50% of all foreign direct investment flows to Africa were directed towards Northern and Western Africa. Investments in the East accounted for 21.3% of the overall volume, with the South receiving 17.3%, and the Central receiving 11.2%.

Foreign direct investment in Africa, 2023



Source: prepared by the HSE Center for African Studies and Intexpertise based on UNCTAD data.

In 2023, the accumulated amount of foreign direct investment into Africa reached USD 1.04 trillion. The **leaders are** Egypt, South Africa, Nigeria and Morocco.

Although it is true that FDI does not involve the direct repayment of capital and interest, foreign direct investors do not invest without the expectation of profit and the eventual repatriation or relocation of the investment. Actually, the return on FDI is the highest compared to that of other external sources of financing as the rates of profit of foreign firms largely exceed the rate of interest on foreign loans or the rate of profit related to portfolio investments.

However, for many projects with foreign investment, there are also shareholder loans and transfer pricing to avoid taxes. The actual price of raw materials is underestimated, and a country's budget does not receive the taxes that should be paid. Investors earn on access to cheaper, unmarketable raw materials so formal returns on investment are no longer as important to them. In addition, investors lend to their companies at commercial rates, as debt repayment is easier than income from capital. It is difficult to assess the impact of transfer pricing and undervaluation of exports on the balance of payments in African countries, but this can reach tens of billions of dollars per year.

The diversity of Africa is in its currencies

The currency and exchange rate play an important role in assessing the economic stability of developing countries.

- The Moroccan dirham is classified as having a **pegged exchange rate** within horizontal bands, which since 2020 has been pegged to the euro and the US dollar in a ratio of 60% and 40%, respectively (basket of currencies).

- The Botswana pula is classified as having **crawling pegs** (in terms of a soft peg) with a bucket of the special drawing rights (SDR) and the South African rand.

- The **soft pegged** exchange rates of five countries (Malawi, Mozambique, Nigeria, Sudan and Tanzania) are categorised as peg stabilised arrangements.

- The **crawl-like** arrangements category includes 12 African countries (Algeria, Kenya, Mauritius, Tunisia, Rwanda, etc.).

- The **conventional peg** is the largest category, including 21 countries. Of these, 17 have currencies pegged to the **euro**: the Central African CFA franc and the West African CFA franc. Three countries are pegged to the South African **rand**, including Lesotho, Namibia and Eswatini. One country's currency, Nakfa (Eritrea), is pegged to the **US dollar**.

The **floating** exchange rate is used by seven countries: Angola, Egypt, Zambia, Madagascar, Seychelles, the Republic of South Africa and Uganda. The Somali shilling's exchange rate is **free floating**.

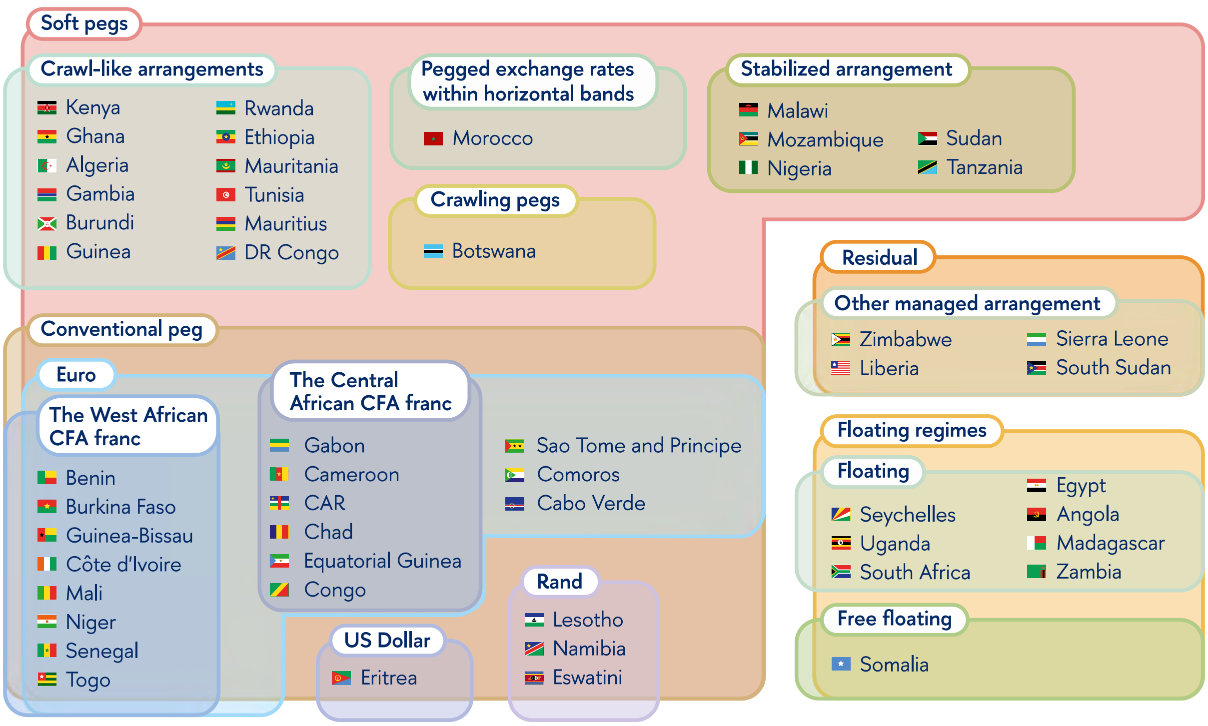
The exchange rates of four countries (South Sudan, Zimbabwe, Liberia, and Sierra Leone) are categorised as "**other managed arrangements**".

Also, based on IMF data, African countries can be classified according to the main principles of their monetary policies. There are four of them: exchange rate anchor, monetary aggregate target, inflation-targeting framework, and other.

Exchange rate anchor means that the monetary authority buys or sells foreign exchange to maintain the exchange rate at its predetermined level or within a range. The exchange rate thus serves as the nominal anchor or intermediate target of monetary policy. This type includes the WAEMU and CEMAC countries, along with Lesotho, Eswatini, Namibia and Botswana.

Monetary aggregate target is the measure when the monetary authority uses its instruments to achieve a target growth rate for a monetary aggregate, such as

Exchange rate regimes of African countries



Source: prepared by the HSE Center for African Studies and Intexpertise based on IMF data.

reserve money, M1, or M2, and the targeted aggregate becomes the nominal anchor or intermediate target of monetary policy. This monetary policy framework is implemented by 13 counties, including Nigeria, Algeria, Zimbabwe, Angola, Ethiopia, Rwanda, etc.

Inflation-targeting framework involves the public announcement of numerical targets for inflation, with an institutional commitment by the monetary authority to achieve these targets, typically over a medium-term horizon. Additional key features normally include increased communication with the public and the markets about the plans and objectives of monetary policymakers and increased accountability of the central bank for achieving its inflation objectives. This type includes Kenya, Seychelles, Ghana, Uganda and South Africa.

The **other monetary policy framework** category means that the country has no explicitly stated nominal anchor, but rather monitors various indicators in conducting monetary policy. This category is also used when no relevant information on the country is available. This group includes Malawi, Mozambique, Sudan, Tunisia, etc.

Many African countries have substantial external debt, often denominated in foreign currencies like the US dollar or the euro

This can make debt servicing more vulnerable to exchange rate fluctuations. Fluctuations in the exchange rate can significantly impact the debt servicing costs. For example, if the local currency depreciates against the currency in which the debt is denominated, the cost of servicing and repaying that debt increases in local currency terms. This can strain the country's financial resources and balance of payments. However, countries with a fixed exchange rate regime or a currency peg might face challenges if they have high levels of external debt. Maintaining the peg can be costly, especially if the country faces a balance of payments crisis or needs to defend its currency.

Since 2022, a number of African currencies have recorded significant depreciation against the US dollar. Currency depreciation leads to an increase in foreign currency-denominated external debt. For example, **Nigeria's** external debt in 2023 increased by 100.1% over a year because of the depreciation of the national currency — the exchange rate of the Nigerian naira fell by 70% against the dollar[40]. In **Kenya** for instance, as of December 2023, external debt – 67% of which was dollar denominated – increased by 1.3 billion dollars owing in part to depreciation of the Kenyan shilling. Also, approximately 98% of Ghana's external debt stock growth in 2023 was a result of the Ghanian cedi's depreciation against the dollar.

The CFA franc is pegged to the euro, which has two consequences for the respective national debt. Given that external debt and international trade are both denominated in the US dollar, a depreciation of the euro relative to the dollar leads to an automatic increase in the value of the external debt of the countries that use the franc. On the other hand, an appreciation of the euro also leads to a decrease in external debt, but this can have harmful effects, such as a loss of competitiveness and market share for products being exported from these countries. In addition, this stability attributed to the franc does not necessarily reflect the reality of the economies that use it.

Thus, we see that the pegging to the euro has apparently saved the countries in the CFA franc zone from high levels of debt (as in East Africa). However, these countries are experiencing slower economic growth.

Nowadays, an increasing number of African countries are turning to gold to hedge against global political risks and protect themselves against currency losses. Several countries are trying to increase their foreign currency reserves. For instance, **Nigeria** has launched a plan to buy gold domestically to boost its reserves. **Tanzania** has announced a plan to spend USD 400 million on six tonnes of gold. The central bank of **Uganda** has announced a programme to buy gold directly from local artisanal miners.

40 Bloomberg. Understanding Nigeria's Currency Slump, and What Happens Next. URL: https://www.bloomberg.com/news/articles/2024-07-30/why-nigeria-s-naira-currency-ngn-usd-slumped-and-why-it-matters

However, in some countries, there is a discussion about tying the national currency to gold. For example, the Vice President of **Ghana**, Mahamudu Bawumia, has said that if he is elected president in the upcoming December election, he plans to introduce a new exchange rate system that will link the Ghanaian cedi to gold.

However, for gold-backed currencies to function effectively, African countries need to have sufficient reserves in order to maintain the stability and longevity of these currencies. In addition, linking a country's currency to gold can make its economy vulnerable to fluctuations in the price of the precious metal.

Africa's digital currency

The digitalisation of financial services in Africa and their transfer to mobile platforms is a natural step towards expanding public access to financial services. This is particularly important in a region where less than half of the population over the age of 15 has a bank account.

African countries account for 66% of the global volume of money transfers through the electronic mobile payment systems. In 2022, more than 50% of new accounts worldwide were opened by users from Sub-Saharan Africa[42]. In 2023, there were 835 million

In 2024, the Reserve Bank of Zimbabwe launched ZIG – a new currency backed by gold, as it seeks to tackle high inflation and stabilise the country's long-floundering economy. The Zimbabwean dollar lost almost 100% of its value against the US dollar in 2023.

ZiG (literally Zimbabwean Gold) started trading on 8 April 2024, at an exchange rate of 13.56 ZiG to the dollar. All Zimbabwean dollar account holders had their balances converted to ZiG. The change also affected stock prices on the Zimbabwe Stock Exchange, as it rebased 56 of its listed securities. In order to comply with international standards, the Reserve Bank of Zimbabwe began the process of changing the currency code from ZWL to ZWG (also Zimbabwe Gold).

The Reserve Bank of Zimbabwe claimed that the new currency would be fully backed by USD 100 million in cash and 2,522 kilograms of gold worth USD 185 million. Meanwhile, the central bank added that it would also adopt a tight monetary policy, linking money supply growth to growth in gold and foreign exchange reserves.

On 30 April, new banknotes were released, and the Reserve Bank of Zimbabwe launched a publicity campaign to raise awareness about the new currency. In order to stimulate demand, Zimbabwe made it compulsory for companies to pay at least half of their quarterly taxes using the new currency. Certain taxes can only be paid in ZiG.

However, in practice, ZiG is still a rare occurrence, as public confidence in the new currency has not yet been fully established. Zimbabweans continue to prefer using US dollars for transactions, and most consumer goods are still priced in dollars. Although there are no major obstacles to paying for goods with the new currency or receiving change in ZiG at the Central Bank's official exchange rate. The authorities say that dollar-denominated transactions have declined to around 70% from 85% when it was introduced[41].

41 Bloomberg. All About ZiG, Zimbabwe's Latest Shot at a Stable Currency. URL: https://www.bloomberg.com/news/articles/2024-08-08/zimbabwe-s-new-zig-currency-how-does-it-work-and-can-it-last

42 GSMA. The Mobile Economy Sub-Saharan Africa. URL: https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-economy/wp-content/uploads/2023/10/20231017-GSMA-Mobile-Economy-Sub-Saharan-Africa-report.pdf

M-Pesa

One of the most successful examples of introducing e-finance technologies in Africa is the **M-Pesa**. This mobile phone-based money transfer and payment service was launched in **Kenya** in 2007 by Vodafone and Safaricom. After 14 months since the launch of the service, its user base had grown to 2.7 million. Two years later, it reached seven million, which is about 40% of the adult population. In 2014, it had grown to 19 million users.

The app provides payment services for subscribers of mobile operators in Kenya, Tanzania, Democratic Republic of Congo, Egypt, Ethiopia, Ghana, Lesotho and Mozambique[43]. More than 60 million M-Pesa customers conduct transactions worth over USD 314 billion annually. Outside of Africa, M-Pesa has also been used in countries such as Afghanistan (until 2022) and Romania. In Afghanistan, the service has been used to pay the salaries of police officers and social workers.

In Kenya, the percentage of the population with access to financial services increased to 83% in 2019, while the percentage of people completely excluded from these services decreased from 41% to 11%[44]. Out of the 26 million people in Kenya who own cell phones, 22 million use M-Pesa, which represents almost every adult Kenyan.

In 2021, Nigeria became the first African country to issue its own digital currency, **eNaira**. The exchange rate of the digital naira is linked to that of the regular naira and its circulation is controlled by the Central Bank. By 2023, the number of transactions increased by 63% and reached 22 billion naira (approximately USD 48 million) due to the currency crisis that occurred earlier this year.

However, eNaira faces several challenges that need to be addressed before it can be widely adopted in the country. Some of these challenges include the lack of necessary technological infrastructure, the need for additional training for financial institution employees who will manage the system, concerns about data privacy, the current electricity crisis and fears of potential financial crimes.

registered mobile money accounts in Sub-Saharan Africa and USD 912 billion in transactions made.

The adoption of mobile communication and wireless internet has opened up a plethora of opportunities for the development of payment services, money transfers, peer-to-peer lending and micro-insurance. Global payment giants such as Visa, Mastercard and American Express are planning to expand their presence into this niche market. African operators such as **MTN** (South Africa) are successfully competing with these global players.

However, mobile payments do have some serious drawbacks. Reliability and security issues contribute to the challenges businesses face in Africa when converting to mobile banking. While many mobile payment platforms available in East Africa rely on SMS, it remains the least secure messaging option. While mobile technology is definitely more prevalent in Africa than it once was, it can still be a challenge for people in more rural areas to gain access to a mobile phone, thus enabling them to participate in mobile payments.

43 M-PESA. URL: https://www.m-pesa.africa

44 FinAccess. 2019 Finaccess Household Survey. URL: https://www.centralbank.go.ke/uploads/financial_inclusion/2050404730_FinAccess%202019%20Household%20Survey-%20Jun.%2014%20Version.pdf

In the long term, the growth of mobile money settlements preserves the dependence of economies and budgets on foreign trade. Mobile money is deposited in the accounts of operators (mostly foreign). Transaction fees are taxed - but not the transactions themselves, which are usually treated as private transfers. As a result, **governments are still unable to develop a sustainable tax base that could form the basis of their financial sovereignty**. The ultimate beneficiaries of mobile money platforms are banks and telecom operators, both foreign, while governments remain dependent on foreign trade and credit.

Is there anything to know about Africa's foreign exchange reserves?

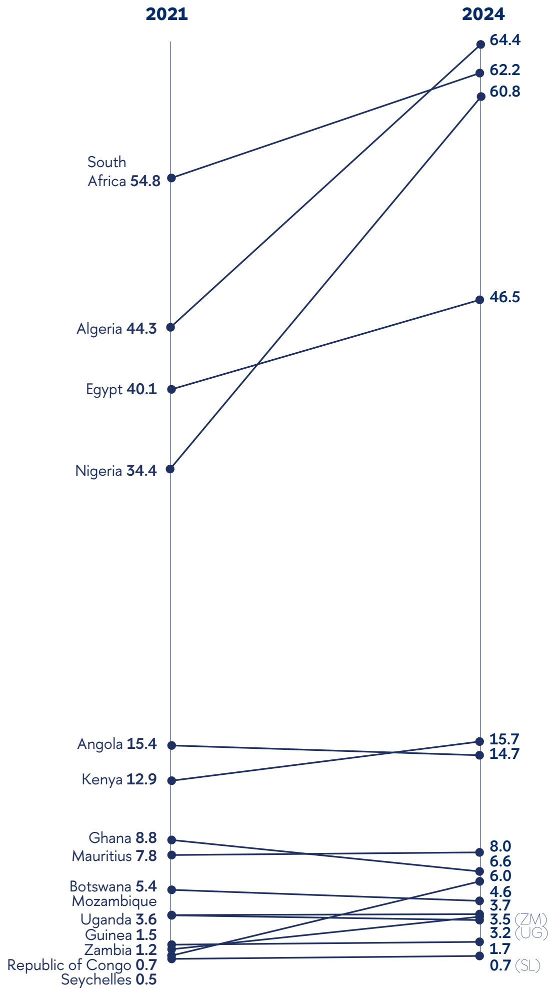
Foreign exchange reserves are an essential part of a country's policy toolkit regardless of the type of exchange rate and national currency, serving as a buffer against economic shocks and complementing monetary policy to maintain price and financial stability. In recent years, changes in foreign exchange reserves in African countries have been driven by policy responses to fluctuations in export revenues, transfers, and capital flows. For example, the decline in oil prices in 2014 led to a 33% reduction in the foreign exchange reserves of oil-exporting countries as authorities resisted pressure to devalue their currencies. Political instability is also a significant factor, especially in lower-income nations. This can lead to uncertainty and volatility in foreign exchange markets, impacting reserves.

As for 2021, **Libya** with USD 81 billion had the highest nominal foreign exchange reserves among African countries, followed by **South Africa** (USD 50 billion), **Algeria** (USD 46 billion), **Nigeria**, **Egypt**, **Morocco**, and **Angola**[45].

In a vast majority of African countries, the total amount of foreign exchange reserves has increased over the period from 2019 to 2024. In dollar terms, **Algeria**'s foreign exchange reserves have increased to USD 64.4 billion at the beginning of 2024. According to the **Central Bank of Egypt**, the country's international reserves increased to USD 41.1 billion in April 2024. The growth of reserves was also noted in the Republic of Congo, Guinea, Kenya, the Seychelles, the Republic of South Africa, and Zambia.

However, in some countries, there has been a noticeable trend of a decrease in the nominal value of foreign exchange reserves. Foreign exchange

Dynamics of foreign exchange reserves change in selected African countries



Source: prepared by the HSE Center for African Studies and Intexpertise based on Trading Economics data.

45 Statista. Foreign exchange reserves in Africa as of 2021, by country. URL: https://www.statista.com/statistics/1351876/foreign-exchange-reserves-in-africa-by-country/

reserves are now frequently being drawn down as central banks endeavour to fight currency depreciation while households withdraw reserves from the formal financial system. For example, in **Botswana**, reserves decreased from USD 5.4 billion in 2021 to USD 4.3 billion in 2024, in **Ghana** reserves decreased from USD 11 billion in 2021 to USD 6.6 billion in 2024. Countries with significant reductions in foreign exchange reserves also include **Angola**, **Nigeria** and **Uganda**.

In general, foreign exchange reserves form an integral part of a country's self-insurance, especially in low-income countries where the government often provides insurance against foreign currency shortages. These reserves provide several benefits, including a buffer to finance necessary imports or repay foreign exchange debt in case of unavailability or extreme expense of foreign exchange funding. Additionally, foreign exchange reserves allow for policy flexibility to maintain price and financial stability during large exchange rate fluctuations.

Having sufficient foreign exchange reserves to cover imports for several months is a top priority.

The largest number of reserves to cover imports for 14 months was recorded in Algeria

Comoros had reserves that could cover imports for about seven months, **Cabo Verde** for six months, **Morocco** and **South Africa** for five months. The shortest import coverage period was observed in **Zimbabwe** (0.7 months), followed by **Djibouti** (1.4 months), **Eswatini** (1.9), **Mozambique** (2.1) and **Sao Tome and Principe** (2.6 months).

The fall in the import cover ratio was widespread during 2022-2023 because of rising global food and energy prices and, as a result, rising inflationary pressures. Countries with the most significant decline during 2022 and early 2023 included Angola, Gambia, Mauritius, Mozambique, Kenya, Ghana and Nigeria[46]. However, in 2024, there was a gradual recovery in the volume of foreign exchange reserves for these countries.

While foreign exchange reserves offer crucial benefits, holding them comes at a cost for the economy. From the perspective of the consolidated public sector balance sheet, accumulating reserves amounts to issuing debt to invest in foreign currency assets. From an accounting perspective, foreign exchange reserves are typically held on the central bank's balance sheet in African countries, so these costs are borne – above all – by the central bank. The financial cost of foreign exchange reserves depends on the difference between the return earned on reserve assets and the interest paid on the corresponding liabilities.

In simpler terms, to place the amount in advance in international reserves, countries need to withdraw this amount from their national economy and transfer it to the EU and the USA for safekeeping. This accumulation of reserves has a downside, as countries may refuse to honour their loan obligations, as has happened with Libya. The Libyan Investment Authority (LIA), set up under Muammar Gaddafi in 2006 to manage the country's oil wealth, has been under a United Nations asset freeze since the 2011 riot that toppled Gaddafi. This means that in order for Africa's largest sovereign wealth fund to make new investments, or even move cash from negative interest rate accounts, the LIA needs UN Security Council sign-off. In 2020, the LIA said that the freeze had cost it some USD 4.1 billion in potential equity returns. Libyan assets are effectively confiscated and cannot be considered sovereign assets.

It is very rare for central banks in African countries to disclose information about which currencies their reserves are held in, where these reserves are located and in what share. Non-disclosure helps to prevent speculative attacks on national currencies as precariously low reserves may trigger further withdrawals.

46 S&P Global. Sub-Saharan African currencies will be more vulnerable to exchange rate pressures in 2023. URL: https://www.spglobal.com/marketintelligence/en/mi/research-analysis/-subsaharan-african-currencies-will-be-more-vulnerable-to-exch.html

African reserves are typically held in major international currencies such as the US dollar, the euro and the British pound.

Some information about reserves is available from the **South African Reserve Bank**. According to the bank's report for January 2024, the Republic of South Africa's total reserves in dollar terms amount to USD 61 billion. This includes USD 46.7 billion in foreign exchange reserves, which consist of foreign currency deposits and other assets, USD 8.2 billion in gold reserves and USD 6.2 billion dollars in holdings with special drawing rights.

Against the backdrop of a general lack of transparency regarding the foreign exchange reserves of African countries, also the **Central Bank of Egypt** stands out. The regulator publishes annual financial reports on Egypt's external position, including detailed information on foreign exchange reserves. According to the bank's report for the end of 2023, Egypt's net international reserves amount to USD 35.2 billion. This includes USD 27 billion in foreign exchange reserves, USD 8.4 billion in gold reserves and USD 36 million in holdings with special drawing rights.

Overall, Africa's foreign exchange reserves are crucial for managing economic stability and growth, but their effectiveness can be impacted by global economic conditions and internal economic policies. Some African countries may use their reserves to service foreign debt or secure additional borrowing.

The Libyan example clearly shows that it is not the size of sovereign reserves that guarantees sovereignty. Much more important is where and in what form these reserves are held. One of the most reliable forms of reserves is gold - if stored in the country itself. An expensive but **worth considering alternative is to invest in reserves of exchange-traded commodities, on the import of which the country is critically dependent**. Of course, these reserves cannot be considered as foreign exchange reserves, as their international liquidity will be limited. However, for the macroeconomic stability of many countries with foreign trade deficits, in terms of ensuring their financial sovereignty, as well as their food and energy sovereignty, the investments in such reserves should be recognised as a necessary and important measure.

African money – dynamic space for research

Thus, African debt has increased not only in absolute terms but also relative to GDP. Secondly, it remains mostly external and concentrated in ten countries, which are essentially the largest economies. External debt has become more private, which increases the cost of borrowing and may complicate future restructurings. In turn, the domestic debt market is underdeveloped, even though it is easier to pay off than external obligations. China, which had significantly decreased lending to Africa, is starting to return in the region; however, the pattern is unclear so far. The analysis of African trade reveals a prevalence of trade deficits and low export diversification for most countries, which generates additional pressure on public debt. Overall, 14 countries are already troubled with their debt levels and 15 more countries are prone to have debt problems if the global conditions worsen.

There are questions that require further investigation and research. Does Africa need its own credit rating agency, and what approach should be used to evaluate national creditworthiness of African states? What is the relation between trade imbalances, financial flows and economic growth? Is there any political backing of decisions on external debt? How do currency regimes affect debt sustainability and availability? Where are foreign exchange reserves of African countries stored and who benefits from them?

And, finally, can financial sustainability be achieved without financial sovereignty, and how can the latter be structured, measured, and achieved?

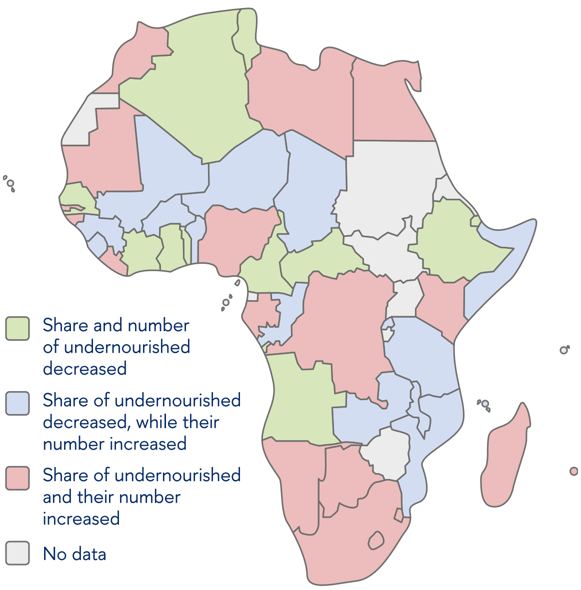
Food for Africa: from food security to food sovereignty

Is there a food crisis in Africa now?

Food issues, deficits, hunger and famines seem to come hand in hand with Africa along the way. However, many international organisations tend to showcase that the food situation in Africa is now getting even worse. At first glance, such claims seem correct – according to FAO classification in 2023[47], the number of undernourished people in Africa has increased by more than 100 million (to 298 million) compared to 2005. The number of undernourished over the world has decreased, except for in Africa where this number has increased. However, in relative terms, the number of undernourished in Africa has been hovering between 15-20% of the population for the past 20 years, and the number of 'non-undernourished' people in Africa is also increasing every year.

The number of undernourished in Africa has been hovering between 15-20% of the population for the past 20 years

Undernourishment dynamics in Africa, 2004–2024 (% of population)



Source: prepared by the HSE Center for African Studies based on UN DESA, GHI and FAO data.

Those advocating a pessimistic view on the food situation in Africa turn to big data and look at the food situation on a continental scale. However, behind the big numbers and the isolated – albeit disturbing – cases of Nigeria and DR Congo (which together accounted for almost half of the increase in the number of undernourished people in Africa), success stories do exist. For example, the number of undernourished decreased in Senegal, Cameroon, Côte d'Ivoire and Ethiopia (in both absolute and relative terms), as did the share of undernourished people in Mali, Rwanda and Tanzania. At the same time, the productivity of African agriculture is growing – in 2003, it amounted to USD 138 billion, while in 2022 reached USD 327 billion (in current USD).

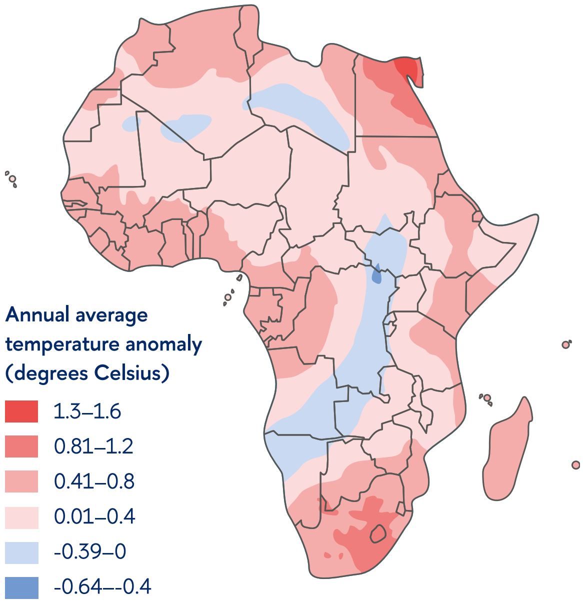
Indeed, while population growth, coupled with ineffective agricultural policies and Africa's dependence on imports of certain basic food commodities, has meant that the number of undernourished may be rising in quantity (including as a result of population growth), it is staying the same in relative terms. Moreover, the increase in the number of undernourished in Africa did not start in 2022 after the crisis in Ukraine or even in 2020 with the COVID-19 pandemic. Indeed, the last time the number of undernourished fell year-on-year in Africa was in 2009, and it has been rising ever since.

47 FAO. The State of Food Security and Nutrition in the World 2024. URL: https://openknowledge.fao.org/server/api/core/bitstreams/06e0ef30-24e0-4c37-887a-8caf5a641616/content

Not only is the number of undernourished people in Africa increasing, but so is the number of articles on food security – in both academia and the media. The topic has become 'trendy', thus impacting interpretations and increasing securitisation.

The problem of hunger is often reduced to climate change. For instance, in the SIPRI report dedicated to the issue of food insecurity in Africa, 'climate' is mentioned 93 times, while 'fertilisers' or 'reserves' are totally absent[48]. That said, the impact of climate change has not yet been fully studied and assessed, which means that its regional impacts may differ – i.e. improvements in one region and crises in another. One study, published in 2015, found that rainfall in Sahel had increased by 10% in the preceding decades and that it could be due to climate change[49]. This caused Lake Chad to fill up with rainfall – in October 2020 the first peak of 700 cm (October 2) and a second peak of 711 cm (October 15), above the recorded peaks in the last decade, were reached on the lake. The rainfall helped farming in several areas; however, there ensued an overflow of major rivers, which in turn led to flooding and significant losses and internally displaced persons in the region[50].

Temperature anomaly (2000–2020 compared with 1951–1990)



Source: prepared by the HSE Center for African Studies based on data from Cowtan, Kevin & National Center for Atmospheric Research Staff (Eds). "The Climate Data Guide: Global surface temperatures: BEST: Berkeley Earth Surface Temperatures." Retrieved from https://climatedataguide.ucar.edu/climate-data/global-surface-temperatures-best-berkeley-earth-surface-temperatures. Calculated by the Data for Children Collaborative with UNICEF.

Food situation in Africa is not deteriorating, but rather is not improving fast enough

So far, neither 'external shocks', which occur regularly in the world, nor climate change, nor even internal conflicts have been able to radically worsen the food situation in Africa. All this suggests that the food situation in Africa is not deteriorating, but rather is not improving fast enough. The extensive model of growth – through increased imports on the one hand and the area of land involved in agriculture on the other (since 2000, Africa's agricultural area has increased by 100 million hectares, almost as much as from 1964 to 2000) – will continue to maintain the 'food status quo' in Africa, unable to keep pace with population growth. New approaches are needed to the discussion of food issues in Africa.

Agricultural potential of Africa remains mainly underexploited, while agriculture in Africa is characterised by low technical capacity and mechanisation (lack of agricultural machinery) and productivity level with irrigation systems (average level of irrigation is 1.5-3% of agricultural lands per country; Morocco has 5.9%) and fertilisers are being a rare sight (average fertiliser consumption in Sub-Saharan Africa is estimated at 17 kg of nutrients per hectare of cropland compared to a world average of 135 kg/ha).

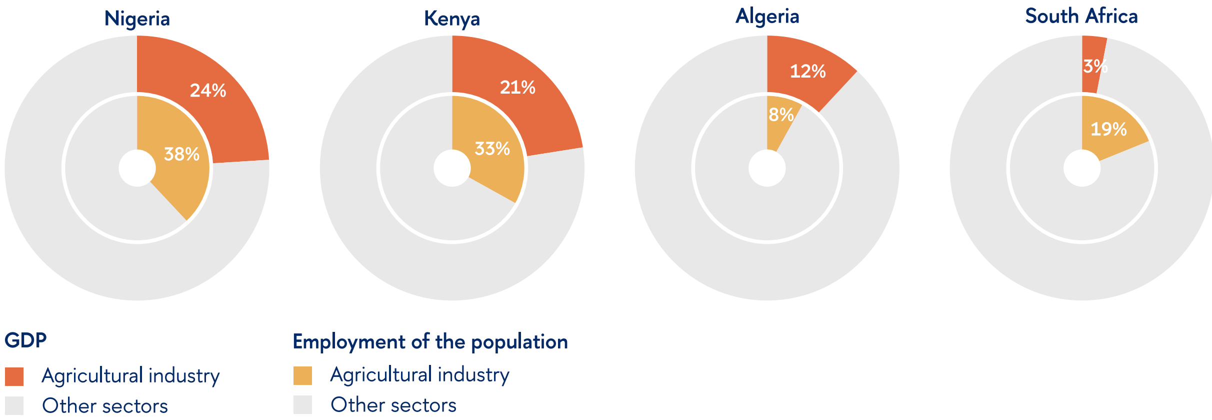
Developing nations becoming self-reliant and establishing sustainable food systems is a rare case

48 SIPRI. Food insecurity in Africa: drivers and solutions. URL: https://www.sipri.org/sites/default/files/2023-01/2301_sipri_rpp_food_insecurity_in_africa_1.pdf

49 Carbon Brief. Factcheck: Is climate change 'helping Africa'? URL: https://www.carbonbrief.org/factcheck-is-climate-change-helping-africa/

50 HumAngle. 2022 Rainy Season Has Increased The Volume Of Lake Chad – Report. URL: https://humanglemedia.com/the-2022-rainy-season-has-increased-the-volume-of-lake-chad-report/

Percentage of GDP generated by agriculture and share of working population employed in this sector, 2022



Source: prepared by the HSE Center for African Studies based on the World Bank data.

that requires a combination of factors, measures and tools. India and Russia are recent examples one could cite of countries becoming not only self-reliant, but also food exporting nations. Most African countries have a potential for similar success stories, but are yet to harness it. Indeed, food access is one of the key issues that will determine the long-term development of African nations, which influences the dynamics of outbound migration, urbanisation and FDI inflow.

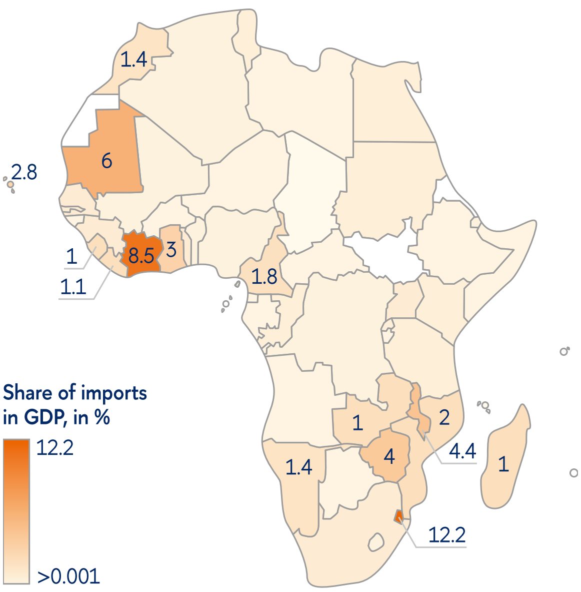
The notion of **food security** is the primary one used through the world today to discuss food related issues. In 1996, the Rome Declaration of the Food and Agriculture Organisation of the United Nations (FAO) defined food security as "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life"[51]. Since then, this perception has become mainstream. However, this interpretation reduces food security primarily to issues of access and provision, thereby stressing the importance of uninterrupted food supply. That said, purchasing from established producers is always cheaper in the short-term than investing in local production and infrastructure, "giving the fish without teaching how to catch it". Under this umbrella, global suppliers are actively involving themselves in the securitisation of food value chains, establishing surplus food stocks on their territory and purchasing agricultural land in developing countries[52].

Food sovereignty as an alternative approach may be suggested. Food sovereignty is not the alternative but is the next level of food security. The very wording highlights the role of the local, national and regional actors, focusing on local agricultural production, developing and sharpening the tools for state support and interventions (subsidies, protection measures, logistical and infrastructure projects, etc.), establishing its own strategy for developing the food system. The desired model can be network-centric, which will allow a more dynamic response to food crises – e.g. through the formation of food reserve systems on the side of importers rather than exporters. At the same time, **network-centricity** should be maintained not only at global level,

51 The Food and Agriculture Organization of the United Nations (FAO). Rome Declaration on World Food Security. URL: https://www.fao.org/4/w3613e/w3613e00.htm

52 Sviridov V., Andreeva T. Russian Fertilizers as an Element of Strengthening Africa's Food Sovereignty. URL: https://africajournal.ru/wp-content/uploads/2024/07/Sviridov-Russian-Fertilizers.pdf

Food imports dependence (share of imports in GDP), 2021



Source: prepared by the HSE Center for African Studies based on World Bank data.

but also at intra-country level - it is necessary to create conditions and infrastructure (primarily transportation) for the equal distribution of food products throughout the country to prevent the overconcentration of the food stocks within the metropolitan areas surrounded by wastelands.

However, transition to food sovereignty, which in extreme form proposes food autarky is still unachievable due not only to the globalisation of food markets, but also climate and other natural conditions that make the production of some food staples in Africa impossible. Instead, collective food sovereignty solutions may become an option corresponding with the notion of **self-reliance** developed by prominent African philosophers and leaders Kwame Nkrumah[53] and Leopold Senghor[54]. That said, no system can develop in a vacuum, and external contacts are required to enable technology and knowledge transfer, logistics solutions and critical supplies like fertilisers.

Almost all African countries today are dependent on food imports to varying degrees. In most regions, the share of food imports in the GDP structure does not exceed 1%. However, there are exceptions, such as Eswatini (with food imports amounting to 12% of GDP), Côte d'Ivoire (food imports amount to 8.5% of GDP) and Mauritania (6%), as well as a number of countries whose share of food imports in GDP is 2–4% (Cabo Verde, Malawi, Ghana, Mozambique and Zimbabwe).

Import elimination or reduction cannot be an end in itself. It should be about import restructuring – assessing the feasibility of maintaining imports of certain food categories at the previous level (e.g. wheat), replacing their part in the diet with food crops grown inside Africa; more active involvement of states in the formation of consumer habits and preferences, diet; partial localisation of the production of certain food categories. The answer to solving Africa's excessive food import dependency, while seemingly paradoxical, is to increase imports, but of higher value-added goods – not finished goods, but first semi-finished products, then fertilisers, seeds, vaccines, raw materials and industrial processing equipment.

Network-centricity implies much more active cooperation between the countries of the region than is currently the case. So far, the main contribution to food cooperation has been made by smugglers or middlemen who supply food across borders, often illegally, and by nomadic herders. There is a need for more active cooperation on food issues at the level of regional economic communities or at least a sustained dialogue between countries on major commodity categories. A shift towards regional or country-wide specialisation could be one aspect of the transition.

53 Nkrumah K. Africa must unite. Melbourne: Hassell Street Press, 2021.
54 Senghor L.S. Négritude et civilisation de l'Universel (Liberte tome 3). Paris: Seuil, 1977.

Population growth and hunger: demography matters. But not as one would think?

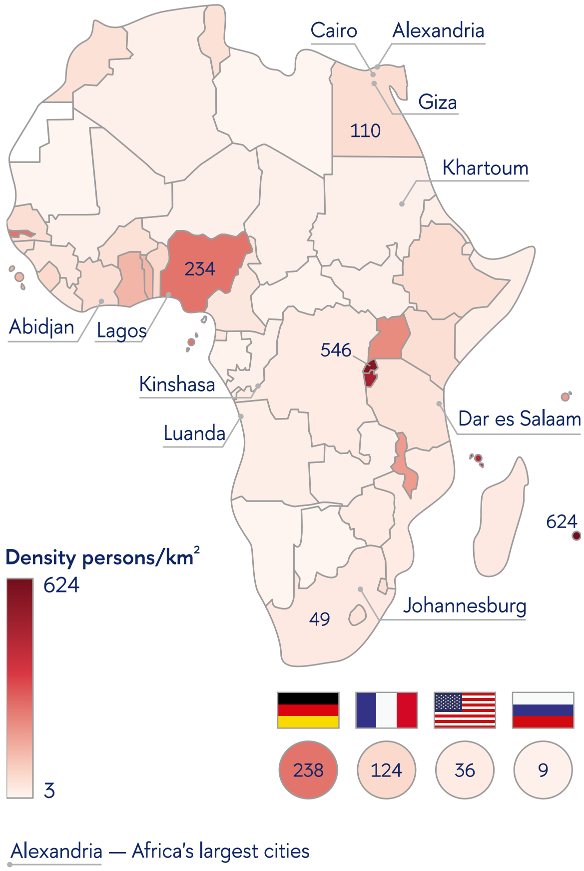
Africa's population is currently approaching 1.5 billion. By 2050, this number is expected to reach 2.5 billion, and by 2100 – 4 billion[55].

It is worth noting that Africa is still a relatively sparsely populated continent. With an area of 30 million square kilometres, the population density is about 44 people per square kilometre. By this indicator Africa is behind not only Asia (104 people per sq. km), but also Europe (73 people per sq. km.)[56]. Excluding the Sahara and Kalahari deserts, as well as a number of uninhabitable areas (about 11 million square kilometres in total), Africa will still remain in third place among the parts of the world with a population density of 66 people per square kilometre. If the population grows to 2.5-3 billion, its density in the habitable part of the continent will still be three times lower than, for example, that of India today.

Many expert papers and reports on Africa start with theses that population growth would challenge regional stability and contribute to food crises, outbound migration and political turmoil. Africa's demographic transition has been later in coming than in other regions; it is in the early stages of transition, causing the population to grow rapidly. That is perceived as a threat and has led to attempts to control the process.

In 1992, a report Beyond the Limits[57] published by the Club of Rome – one of the most influential behind-the-scenes non-profit organisations, notorious for its struggle with overpopulation – was released. It warned about the threat of overpopulation and has strongly influenced how conflicts in Africa are viewed by the world. One example given to demonstrate the danger of overpopulation in the views of the Club of Rome and numerous Western publications was the genocide that devastated Rwanda in 1994. The case of Rwanda was presented as a precursor of similar catastrophes in bigger "overpopulated" countries[58].

Population density of African countries, 2023



Source: prepared by the HSE Center for African Studies based on World Bank data.

Publications of leading international organisations systematically built in the public consciousness the connection of population growth with crises and hunger. Among the signature papers are Demographic Change in Sub-Saharan Africa (1993), Briefing Note Population and Development in Africa (prepared by the Organisation of African Unity (OAU) and the UN Economic Commission for Africa (UNECA) in

55 UNICEF. Generation 2030. Africa 2.0. URL: https://data.unicef.org/resources/generation-2030-africa-2-0/
56 World Bank. Population density (people per sq. km of land area). URL: https://data.worldbank.org/indicator/EN.POP.DNST
57 Meadows D., and Randers J. Beyond the limits: confronting global collapse, envisioning a sustainable future. Vermont: Chelsea Green Publishing, 1992.
58 Prunier G. The Rwanda Crisis: History of a Genocide (2nd ed.). Kampala: Fountain Publishers Limited, 1999.

Thirty years have passed since the Rwanda genocide. Following a significant population decrease – from seven million people in the late 1980s to five million by the end of 1994 – by now, the population of Rwanda has surged to 14 million. Rwanda remains the most densely populated in continental Africa and is also one of the leaders in terms of economic growth. In terms of population density in Africa, Rwanda is surpassed only by Mauritius – which could well be the most prosperous country on the African continent. In Rwanda itself, economic growth is evident. In the past 30 years, crop production has increased more than sixfold, both due to increased agricultural productivity and fertilisers intake growth, as well as because of new land included in agricultural turnover. Development of agriculture was combined with other infrastructure investments: the length of paved roads has doubled to 1,200 km and the capacity of power plants has increased sevenfold to 230 MW. The growth of the Rwandan economy is not just a result of the balanced development of infrastructure but is also due to the consistent development of the tertiary sector of the economy.

1994), Harnessing the Demographic Dividend for Africa's Socio-Economic Development (prepared by AU in 2012), Synthesis Report on the Demographic Dividend in Africa (by African Institute for Development Policy and UNFPA, 2015), UNECA's Demographic Profile of African countries (2016) and more. The ideas developed in these works create a negative image of population growth, while suffering from ambiguities and lacunas, ignoring possible positive population growth impacts on the food situation.

However, the bread riots and general destabilisation of Africa engendered by population growth has never happened and the prospects of such are quite low. In contrast to the pessimistic view of the correlation between population growth and access to food, an alternative positive vision can be considered.

Population growth makes agriculture more profitable: the number of consumers increases, as does the number of workers. In this way, both consumption and production growth can and should be combined with investments in fertilisers, irrigation systems and resource allocation, leading to multiplicative effects. Rising urbanisation together with the population leads to a gradual change in consumer habits, the emergence of supermarkets, the development of the bulk purchasing segment and, consequently, the consolidation of farms (it is easier for large chains to work with a limited number of suppliers with similar standards) and, finally, an increase in their technical equipment and productivity.

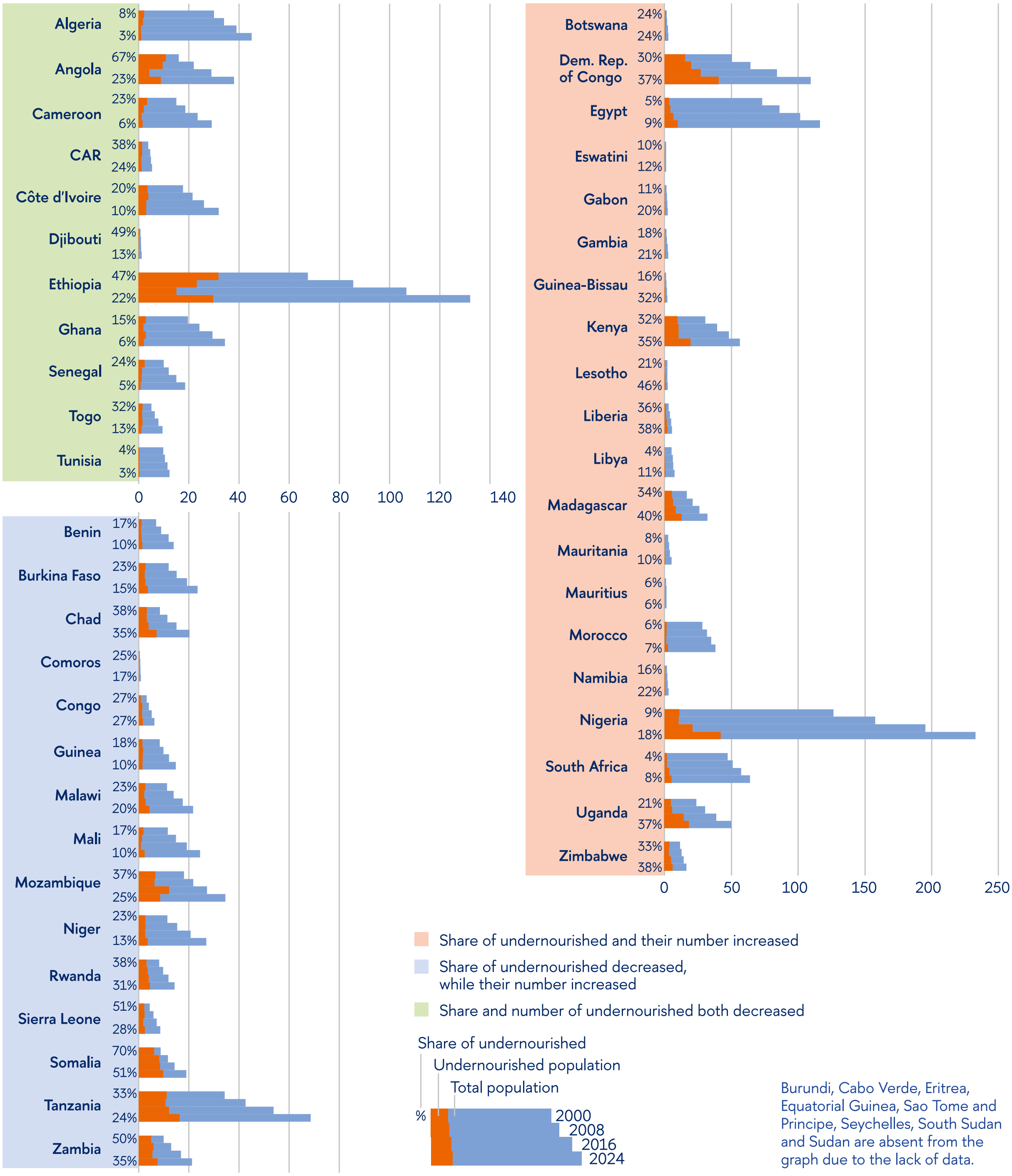
The larger a population is, the easier it is to feed

Therefore, it is worth considering a positive option: the larger a population is, the easier it is to feed. A growing population would lead to a more evenly distributed population, bridging the gaps (i.e. unpopulated areas) between 'food hubs', increasing not only the size of the workforce and arable land, but also development of infrastructure[59]. Low population density results in low-quality infrastructure (including roads), and food is not brought into remote areas due to insufficient demand and high transportation costs.

To initiate the discussion about the positive impact of population growth on food availability, the correlation between undernourishment rates and population growth was studied.

59 World Bank Blogs. Can rapid population growth be good for economic development? URL: https://blogs.worldbank.org/en/africacan/can-rapid-population-growth-be-good-for-economic-development?page=1

Population growth and undernourishment in Africa, 2004–2024



Source: prepared by the HSE Center for African Studies based on UN DESA and Global Hunger Index data.

For the study, the sample was taken both from countries suffering from acute food crises and countries with a stable economic and political situation. This sample made it possible to assess the magnitude of the trend and the hidden factors affecting the correlation. Overall, the statistics show that **demographic growth may work in favour of food systems**, but food access still remains extremely sensitive to changes in the political and economic environment.

In the long term from 2004 to 2024, with population growth in many African countries, **undernourishment among the population is decreasing**. Even in those countries where the share of undernourished is rising, the rate of increase, with a few exceptions, does not appear to be catastrophic. However, the correlation of population growth with hunger reduction is still very sensitive to changes in the political and economic environment. In some countries this has occurred as a result of civil wars or unrest that have led to disruptions in the food system, primarily in terms of food delivery, while in others the situation has worsened as a result of overdependence on external supplies of basic food commodities. However, such spikes are often short-term and levelled off in the long run.

Strategy of eliminating hunger through the birth rate control is not an option

Thus, the expected growth of Africa's population to 3 billion people in the coming decades is likely to contribute to food deficit reduction through market growth, infrastructure development and agricultural production[60]. However, population growth is both the challenge and the opportunity. What does seem obvious is that a strategy of eliminating hunger through the birth rate control is not an option. Instead, it is worth producing working strategies of development based on the realistic and positive assumptions of population growth. It is also necessary that the per capita food availability not fall with population growth. The basic conditions for these demands increase in domestic production and redistribute food, hence intensifying agriculture by supplying fertilisers and improving infrastructure for supplies to remote areas. There seems to be no other actors but the governments to produce these workable strategies and implement them.

If destructive factors prevail (such as lack of infrastructure investments and fertilisers, dependence on import, etc.), a demographic surge may have the opposite effect (rising unemployment, excessive urbanisation, environmental problems). That is why the food crises in Africa need to be addressed in a comprehensive manner, given that the demographic factor is ambivalent. Technically it is almost impossible to eliminate the other factors and calculate correlation between demographic growth and undernourishment. Nevertheless, it is worth further research, based on the particular case studies as it is clearly seen that population growth generally does not lead to food situation deterioration.

If destructive factors prevail, a demographic surge may have the opposite effect

What does matter is the population and supply balance between cities and food producing agricultural areas. Cities are growing faster than the population itself. Malnutrition drives people to the cities, there food distribution works better to prove the concept 'the more people the more food available', but the fertility rate is higher in the rural areas leading to food crises there.

60 RT. Maslov A. The myth of overpopulation: More people in Africa are the solution, not the problem. URL: https://www.rt.com/africa/591953-africa-population-growth-west-worried/

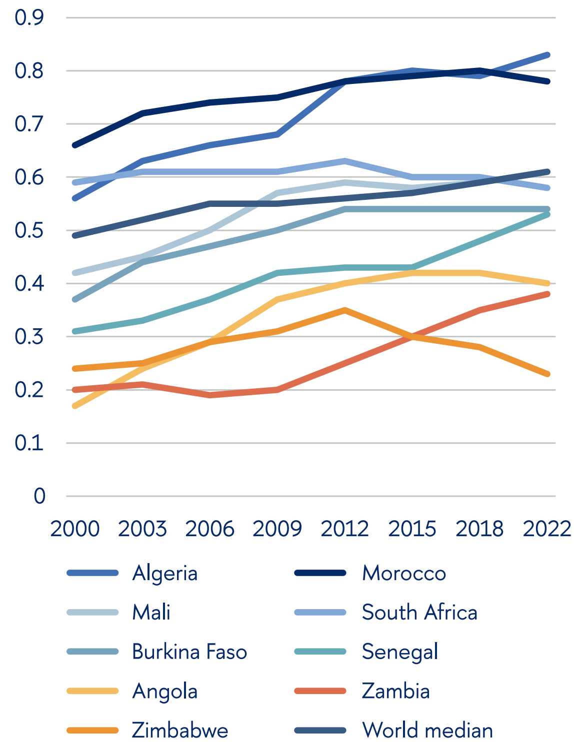
Main trends in agriculture

1. New diet trends

Per capita kilocalorie consumption[61] per day varies across Africa: with a global median consumption of 0.61 (in an index where the highest indicator is assigned a value of 1) in 2022, some countries performed strongly, such as Algeria (0.83) and Morocco (0.78). In Sahel and Western Africa, perceived by many as food crises prone, the indicator is average at 0.61 in Mali, 0.54 in Burkina Faso and 0.53 in Senegal[62]; South Africa's kilocalorie consumption is around the same level at 0.58. The deficit in kilocalorie intake is registered in Central and Southern Africa: 0.4 in Angola, 0.38 in Zambia, and 0.23 in Zimbabwe. By comparison, the US figure in the index above is 1, China's is 0.77, and Europe's average is 0.8 to 0.9.

These indicators, first of all, allow us to draw conclusions about the diet. In some countries, a low-calorie diet is common due to the prevalence of vegetables, fruits, sometimes poultry or fish, and the lack of dairy and meat products.

Kilocalories per person per day (highest score = 1), 2000–2022



Source: prepared by the HSE Center for African Studies based on World Bank data.

Overall, it is not only about food availability, but what is available as well

In recent years, there has been a shift from a low-calorie diet to a new high-fat, high-sugar diet, which brings certain risks[63]. With rapid urbanisation, higher incomes and female employment opportunities, the demand for convenience foods is growing rapidly and supply chains are undergoing a transformation, with production shifting to low-cost processed foods. Consumption of processed and ultra-processed foods is increasing not only in urban but also in rural Africa due to, among other things, the mechanisation of agricultural production, increased income from non-farm employment and the associated increase in the opportunity cost of time. Many processed foods are high in sugar, salt, saturated fats and/or preservatives and, thus, contribute to overweight and non-communicable diseases such as diabetes, cardiovascular disease and cancer. At the moment, Africa has not seen a surge in fat consumption, and it would be premature to claim a shift to an unhealthy dietary pattern, but the risk in the form of a slow but steady increase in sugar consumption remains: thus, total African consumption of sugar (raw equivalent) in 2010 was 13.9 million tonnes, in 17.9 million tonnes in 2016 and 19.8 million tonnes in 2022[64].

61 World Bank. Kilocalories per person per day (highest score=1). URL: https://prosperitydata360.worldbank.org/en/indicator/IDEA+GSOD+v_23_03

62 One of the reasons why calorie intake in the Sahel zone is higher than in Sub-Saharan Africa may be the abundance of dates in the diet. The caloric value of dates is about 25 calories per fruit (about 274 kcal per 100 grams of product), which with the production volumes (e.g. Niger - 16.6 thousand tons in 2020, Chad - 21.2 thousand tons in 2020) makes dates an important source of calories for local population.

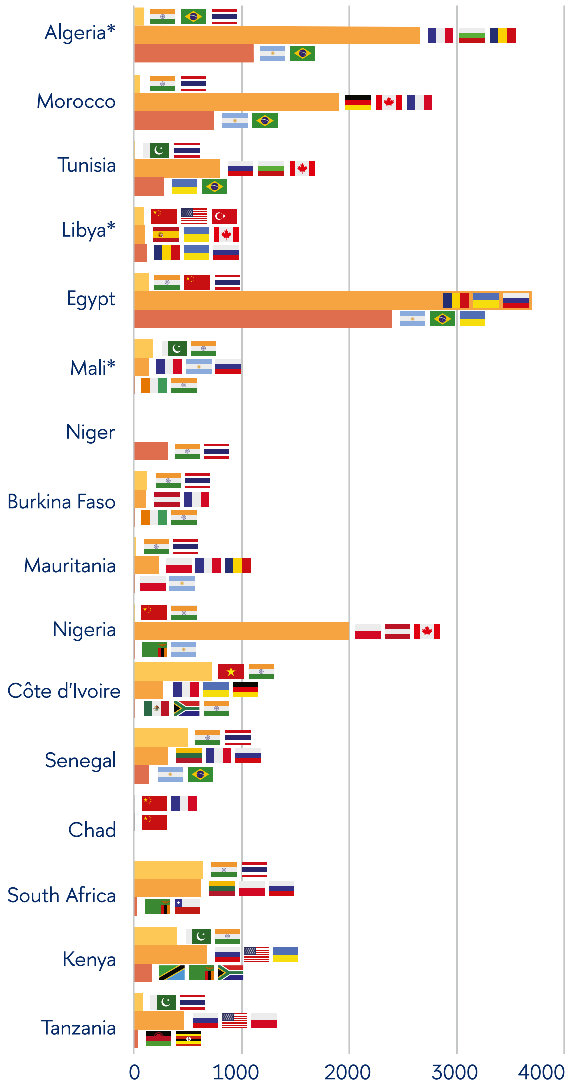
63 Global Food Research Program. Ultra-processed products make up nearly half of low-income South African adults' diets. URL: https://www.globalfoodresearchprogram.org/ultra-processed-products-make-up-nearly-half-of-low-income-south-african-adults-diets/

64 FAOSTAT. Food Balances (2010-). URL: https://www.fao.org/faostat/en/#data/FBS

Grains

Africa has the potential to become a major producer of cereal crops: for 2022, the area planted with maize is 41.8 million hectares with a production of 92.9 million tonnes. For 2022, 16.5 million hectares have been allocated to rice (production of 39.9 million tonnes) and 29 million hectares to sorghum with a yield of 29.6 million tonnes[65]. However, **due to a lack of fertilisers, field yields are not sufficient to meet the growing needs of the population**. Africa spends up to USD 80 billion annually on food imports, and up to USD 30 billion of this is wheat.

Import of rice, maize and wheat in Africa, 2023, USD mln

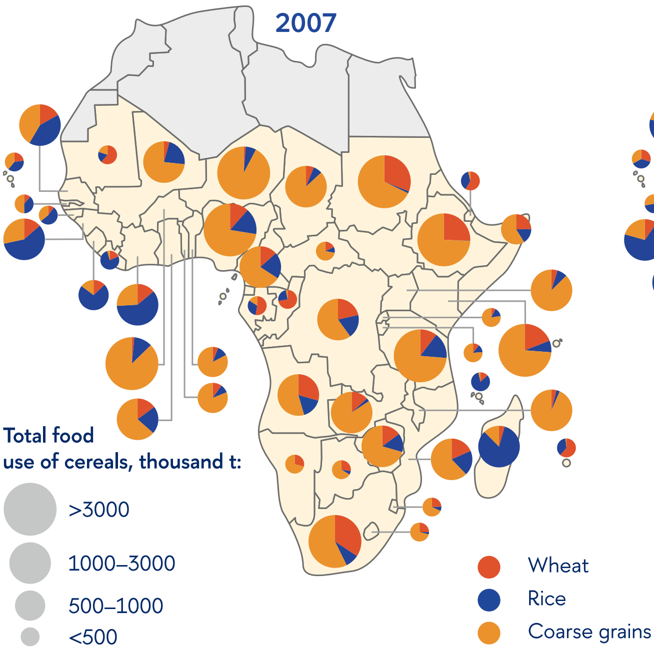


Source: prepared by the HSE Center for African Studies based on Trade Map and OEC data.

Nigeria is a textbook example of the "wheat trap" (after the title of a 1985 book by Swedish researchers Gunilla Andrae and Björn Beckman, The Wheat Trap: Bread and Underdevelopment in Nigeria)[67]. Since colonial times wheat (poorly suited to the country's climatic conditions) has been replacing traditional crops in the African diet. The process intensified with gaining independence and the influx of petrodollars, which created a westernised class of urban dwellers, consumers of wheat products. They in turn created a demand for wheat imports, which is extremely difficult to replace with local production. The most consumed cereal crop in Nigeria is maize, accounting for almost 40% of consumption in quantity terms, rice and sorghum have roughly equal shares of 22% and wheat only 15%. Wheat is the only cereal in Nigeria for which imports are the main source of supply. 2.5 times between 2000-2020, rice consumption increased 2.5 times, maize consumption increased 2 times, and sorghum consumption is stagnant[67]. Urbanisation and the gradual globalisation of food behaviour standards together with population growth is leading to a gradual increase in the consumption and importation of wheat.

65 USDA. International Production Assessment Division. URL: https://ipad.fas.usda.gov/Default.aspx
66 Andrae G., Bjorn B. The Wheat Trap: Bread and Underdevelopment in Nigeria. London: Zed Books, 1986. 192 p.
67 FAOSTAT. Crops and livestock products. URL: https://www.fao.org/faostat/en/#data/QCL

Food use of main crops in Sub-Saharan Africa, 2007–2024, thousand t



Source: prepared by the HSE Center for African Studies based on FAO data.

Wheat is not a traditional crop for most African countries, and compared to other regions, Africa ranks last among consumers of bakery and confectionery products. Nevertheless, imports of this particular crop account for a significant portion of African government and consumer expenditures. The reason lies in the artificial increase in demand as part of the "**wheat trap**".

The way out for African countries may be to consistently support more domestically adapted crops like sorghum, cassava, etc. Such measures could include imposing obligations on flour producers to replace a share of wheat flour with sorghum, introducing more pest and climate-resistant varieties and seeds.

The way to African food sovereignty seems to be in reducing dependence on wheat in general, not only on wheat imports

Protein intake: dairy, fish, meat and poultry

Although overall protein intake is not significantly below the recommended and required amounts, the problem lies in its composition

The average protein intake in Africa has decreased over the last 10 years and stands at 65-66 g per person per day, which is 20 g less than the world average.

The majority of protein consumed in Africa is low-quality plant proteins, with them constituting 77% of the intake (37% in the EU). African countries consume plant proteins almost as much as the world average (50 g), but with animal proteins like fish, meat, eggs, dairy products their consumption is 2-3 times less. With the spread of fast food – noodles and other snacks – the share of low-quality proteins will probably increase even more.

The Kenyan dairy industry is among the top in Africa and is the leading in Eastern Africa. This case demonstrates the potential of the government interventions and investments in food sovereignty. The dairy is contributing 4.5%, 14% and 44% to the national, agriculture and livestock sub-sectors GDP, respectively. In 2023 total milk production in the sector is estimated to be 4.6 billion litres (for comparison, about 2.9 million litres in 2000), and the consumption of dairy products remains high (about 98 kg /capita/year in milk equivalent). Such an increase was possible due to high demand for processed milk and milk products due to a growing urban middle class and ongoing investments in value added products including long-life milk and milk powder. A chain of production has been established - milk collection from small farms is centralised in so-called 'milk bars', from where milk is either delivered for processing or sold to consumers in raw form. A big role in establishing value-added production is played by the government, that supports the industry through set of regulatory measures and incentives. There are also support measures from the regional governments - for example, in Murang'a the county government established a subsidy programme in early 2023 - milk producers are receiving 7 shillings (USD 0,054) per delivered litre of milk via e-card[68].

Consumption specifics limit the continent-whole approach. Here, even a country-by-country approach is not sufficient, given the significant differences in traditional diets in different regions of the same country – for example, in the countries of Western Africa coastal populations depend primarily on fish, while those in the northern regions depend primarily on dairy products and beef. Moreover, the share of animal protein intake is still so small and fluid that a single reform in one country may have an impact on continent-wide statistics.

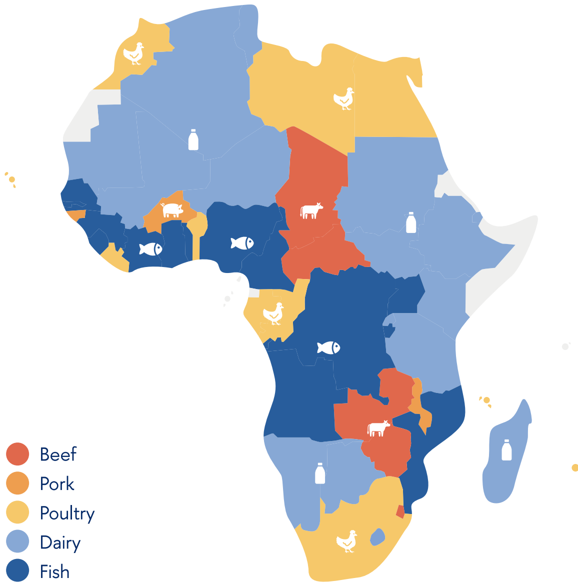
Dairy products remain the main source of animal protein in Africa, but this is primarily at the expense of Northern Africa, where milk powder has a significant market share, and Eastern Africa, namely Kenya, where the government has consistently supported local producers and the dairy industry occupies an important position in the economy (4.5% of GDP).

The low consumption of milk and dairy products is due to low production levels, lack of canning technology (for products on the domestic market) and the high prevalence of lactose intolerance among the African population. Overall, dairy farming remains primarily subsistence, especially for countries with a significant share of nomadic population: Mali, Niger, South Sudan, Ethiopia. Improving the efficiency of the dairy industry in such countries is not only an issue of food sovereignty and balanced diet, but also of security in its broader sense. Government support to the dairy industry, creation of additional jobs and infrastructure will help to improve life conditions of herdsmen, consequently, contributing to the resolution of the centuries-old farmer-herder conflict.

Meat is generally less consumed in Africa compared to other regions (about 20 kg of all meat species per person per year in 2021 against 43 kg per person globally and 67 kg per person in Europe[69]) due to its high price and additional production costs in the pastoral sector, as well as the lack of infrastructure (industrial slaughterhouses). The variation in meat and poultry consumption in Africa is very wide, ranging from an average of 5.4 kg per person per year in Ethiopia to 60 kg per person per year in South Africa, with an average of 20 kg per person per year in Africa. **Chicken** is the main meat

68 Kenya News Agency. Dairy, Mango Farmers To Access Subsidies Via E-Card. URL: https://www.kenyanews.go.ke/dairy-mango-farmers-to-access-subsidies-via-e-card/
69 FAOSTAT. Food Balances (2010-). URL: https://www.fao.org/faostat/en/#data/FBS

Main source of animal protein in Africa, 2024



Source: prepared by the HSE Center for African Studies based on FAO data.

for the vast majority of Africans, accounting for around 30% of annual meat consumption. In general, it is chicken that has accounted for most of the growth in meat and protein consumption in Africa. However, this consumer boom is largely driven by imports - African countries spend more than USD 2 billion a year on poultry imports.

Urbanisation and low efficiency of domestic production in Africa, including feed shortages, will remain the key drivers of chicken consumption and import growth

Consumption is expected to increase as the demand for chicken in Africa rises, with a projected market volume of 11 million tonnes by the end of 2030[70].

Because of **pork**'s limited potential as a source of protein, engendered by climate and religious taboos, what meat African cities will eat - chicken (local or imported), beef, lamb, fish or goat meat and in what proportions - depends on decisions with little time to make. Global consumption standards make the key role of chicken almost inevitable, but whether it comes from Africa or abroad depends on whether African governments can take measures to support the industry, introduce more efficient and crossbred types of poultry, support higher input requirements (housing/shelter, commercial diet, and strict disease/vaccination programmes) associated with the more genetically efficient breeds. Otherways, chicken may become the new "wheat trap" for Africa.

Despite the fact that Africa provides approximately 10% of global fish catch[71] and 10% of global fishermen are Africans[72], fish consumption is almost 2 times less than world average (9 kg per capita vs 20 kg[73]). According to IDH, the African continent has been experiencing a seafood deficit since 2001 and this deficit has been growing by 13% every year[74]. This is primarily due to the low level of knowledge of African aquatic resources, lack of skilled labor and infrastructure (storage, processing, delivery to consumers). The most pressing issue is aquaculture: fishing is haphazard, extensive and often left to foreign companies. At the same time, due to the low efficiency of the fishing industry in Africa, imports of fish and seafood are increasing. Fish imports have increased fivefold in 20 years and almost reached USD 5 billion by 2023. It is the development of **aquaculture** and improvement of technological equipment of the industry that will guarantee the growth of fish consumption in Africa.

70 African Union Development Agency. Digitalising The Poultry Industry In Africa. URL: https://www.nepad.org/blog/digitalising-poultry-industry-africa
71 FAOSTAT. Food Balances (2010-). URL: https://www.fao.org/faostat/en/#data/FBS
72 FAO. The State of World Fisheries and Aquaculture 2018. URL: https://openknowledge.fao.org/server/api/core/bitstreams/6fb91ab9-6cb2-4d43-8a34-a680f65e82bd/content
73 FAOSTAT. Food Balances (2010-). URL: https://www.fao.org/faostat/en/#data/FBS
74 IDH. Fish farming for African food security and job creation. URL: https://www.idhsustainabletrade.com/news/increasing-food-security-through-local-fish-production-and-market-growth-in-africa/

2. Shift away from subsistence farming

With urbanisation, there has been a shift away from subsistence farming and, more widely, from eating locally grown food. Land is increasingly given to technical (cotton, rubber) and export crops, while food is increasingly imported: wheat, rice, corn. There is a decline in the food base in the wild, as well as in fauna, amidst population growth, hunting and insurgency.

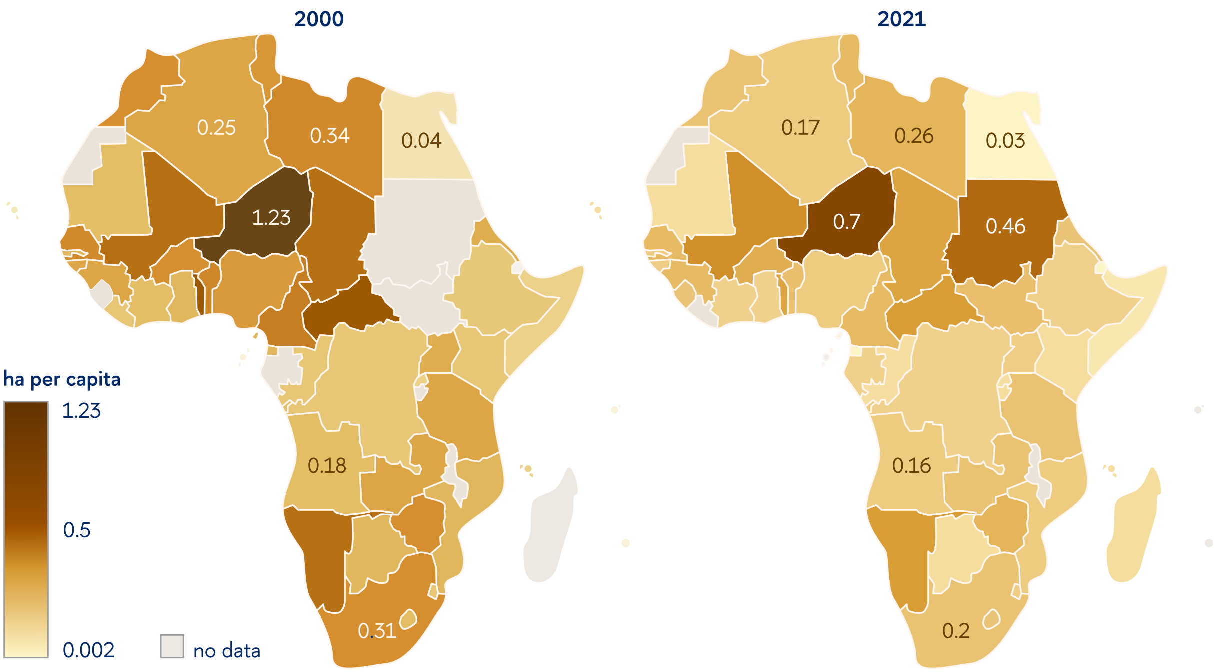
As a consequence, there is a decrease in opportunities for **extensive growth** (arable land, pastures), an increase in demand for intensive farming methods introduction. One of the main methods of increasing the quality and quantity of yield is the application of fertilisers.

Fertilisers market in Africa: towards agricultural intensification

Fertilisers will be the main trendsetter for African agriculture development in the forthcoming decades

Land dilemma exists as well, as alternative to agriculture options arise for land use. For instance, in Tanzania in the period from 2022–2023, the territory of national parks amounted to 99.3 thousand hectares, the revenue from these territories for this period amounted to USD 123.9 million[75], the average revenue amounted to USD 12.5 thousand/ha. While the approximate income from agriculture does not exceed USD 1 thousand per ha.

Arable lands (ha per person), 2000–2021



Source: prepared by the HSE Center for African Studies based on FAO data.

75 The Citizen. Tanapa revenue soars by 94 percent as tourism rebounds. URL: https://www.thecitizen.co.tz/tanzania/news/national/tanapa-revenue-soars-by-94-percent-as-tourism-rebounds-4564600

As of 2022, agricultural fertiliser use in Sub-Saharan Africa is **17 kg/ha**[76] of active ingredients (compared to APAC at 300 kg/ha), with some countries like Uganda, Guinea, Republic of Congo, Niger and CAR using less than 5 kg/ha. Following the meeting of African Ministers of Agriculture in 2006 in Abuja (Nigeria), a modest goal was set to increase the average volume of fertiliser use from 8 kg/ha to 50 kg/ha, which is still yet to be achieved in most countries. According to the calculations of the United Nations Development Programme (UNDP), achieving the goal of increasing the use of fertilisers could triple food production in Africa in the near future, as well as reduce malnutrition by almost 5%[77]. Fertiliser consumption in Africa is 7.5 million tonnes of active ingredients, and most of it is imported nitrogen, potash and phosphate fertilisers.

Fertilisers have already contributed to food sovereignty of several African countries. Among them is Ethiopia, which has arranged an increase in production due to the introduction of new wheat varieties and an increase in the use of fertilisers.

African market share of imported fertilisers (6% of global value) and exported (12%) is relatively high, whereas indicators of several countries (Morocco, Algeria, Egypt) are in position to increase significantly this decade.

According to the Africa Fertilizer Map, the major fertiliser producers on the African continent – Morocco, Algeria, Nigeria, South Africa and Libya – manufacture fertiliser not only for their own consumption but also for export, including intra-regional exports[78]. Africa is endowed with the resources for fertiliser production. According to the USGS, up to 80% of the world's phosphate reserves are concentrated in Africa. Africa annually produces around 250 bcm of natural gas (about 1 thousand cubic metres of gas is needed to produce 1 tonne of ammonia fertiliser). That proves the potential for wider regional cooperation in fertilisers production[79].

South Africa, Ethiopia, Zambia, Djibouti, Tanzania and Zambia are the region's leading fertiliser buyers (the combined share of these five countries is 20% of total African imports)[80]. At the same time, Morocco, South Africa, Egypt, Nigeria are among the five leaders exporting to other countries of the region: they account for 16.1% of external African exports and 76.8% of intra-regional exports.

Ethiopia imports up to one million tonnes of wheat annually (500,000 tonnes in the first half of 2023 and 400,000 tonnes in the first half of 2024) with an average annual consumption of 6 million tonnes for 2019-2020[81].

Increase in yields – the "**wheat revolution**" as some media refer to the phenomenon – has been made possible by the nation-wide introduction of heat-tolerant wheat varieties combined with increased mechanisaton, irrigation and fertiliser application. For instance, nitrogen fertiliser input increased from 240,000 tonnes in 2014 to 426,000 tonnes in 2022 (from 14 kg/ha to 23 kg/ha), contributing to wheat yield increasing from 2.5 tonnes/ha to 3 tonnes/ha. All measures combined led to an increase in wheat production from 4 million MT to 5.6 million MT in 2023/24[82].

76 Malpass D. A transformed fertilizer market is needed in response to the food crisis in Africa. URL: https://blogs.worldbank.org/en/voices/transformed-fertilizer-market-needed-response-food-crisis-africa

77 UNDP. Towards Food Security and Sovereignty in Africa. URL: https://www.undp.org/facs/publications/towards-food-security-and-sovereignty-africa

78 Africa Fertilizer Map. URL: https://www.africafertilizermap.com/

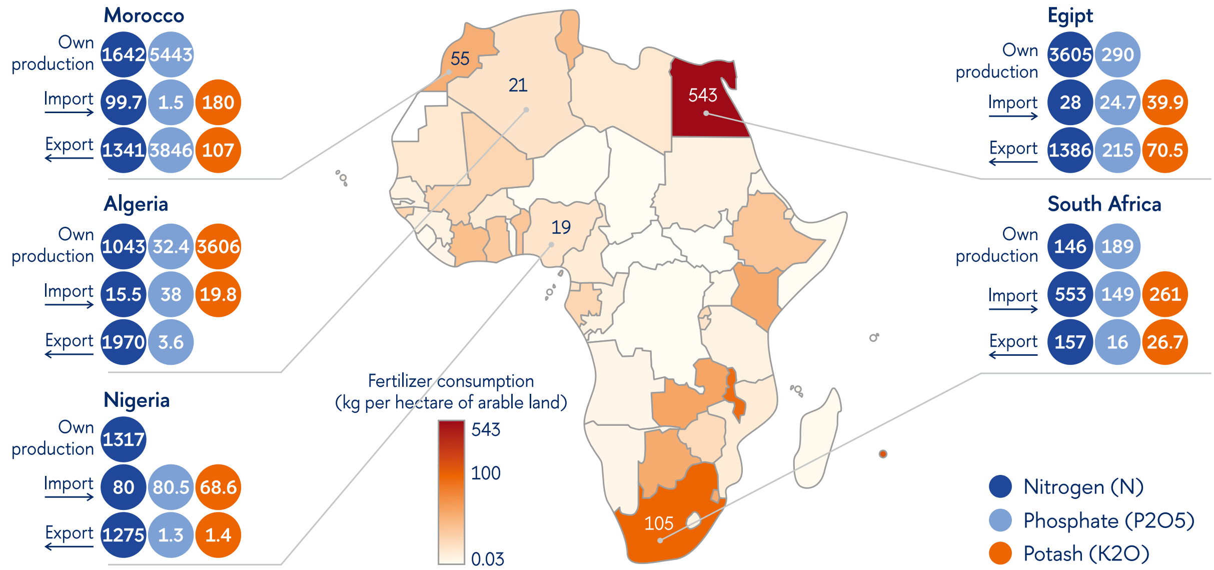
79 Sviridov V., Andreeva T. Russian Fertilizers as an Element of Strengthening Africa's Food Sovereignty. URL: https://africajournal.ru/wp-content/uploads/2024/07/Sviridov-Russian-Fertilizers.pdf

80 IFASTAT. URL: https://www.ifastat.org/

81 FAOSTAT. Food Balances (2010-). URL: https://www.fao.org/faostat/en/#data/FBS

82 FAOSTAT. Crops and livestock products. URL: https://www.fao.org/faostat/en/#data/QCL

Production and trade of fertilisers in Africa (by nutrient), 2022, thousand t



Source: prepared by the HSE Center for African Studies based on Africa Fertilizer Map and FAO data.

However, intra-regional fertiliser consumption and distribution remain low. The main reasons include low qualification of farmers and specialists involved in the agricultural sector, dependence on subsidies, shortage of foreign currency and the general lack of government support for the sector.

It is the government that should be the main player in the emerging fertiliser markets

Given the small size of farms and their lack of working capital and knowledge of soil conditions, it is the government that should be the main player in the emerging fertiliser markets. Examples of separate states show that the set of these measures is limited, but allows to achieve significant results even in the short term.

However, the main reason remains the benefit for large African producers of targeting external markets. Countries with unstable economic and political environment, as well as countries amidst acute food crisis, cannot pay for sufficient volumes of fertilisers at market price, which directs export flows to other regions rather than inland.

Another critical reason for low consumption and intraregional exports is the poor state of logistics. For example, the main railroads and transport trade corridors on the continent pass through coastal countries, international ports and major railway stations, almost completely ignoring the inland countries (most affected by the food crisis).

The de facto 'exclusivity' of some routes increases the price of fertiliser shipments. According to Africa Fertilizer Map's 2021 calculations, the transportation cost per tonne of fertiliser from Dakar to Bamako averaged USD 54 (1,115 km), from Beira to Lusaka USD 85 (1,055 km), from Durban to Harare USD 115 (1,680 km) and from Dar es Salaam to Lusaka USD 100 (1,940 km)[83]. Meanwhile, the major railroads and transport corridors affect intra-continental countries tangentially. This increases the cost of transportation at the expense of conveyance within the country itself (from the transport hub to the periphery) and adds the risk of a transport blockade if relations between states deteriorate.

83 Africa Fertilizer Map. URL: https://www.africafertilizermap.com/#Interactive

Russia, as the second largest producer of mineral fertilisers in the world, plays a significant role in fertiliser exports to Africa. In value terms, their exports have grown almost 32-fold over the past 18 years, reaching USD 511 million in 2021[84]; in volume terms, exports have increased from 770,000 tonnes in 2018 to 1.6 million tonnes by 2022. Thus, Russia's share in the African fertiliser market has reached about 12%. For comparison, Russia's share in the supply of hydrocarbons to Africa is 3%, and 32% for wheat.

At the same time, the share of Russian exporters is still significantly inferior to the volume of supplies from leading international companies. Thus, the Moroccan company OCP supplies about 2 million tonnes of phosphate fertilisers to Africa annually, and the Norwegian company Yara supplies about 1 million tonnes (mainly urea, but also complex fertilisers).

Uralchem Group case: trade flows and humanitarian supplies

Several large Russian companies, including PhosAgro, EuroChem, Uralchem and others, currently cooperate with African countries. An interesting example is the cooperation between African countries and Uralchem Group.

Uralchem Group's efforts to gain a foothold in the Nigerian potash fertiliser market culminated in the signing of a contract between Uralkali, part of Uralchem Group, and the Nigeria Sovereign Investment Authority (NSIA) in 2019. As a result of the contract, Uralkali remained the sole supplier of potash fertilisers to Nigeria from 2019 to 2021. In financial terms, such supplies amounted to USD 47 million in 2020 and USD 41 million in 2021.

In 2022, more than 260,000 tonnes of fertilisers belonging to Uralchem Group were blocked in Riga, Ghent and other EU ports. Uralchem Group volunteered to use such blocked tonnages for gratuitous deliveries to African countries: in March 2023, 20,000 tonnes of fertilisers were delivered to Malawi, then 34,000 tonnes went to Kenya in May 2023, another 34,000 tonnes went to Nigeria in February 2024, and 23,000 more tonnes were shipped to Zimbabwe in March 2024. In total, this initiative has resulted in more than 111,000 tonnes of supplies (and counting), which were made in cooperation with the United Nations.

In fact, the humanitarian shipments of Uralchem Group to African countries made in late 2022 and early 2023 paved the way for a wider engagement in gratuitous deliveries of agricultural commodities from Russia to Africa, with other suppliers stepping in. An example of such development was the initiative on gratuitous deliveries of 25 to 50 thousand tonnes of grain to Burkina Faso, Zimbabwe, Mali, Somalia, Central African Republic and Eritrea, which was announced during the Russia-Africa summit in 2023.

Previously, Russian food aid to Africa was mostly limited to monetary contributions to intermediary organisations, such as the WFP, FAO, the International Committee of the Red Cross and other international bodies, which then provided targeted support.

84 Federal Customs Service of the Russian Federation. URL: https://customs.gov.ru/statistics

Nigeria provides an example of the use of a range of government support measures for the development of the sector. Fertiliser consumption trends are positive, but reflect the general picture for Africa (less than 20 kg/ha). Nigeria's former president Muhammadu Buhari (2015-2023) made the fertiliser programme a priority and several steps have been taken at state level in this regard:

1. Establishing a **legal framework** for the development of the national fertiliser market segment.
   – **Presidential Fertiliser Initiative** (2016), the objectives of which were, among others, to rehabilitate local idle infrastructure and encourage domestic production (blending) of fertilisers[85].
   – **The National Quality Fertiliser Control Act** (2019) to prevent substandard or counterfeit products from entering the market[86]. One of the requirements of the act is for companies operating in Nigeria to register and obtain certificates of registration and marketing authorisation from the relevant agency. To this end, an electronic platform, The National Fertiliser Management Platform, has been operationalised. The first certificates were issued in 2022.

2. **Support for local producers** of fertilisers and agricultural products.
   – **Non-tariff measures**. Import bans on urea and NPK were introduced in 2016 and 2018, respectively.
   – **Subsidies**. Subsidies to increase the amount of fertiliser per hectare of cultivated land under various schemes and programmes (including the Federal Market Stabilisation Programme, the 2010 Fertiliser Voucher Programme, and the Growth Enhancement Support Scheme) have been used in Nigeria since 1977. However, after 2015, due to declining government revenue as a result of falling oil prices and the government's high debt obligations to agro-dealers, subsidies were not used. In 2022, the subsidy system was partially brought back; in 2023, several state governments in Nigeria announced the introduction of a 50% subsidy on fertiliser purchases.

3. **Direct purchase by the government**
   Nigeria is using contracting for the supply of raw materials for local blending in Nigeria is done through government procurement: in 2019, a contract was signed with Uralkali (a Russian company, part of Uralchem Group), for the direct supply of potash component for NPK fertilisers.

4. Introduction of a **Soil Doctor programme** to test soils and determine the level of fertiliser requirement, with parallel training of specialists and opening of laboratories.

   Despite the positive trend in fertiliser use, Nigeria remains dependent on external fertilisers, the supply of which can be drastically reduced in times of crisis, leading to higher prices and a reduction in already established local production. The only way for Nigeria to achieve food sufficiency via increased fertiliser application is to harness its vast natural gas resources for nitrogen fertiliser production.

85 Nigeria Sovereign Investment Authority. Presidential Fertiliser Initiative (PFI). URL: https://nsia.com.ng/portfolio/presidential-fertilizer-initiative-pfi/

86 Federal Republic of Nigeria Official Gazette. The National Quality Fertiliser Control Act. URL: https://nesgroup.org/farmgain/documents/Official%20Gazzettee%20of%20NATIONAL%20FERTILIZER%20QUALITY%20CONTROL%20ACT,%202019.pdf

An USD 11 million **soil fertility mapping project** (launched in 2012) was completed in Ethiopia in 2019[87]. The maps, which contain soil characteristics and soil nutrient levels, have helped create recommendations for a more balanced use of fertilisers and new mineral mixtures, instead of using one type for all soil types. In this regard, Ethiopia has abandoned some fertilisers that did not suit the soil type in terms of nutrient composition (in particular DAP was completely replaced by NPS and its varieties in 2015)[88].

SSA trade corridors

Mombasa (1,1-1,600km/3-7 days):
Kenya, Uganda, Rwanda, South Sudan

Dar es Salaam (1,5-2,100km/3-7 days):
Tanzania, Burundi, Rwanda, Zambia, DR Congo

Beira (1,600km):
Mozambique, Malawi, Zambia, Zimbabwe

Abidjan-Dakar (1,1-2,500km/2-6 days):
Guinea, Mali, Burkina Faso, Senegal, Ivory Coast

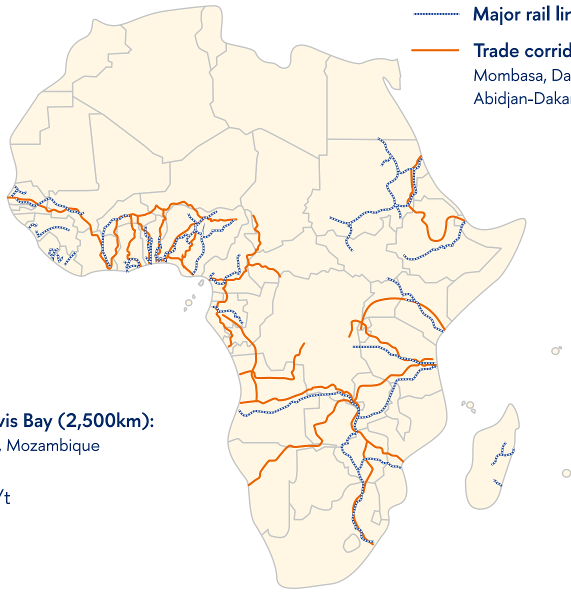
Djibouti (800km/2-3 days):
Djibouti, Ethiopia

Togo (1,600km/4-5 days):
Togo, Burkina Faso, Niger

Benin (1,100km/2-3 days):
Benin, Niger

Durban (2,100km) Lobito (1,800km), Walvis Bay (2,500km):
South Africa, Angola, Namibia, Zambia, Zimbabwe, Mozambique

Dar Es Salaam to Lusaka: 1,940 km — 100 $/t
Beira to Lusaka: 1,055 km — 85 $/t
Durban to Harare: 1,680 km — 115 $/t
Dakar to Bamako: 1,115 km — 54 $/t
Abidjan to Ouagadougou: 1,153 km — 81 $/t



Major rail lines

Trade corridors:
Mombasa, Dar Es Salaam, Beira, Abidjan-Dakar, Djibouti, Benin, Durban

Source: prepared by the HSE Center for African Studies based on Africa Fertilizer Map data.

The logistics of fertiliser distribution is also important: small farms, those who primarily need fertilisers, find it difficult to buy large batches of fertilisers coming to ports. At the same time, it is unprofitable for suppliers to divide batches of fertilisers into small portions. Thus, investments are needed in a mechanism for redistributing and packaging imported fertilisers on the territory of ports or in the vicinity of them.

Africa's food sovereignty through fertiliser supply should be complemented by educational and research initiatives

These include additional courses, lecture series, internships for farmers and government officials.

3. Subsidies and subventions

Many African countries, such as Algeria, Egypt and others provide government subsidies on food products, especially wheat and bread as a staple (baguettes and loaves of white bread).

Subsidies are an important tool to fight hunger, which is evident when comparing with the Global Hunger Index indicators[89]. Thus, in Algeria and Senegal, where subsidised products fully cover the national average bread consumption, the level of malnutrition among the population has been gradually decreasing since 2000

87 FAO. Using Soil Maps to Promote Efficient Use of Fertilizers Learning from the Ethiopian Experience. URL: https://www.fao.org/3/cb9452en/cb9452en.pdf
88 AfricaFertilizer. Ethiopia Fertilizer Dashboard. URL: https://viz.africafertilizer.org/#/ethiopia/wpContentPage/country-overview-8
89 Global Hunger Index. URL: https://www.globalhungerindex.org/

and fluctuations in world grain prices have not had a strong impact on the indicator. In Morocco and Tunisia, where subsidised bread meets about half of the demand, malnutrition rates remain at the same level with slight fluctuations (Morocco) or slightly decreasing (Tunisia). This underlines the strong influence of international conditions on regional bread markets that are not subsidised by the state.

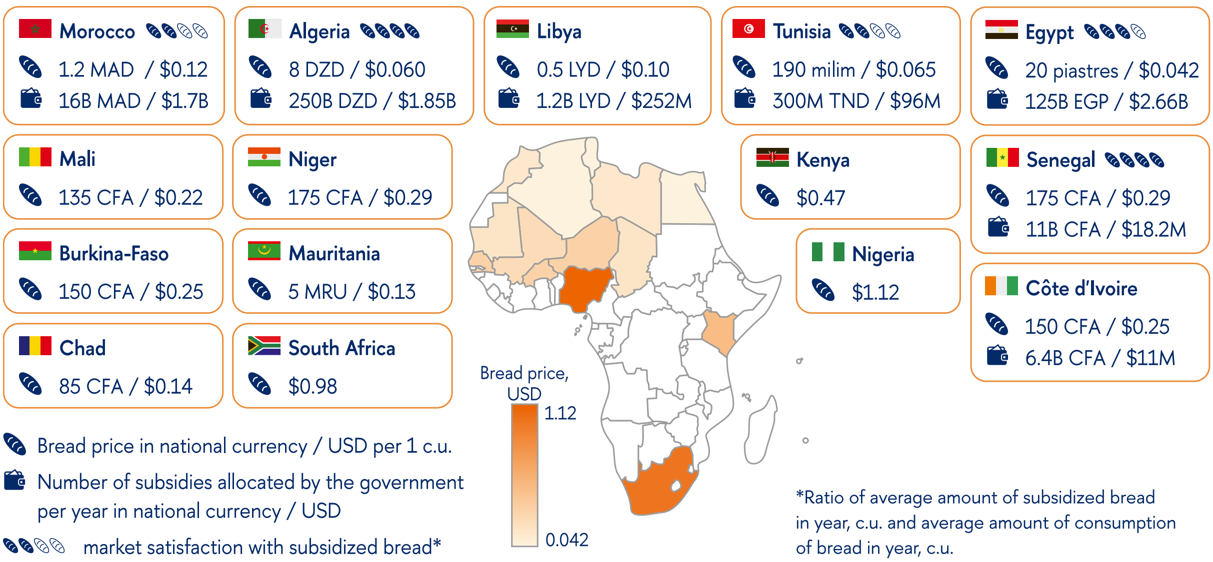
Nevertheless, bread subsidies are also a change-sensitive instrument and **cannot function in isolation from other factors**. For example, in Egypt, where subsidised bread covers more than half of the demand, the malnutrition rate has increased. This process is linked to Egypt's dependence on wheat imports as well as the country's crisis phenomena - food prices inflation rose by 60% between 2013 and 2023, along with foreign debt and the dollar's exchange rate to the national currency[90].

Farmers and enterprises involved in bread production (flour mills, bakeries) find it unprofitable to work below or at par with the market price. Subsidies are beneficial in the short term (instant access to food for all segments of the population) but can cause irreparable damage to the economy in the long term. For example, the impoverishment and ruin of bakeries operating at a loss leads to less competition in the market, monopolisation of the sphere, and deterioration of product quality. Finally, all this leads to distortions in the distribution of resources in the economy and, thus, social inequality, which the subsidy system is originally aimed to combat.

To increase the efficiency of subsidies for bread and food in general, the most of the subsidy regimes requires more flexibility with policies exclusive for each individual country. Such a flexible system should consider the level of self-sufficiency and grain imports; the percentage of the population below the poverty threshold and the population receiving minimum wages; the level of logistical connection

High government subsidies on bread and flour stimulate consumption but limit private sector growth

Subsidies on bread in African countries



Source: prepared by the HSE Center for African Studies based on FAO data.

90 International Institute for Strategic Studies. Egypt's economic crisis and uneasy position in the Middle East. URL: https://www.iiss.org/publications/strategic-comments/2023/egypts-economic-crisis-and-uneasy-position-in-the-middle-east/

between the centre and the periphery and other indirect factors.

For instance, in Algeria, according to Algerian researcher Bouchafaa Bahia, as of 2018, about 52% of the population on average risks poverty and needs subsidised products, but 48% of the population may not need subsidies[91]. Qualitative analysis of existing risks and resources for the introduction of subsidies can improve the situation of all participants in the economic life of the state.

The dependence of many African countries on imports and the resulting fluctuations in world product prices remains a major challenge to a flexible subsidy system. Thus, rising prices for imported wheat will inevitably lead to an increase in prices for baked products, even subsidised ones. To mitigate risks, it is very important to ensure a long-term transition to own raw material resources. An option for countries that cannot achieve self-sufficiency may be the development of reservation systems.

4. Food reservation systems

Food availability remains one of the main reasons behind most African food crises, which is provoked in the first place by the shortage of food not in the country as a whole, but by its uneven distribution between regions. In Africa, there has already been experience in establishing reservation models at national level. For example, **Ethiopia** has a reserve system (run by the Ethiopian Food Security Reserve Authority (EFSRA), established by the Council of Ministers; renamed the Strategic Food Reserve Agency (SFRA), but in fact it currently has no food reserve policy[92] and faces the inability to solve food crises in regions affected by political turmoil – e.g. Tigray. Issues related to the food reserve system are addressed only in related strategies such as the National Policy and Strategy on Disaster Risk Management, Plan for Accelerated and Sustained Development to End Poverty (PASDEP) and Growth and Transformation Plans (GTP 1 and GTP 2)[93].

Thus, countries face difficulties in establishing national reserve systems – in fact, there is no surplus to set aside as a reserve. A collective reserve system could help to relieve the pressure on national systems.

5. Water withdrawal dilemma

The state of water balance in Africa is an important factor for forecasting economic growth, overcoming the problem of hunger, and progress on sustainable development goals. According to the joint study by WHO and UNICEF, only in 8 countries of Africa (Botswana, Gabon, Djibouti, Egypt, Malawi, Namibia, Tunisia, South Africa) the level of access to water sources of acceptable quality exceeds 90%. The worst situation with access to water is in Angola, DR Congo, Mozambique, Equatorial Guinea, Chad and Madagascar (less than 55%).

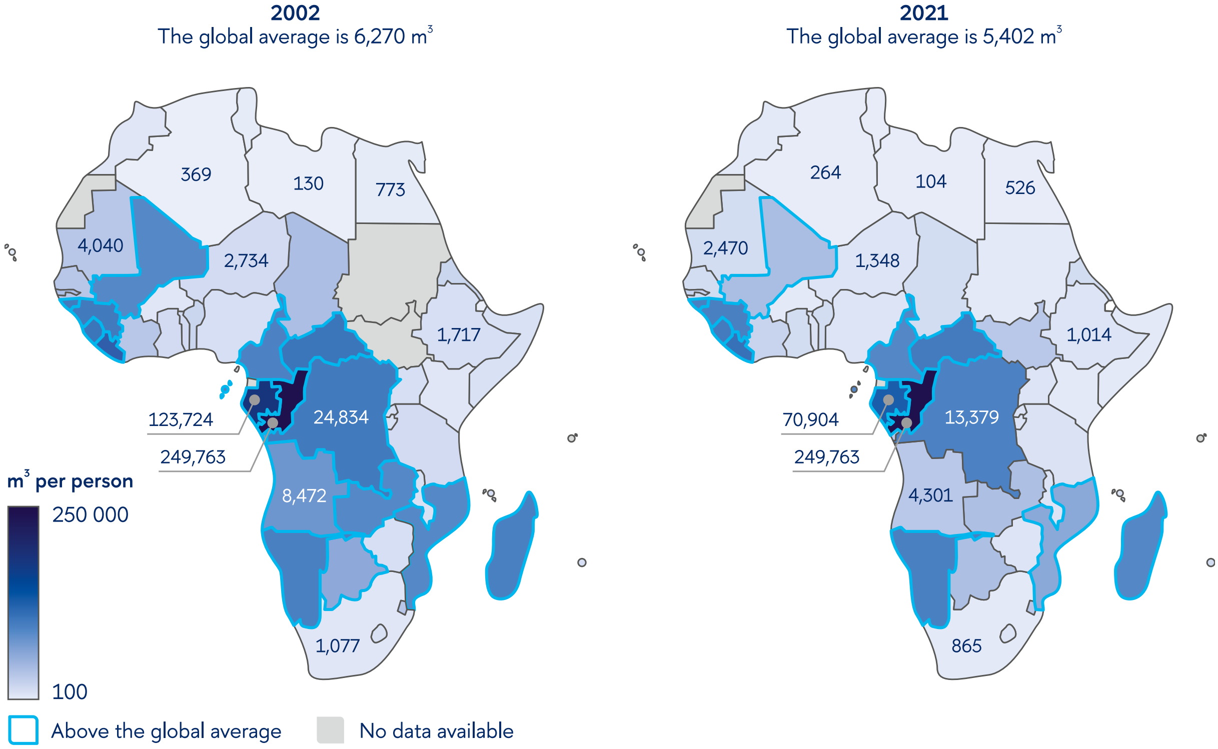
Access to drinking water is becoming a separate problem. According to Aquastat, per capita availability of freshwater is reducing across the continent; in Angola, Botswana and Zambia, where per capita access to freshwater was above the world average in 2002, by 2021 the rates have fallen below the world average. In some countries of the continent – Gabon, Mali, Mozambique – total renewable water resources per capita have almost halved in 20 years. One of the main problems is water loss during water withdrawal. On average on the continent, between 80 and 95% of water withdrawals are from agriculture, with losses through evaporation or return to rivers and groundwater aquifers ranging from 40% (in developed countries) to 80% (in developing and least developed countries) due to inefficient water systems.

91 Bahia B. Subsidizing Bread In Algeria? Yes, But... // Revue d'économie et de statistique appliquée. 2018. Vol. 15, №1. Pp. 83 – 89.

92 Mulugeta, M. Food Reserve System in Ethiopia: Assessment of the Current Implementation Technicalities and Policy Recommendations. URL: https://jsd-africa.com/Jsda/Vol17No5-Fall15A/PDF/Food%20Reserve%20System%20in%20Ethiopia.Messay%20Mulugeta.pdf

93 Ethiopia Ministry of Agriculture. Disaster Risk Management. Strategic Programme and Investment Framework. URL: https://www.preventionweb.net/media/97384/download?startDownload=20240930; Ethiopia Ministry of Finance and Economic Development. Growth and Transformation Plan I. URL: https://www.greenpolicyplatform.org/sites/default/files/downloads/policy-database//ETHIOPIA%29%20Growth%20and%20Transformation%20Plan%20I%2C%20Vol%20I.%20%282010%2C11-2014%2C15%29.pdf

Total renewable water resources per capita (m³/person)



Source: prepared by the HSE Center for African Studies based on AQUASTAT data.

For Africa, international water basins are the norm: there are 63 in total, covering almost two-thirds (64%) of the African continent. The largest basins are the Congo, Nile, Niger and Zambezi rivers. The most complex basin in terms of combining the scale of water challenges and political disagreements today is the Nile. The population of the basin, which is shared by 11 countries, has quadrupled in half a century (from 143 million in 1971 to 564 million in 2021) and continues to grow.

The first step to increase adaptability to water challenges is solutions at the basin management level

This is not only information exchange based on geographic informations systems, AI and monitoring technologies, but also harmonisation and coordination of water withdrawal, mutual support mechanisms, energy grid integration, joint food reserves. Without such coordination, the struggle for water quality and sanitation often makes no sense at all or multiplies costs.

One of the ways to solve the problem of access to drinking water in Africa is the construction of desalination plants. Algeria is the regional leader, with 11 desalination plants already in operation, while 10 such plants are operating in South Africa. In 2021, the Egyptian government has announced plans to invest USD 8.5 billion by 2050 to build 47 seawater desalination plants, and Morocco has begun construction of the continent's largest desalination plant powered by renewable energy – the first phase is expected to be completed by the end of 2026 with a capacity of 200 million cbm per year, which will increase to 300 million cbm per year by 2030. However, not all countries in the region can afford to build infrastructure – desalination and

Main river basins in Africa

Source: prepared by the HSE Center for African Studies based on AQUASTAT data.

the use of hard-to-reach water resources require significant investments in the construction of plants and facilities, but also in ensuring their uninterrupted power supply, which, given the chronic shortage of electricity, complicates efforts to ensure access to drinking water.

The structural transformation of African economies will inevitably raise the issue of new water withdrawal dilemmas

Only a few countries can afford to divert water to cities, energy or industry without improving irrigation efficiency. Africa's economic boom cannot happen without investment in water conservation, desalination for coastal megacities, and improved water use efficiency, which starts with better monitoring and reduced losses. These measures may be supported via increasing agricultural productivity and intensifying trade in water-intensive food and goods. A modern solution to the water problem could be the development of a new multi-component system of water use, including not only infrastructure but also rationalisation of water use – policies to improve water efficiency and the use of non-conventional sources.

New food sovereignty systems

As this chapter and the analysis of most statistical indicators show, the food situation in Africa is not worsening with population growth, and the measures taken are just enough for a "conservation scenario" – there is neither improvement nor deterioration. However, population growth gives Africa an opportunity – growing consumer markets, and thus attractiveness to foreign investors. How African governments and businesses are able to capitalise on this growth will determine the food situation in the long term.

Local content should become an integral part of international trade in food products

For Africa, the issue of food sovereignty is broken down into two circuits – external and internal. On the external side, it is necessary to gradually reduce dependence on the external environment, such as global price fluctuations, political will of exporters, development agenda imposed from outside. If import substitution is impossible (e.g. with wheat), African governments need to take a more proactive stance and exert more pressure on suppliers. The logic of other sectors can be applied to food as well – local content should become an integral part of international trade in food products, meaning technology and knowledge sharing, food stocks creation on the territory of importers, etc. Such an approach is logical, given that the food situation in the world is indivisible. Issues in the importing country today mean problems for the exporting tomorrow – and vice versa.

Another important issue is **nutrition design** and involvement in **shaping eating and consumption habits**. Urbanisation is bringing about significant changes in eating behavior and the problem of access to food is widely recognised, but the responses to these challenges must be conscious and long-term. It is not just about the quantity of calories and protein, but also the quality of them. Food aid, for example, should

The case of Egypt demonstrates that even severe arable land deficit may be leveraged by the investments in infrastructure. One should mention the long-standing policy of desert proclamation: in 1950, Ahmed Hussein, the minister of Social Affairs, suggested a plan labelled the Five Feddan Scheme aiming at distributing desert lands to farmers for reclamation. In 2023, the Minister of Agriculture and Land Reclamation, El Sayed El Qusair, announced the addition of over 1.47 million ha of agricultural land since 2013.

Apart from that, there are several ongoing projects to expand greenhouses and increase efficiency of water withdrawal. According to the report by the Ministry of Planning and Economic Development, in 2023 the Egyptian government increased investments in the agriculture and irrigation sector to USD 3.77 billion, which is 71% higher than in previous year. Abovementioned measures are designed for a long-term perspective, but the results are visible now: Egypt has already managed to achieve self-sufficiency in vegetables and fruits, rice, fish and sugar, while in 2023 exports of fresh agricultural products exceeded 7 million tonnes in physical terms.

not become a way to inculcate certain non-African consumption habits, and urbanisation should not become a driver of increased consumption of low-quality protein.

The dispersal of the state support resource is also obvious. For each country a **strategic food commodities** list may be developed, consisting of a food basket to ensure a healthy diet that can be fully produced within the country. These same commodities should be the focus of government support in terms of creating a full cycle of production: from feed, seeds and vaccines, to industrial equipment and processing and packaging facilities. Full self-sufficiency is impossible, but it is achievable in basic categories.

In terms of the domestic market, it is necessary to take measures to increase agricultural productivity, through transition to intensive farming, use of quality fertilsers, which increase the quality and yields of agricultural products, improve soil fertility, aquaculture, and industrial livestock breeding. Increasing imports of fertilisers and technical equipment of farms in general is crucial here. Given the small size of farms, **the role of the government is of key importance** – it should be the main customer of soil quality research and mapping programmes, wholesale purchaser of fertilisers for further distribution among farms.

The answer to solving Africa's excessive food import dependency, while seemingly paradoxical, is to increase imports, but of the means of production.

International assistance in this regard may be focused on facilitating this import and maintaining favourable conditions for its expansion.

African resources to African markets: making energy and mining work for Africa

Role of energy in African economy

Estimates of the loss African economies suffer from energy deficits, ranging from 2% to 4% of continental GDP annually, have become mainstream, but do we understand these energy deficits correctly? Why, for example, is the economy of DR Congo, where electricity generation per capita has remained unchanged at 130 kwh annually for the last 20 years, is growing at an impressive rate of 5-6% of GDP per year? Why has Africa's economic growth not been matched by a proportionate increase in electricity generation?

This is because much – if not most – of the African energy generation is in the shadows. By focusing research on the grid segment of generation, governments and international organisations are ignoring the booming market of small-scale diesel generators.

We estimate that about 10 GW of diesel generators capacity is imported into Africa every year – this is almost as much as the grid installed capacity increase. Despite the seemingly simple and promising nature of this solution (1 GW of diesel generators costs USD 100-300 million, which is much cheaper than building a power plant of the same capacity), this trend itself is a consequence of systematic errors and imbalances in energy policy and threatens to have dire consequences.

Firstly, 1 GW of diesel generation is actually much less than 1 GW of gas-fired power plants or hydroelectric power plants (HPP), which is explained by the low capacity utilisation of diesel generators – 10-15% compared to 40% for natural gas and 30% for HPP. Secondly, such diesel generators will be insufficient for industrialisation of the economy and import substitution, as industry requires a stable source of energy. Thirdly, the diesel generation market itself remains beyond the control of African governments.

This chapter is devoted to the main constraints that have led to structural imbalances in African energy markets, while these theses should lay the groundwork for future discussions on how these challenges can be overcome.

What is African in African energy?

The issues of energy sovereignty, electrification, blackouts, oil and gas, and commodities extraction always come quickly to mind during discussions on Africa's economic development prospects: Nigeria loses USD 28 billion a year or 2% of GDP due to energy shortages[94], South Africa promises no load shedding on presidential election days[95], Ghana's parliament plunges into darkness right during the session due to debts to electricity supplier[96], violent clashes over discussions to remove fuel subsidies or impose additional fuel fees have become commonplace in African political life.

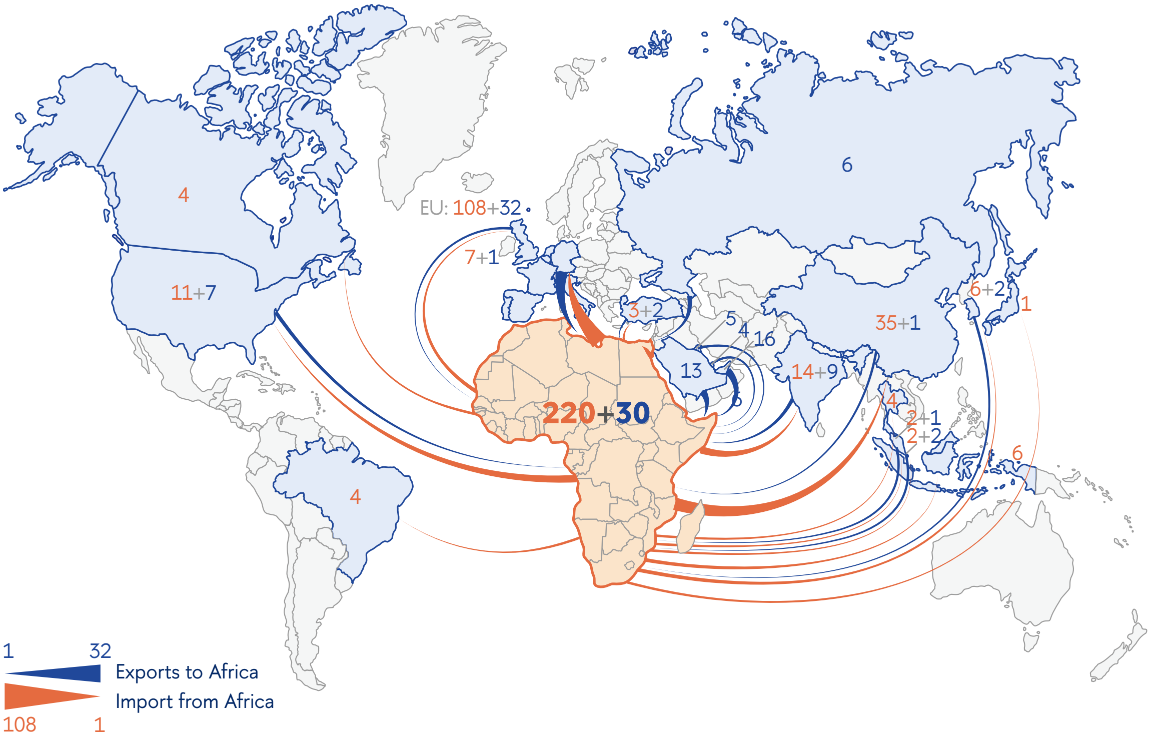
On the one hand, energy resources (crude oil, natural gas, coal, uranium) for some countries remain the sole source of export earnings feeding foreign exchange reserves and debt repayments. On the other hand, the prospects for economic development of most states in the region will be defined by the ability of governments to guarantee access to affordable electricity for the population and industry. Their ability to do so will determine whether the

94 World Bank Group. Nigeria to Keep the Lights on and Power its Economy. URL: https://www.worldbank.org/en/news/press-release/2020/06/23/nigeria-to-keep-the-lights-on-and-power-its-economy

95 SA News. No load shedding on Election Day. URL: https://www.sanews.gov.za/south-africa/no-load-shedding-election-day

96 Reuters. Ghana electricity supplier briefly disconnects parliament over debt. URL: https://www.bbc.com/news/av/world-africa-68451286

Main Africa's trading partners in energy commodities, 2023



Data in USD bln

Source: prepared by the HSE Center for African Studies based on ITC TradeMap and UNCTAD data.

demographic transition will bring about an economic boom or lead to Africa having the largest share of people living without access to electricity. Without affordable electricity, fertilisers and cement (produced using natural gas), irrigation systems that depend on dams and HPP, and without oil refineries, African economies will not be able to achieve sustainable growth.

For energy-deficient Europe and Asia security of supply logic seems suitable, while for energy-rich Africa this means exposure to outer shocks and crises

'Energy security' is a complex notion relating to the position of a state in the global energy markets. The term started being used in the 1970s and 1980s during energy crises and embargoes and initially referred to importing countries and implied guaranteed stable supplies that were not subject to political shocks and excessive price fluctuations – i.e. security of supply. However, for exporting countries, **security of demand** seems to be more relevant – i.e. long-term guarantees of demand for supplies at stable prices.

It means draining its mineral resources for the good of other regions and economies. Furthermore, the African countries which depend on imports do not benefit from the security of supply logic. Indeed, they are the first to suffer during crises, since they lack the financial capabilities to compete with buyers from Europe and Asia and infrastructure to build up reserves.

Energy regionalisation seems to be more promising for Africa, meaning that suppliers should pay more attention to their domestic markets and neighbouring countries without relying on global demand, and vice versa – buyers should look for energy sources, which are more expensive but closer to them, without relying on international markets.

This would reduce dependence on external economic aid, strengthen collective regional efforts and establish regional markets.

In fact, the desired model of sub-regionalism, is at odds with the current model of globalisation[97], in which African resources are not used for the development of the region, but are used outside of it

It is illustrated, for example, by the position of African countries in most global value chains[98].

To put it bluntly, maintaining the logic of global energy security for Africa implies, for example, continued dependence on imports of energy amounting to USD 120 billion per year, imports of petrochemicals, most technologies, equipment, knowledge, concepts and ideas, as well as dependence on the global commodity markets. This is the cost of defining the country's economic growth in terms of the 'commodity booms' rather than sound economic policies, not to mention the need to sell oil at USD 10-20 per barrel[99] in years of crisis due to the lack of oil storage facilities.

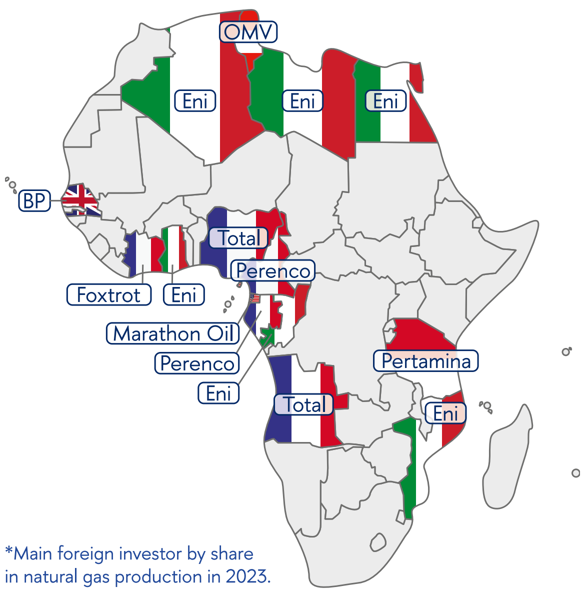
The previous chapters have already shown that excessive import dependence is one of the leading destabilising factors in the macroeconomic situation of most countries in the region, and energy resources play a key role in this.

At the same time, African countries are endowed with energy resources: for example, up to 9% of the world's proven natural gas reserves, 8% of the world's crude oil reserves and 60% of the world's solar resources are concentrated in Africa. In this regard, the problem of electricity and energy shortages in Africa is not attributable to an objective deficit, but primarily to improper distribution and management as well as a lack of relevant infrastructure.

One is used to African countries playing an important role in global energy markets as suppliers of crude oil, natural gas and uranium, but the question who really plays this role remains often overlooked. In fact, it is hard to say that African countries themselves, their governments and companies are actively involved in shaping global markets. After all, it is not just the control over resources but also over the channels of their delivery to the final consumer that allows exporting countries to effectively use the 'energy factor' for their political purposes and economic development.

Historically, Africa has been a region dominated by various non-state actors who have shaped the business environment and determined the development of entire industries, states and regions.

Who controls* Africa's natural gas production?



*Main foreign investor by share in natural gas production in 2023.

Source: prepared by the HSE Center for African Studies based on companies' annual reports.

97 Mensah J. Neoliberalism and globalization in Africa: contestations from the embattled continent. New York-: Palgrave Macmillan, 2008.

98 OECD. Regional value chains in Africa for better global integration. URL: https://www.oecd.org/coronavirus/en/data-insights/regional-value-chains-in-africa-for-better-global-integration

99 Bloomberg. Nigeria's Banner Oil Hits $12, Millions of Barrels Remain Unsold. URL: https://www.bloomberg.com/news/articles/2020-04-17/nigeria-s-banner-oil-hits-12-millions-of-barrels-remain-unsold

Most export infrastructure in Africa is beyond the control of African governments. One of the few exceptions is Algeria, where there is a state monopoly on natural gas exports, and the state-owned oil and gas company Sonatrach owns and operates most of the export infrastructure and determines the geography of sales. Another example can be seen in South African coal mining, which is dominated by local businesses.

In most other African countries, however, the role of the state in resource production, processing and then export is minimal. This is due to a whole complex of factors: budgetary and technological deficit, which does not allow the states to independently engage in exploration, production and export of commodities; construction of export infrastructure; the legacy of the colonial era, which laid long-term strategic foundations for the development of energy industries and export specialisations; the dominant position of a limited number of multinationals in African energy markets. Thus, in most cases, African countries serve merely as a source of raw materials.

African countries are represented on the world markets by a very limited pool of multinationals, mainly Western

For example, with oil and gas those are Shell, BP, TotalEnergies, Chevron and ExxonMobil, Vitol, Glencore and Trafigura, and a number of other companies that dominate smaller markets like Perenco in Cameroon and Gabon and Marathon Oil in Equatorial Guinea.

Every market or international regime can be divided into 'rule-makers', who shape the agenda, and into 'rule-takers', who obey. In terms of this hierarchy on the energy markets, African countries are the rule-takers. The only component of influence they have so far is mineral reserves, while the main infrastructure (including tanker fleets, terminals, pipelines, etc.) is under the control of Western multinationals, and the basic principles, norms, rules, procedures and strategies are set without the involvement of African countries. Moreover, even projects within Africa aimed at developing regional energy markets and integration depend on the interests of extra-regional players who control the financing and technological support for such initiatives.

For African countries, the issue of control over their own energy and power is still pressing. Here we mean control – above all – in terms of norms, strategies and regulations

It means understanding what reserves and assets are available, who owns them, how they are being developed, how they interact with each other and with the environment and what their technical condition is.

In the meantime, excessive consolidation of the energy sector under state control in **terms of ownership and management** leads to long-term negative consequences. In South Africa, the state-owned Eskom owns facilities that generate more than 90%[100] of the country's electricity, and until recently the company controlled all the country's transmission lines. Lack of competition, non-payments by consumers and aging energy infrastructure have caused a crisis in the energy sector. However, private African businesses, with few exceptions, do not yet have the necessary technical competencies and free funds to ensure stable operation of power systems.

Partial privatisation of 'GenCos' (i.e. generation companies) in Nigeria is an important example: Nigerian companies took loans to buy out state-owned enterprises. Faced with non-payment for electricity, natural gas shortages and outdated transmission lines, they are suffering losses and cannot repay the loans, let alone reinvest money in infrastructure development.

100 Eskom. Integrated Report for the Year Ended 31 March 2023. URL: https://www.eskom.co.za/wp-content/uploads/2023/10/Eskom_integrated_report_2023.pdf

At an extraordinary meeting of the Council of Ministers of the African Petroleum Producers Organization (APPO) in early July, it was decided that the headquarters of the new **Africa Energy Bank** (AEB) will be located in Nigeria. The founding documents and the AEB charter were signed in early June by Afreximbank and the Africa Petroleum Producers' Organization (APPO). The same two organisations spearheaded the project to establish the AEB, became its founders and committed themselves to provide a large portion of the initial capital. It is assumed that the bank's capital will initially amount to USD 5 billion. USD 1.5 billion will be provided by Afreximbank and APPO, another USD 1.5 billion will be contributed by the bank's member countries (the minimum contribution is set at USD 83 million, so the founders are counting on about 15-17 countries to join the bank) and another USD 2 billion will be provided by external investors. There is no definite information yet as to which countries will join the membership circle, but Nigeria and Ghana have already contributed funds and, in addition to Algeria, Benin and Nigeria, countries like Angola, Egypt, Côte d'Ivoire, Libya, South Africa, and others are interested in becoming members. The AEB's main task is to reduce and overcome Africa's dependence on external forces. By developing intra-African cooperation and diversifying contacts with non-regional players, it aims to solve the problem of underfunding or, rather, the dependence on external financing and, accordingly, an externally imposed energy and climate agenda. The establishment of the AEB is an important development for Africa and an attempt to strengthen energy sovereignty, but the main work lies ahead and finding money is the main problem. First of all, USD 5 billion is not enough to solve the problem of energy poverty in Africa, where 600 million people still do not have access to electricity. Secondly, the USD 2 billion (or 40% of the capital) that the bank plans to obtain from external investors is a 'black box' and potentially the project's biggest risk. The experience of other Pan-African financial institutions (such as the African Development Bank) shows that the shareholders are likely to be Western countries and Bretton Woods institutions (the IMF and the World Bank) that will form alliances, and as a result, their voice may become decisive at shareholder meetings, so they will get the opportunity to determine the bank's policy. As a result, the AEB may end up financing export-oriented projects like Mozambique LNG or EACOP, ruining the prospects for the development of the domestic markets.

Finally, the main players in the African energy sector (with only a few exceptions) are still Western and Chinese companies. They invest in projects and manage them and supply the necessary equipment and technologies, which means that any project will still depend on the position of non-regional players. All these risks are surmountable and, through further work, additional capitalisation, and greater sovereignty, the bank will be able to achieve its ambitious goals.

The establishment of the AEB indicates an important trend: African countries want to independently determine the development of their energy markets and move away from being subject to external control. The establishment of an independent infrastructure is a key step in this direction, but it must be complemented by other measures, including: developing an adequate energy strategy (at all levels, from the local to the continental); establishing project-evaluation criteria (in terms of the contribution to the energy sovereignty of Africa and not the export of energy resources from Africa); developing regulatory, technical, and environmental supervision tools; strengthening the legislative framework; and supporting African energy companies and knowledge sharing programmes[101].

101 RT. Can Africa seize control of its own energy? URL: https://www.rt.com/africa/601547-sovereignty-africa-energy-bank/

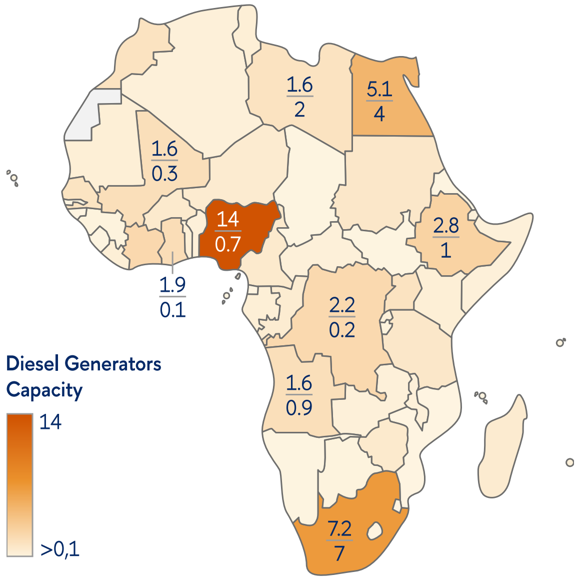
However, national and trans-African businesses are growing stronger in Africa. Large private holdings are being established, and regional financial institutions and banks are becoming more robust. Their role in financing energy projects is also growing, and they are ready to finance, among other things, projects targeted at the development of domestic markets. The number and weight of African companies in the continental energy market along the entire length of the value chain is growing every year – for example, Sasol, PetroSA, Oando, Axxela are successfully operating in the production and transportation of hydrocarbons; Dangote is in oil refining, cement and fertiliser production; Arab Contractors and El Sewedy are in engineering, procurement and construction (EPC) of power plants.

Common framework is being formed as well, AFREC and NEPAD have been joined by public and private initiatives: ACTING, LNG2AFRICA. The number of Pan-African energy conferences and exhibitions (Africa Oil Week, Africa Energy Week), publications (Africa Oil and Gas Journal, Petroleum Africa), etc. is growing.

Do we understand true African installed capacity?

Per capita electricity generation in Africa remains extremely low. With the world average per capita electricity generation at 3,664 kwh, in Africa it is around 600 kwh, but in the majority of sub-Saharan states it is around 100-200 kwh[102]. This ratio is explained by the lack of adequate statistics on electricity generation by **diesel generators**. With all the limitations of such comparisons, the example of Bangladesh, a country similar in economic size and population to Nigeria, but where grid electricity generation is almost three times higher than in Nigeria (100 TWh vs 37 TWh), may be illustrative. It is obvious that actual electricity generation in Nigeria, as in most other countries, is actually several times more than what is reflected in the statistics of national governments and international agencies.

Capacity of diesel generators imported in 2018–2022 (GW)



7.2 — diesel generators capacity imported in 2018–2022 (in gigawatts)
7 — grid capacity added in 2018–2022 (in gigawatts)

Source: prepared by the HSE Center for African Studies based on UNCTAD, ITC Trade Map and Ember data.

That said, the actual installed capacity in most African countries remains unknown.

The statistics on grid generation in Algeria, Egypt and probably South Africa, is more accurate as it is more reliable.

In reality, the power systems of most African countries rely on small diesel generators (below 1 MW), which power most rural households, businesses, cafes, hospitals, airports, hotels and also serve as backup power in cities during grid power outages. In this context, the situation in South Africa with **load-shedding** or in Ghana with **dumsor** does not seem to be as catastrophic as the media tend to show it – during these outages, cities are not plunged into darkness, but turn on diesel generators.

In 2022, according to our estimate based on ITC and UNCTAD data, African countries imported about 200,000 generators with capacity up to 75 kW, 20,000 of 75 to 375 kW and 5,000 of more than 375 kW.

102 Ember. Electricity Data Explorer. URL: https://ember-climate.org/data/data-tools/data-explorer/

On this basis, about 10 GW of diesel generators capacity is imported into Africa annually

However, their installed capacity utilisation factor is much lower than that of grid power plants since they operate with a lower load 2-3 hours per day, meaning their output is much lower than it could be. Nevertheless, it is the estimation of the number of generators, their installed capacity and utilisation that is the key to a correct undestanding of the unaccounted installed capacity and therefore of the and potential demand.

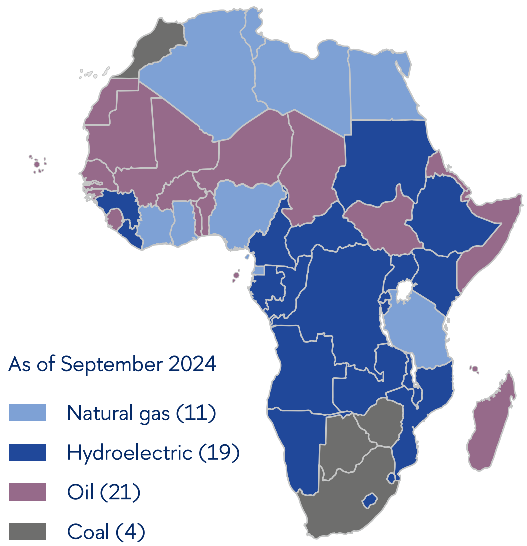
Key importers of generators are Nigeria (USD 1.3 bn and 14 GW over five years), Egypt (USD 0.6 bn and 5.1 GW), Libya (USD 0.4 bn and 1.6 GW), Algeria (USD 0.3 bn and 0.4 GW), Sudan (USD 0.3 bn and 1.1 GW) – together accounting for 44% of the market. Key suppliers of generators over five years are China (USD 10 bn), USA (USD 3.9 bn), UK (USD 3.7 bn).

However, analysing the grid segment of power generation is important in terms of understanding the long-term development prospects of individual countries. Clearly, imports of diesel generators – expensive and dependent on diesel fuel – are a sure indicator that energy policy is not yet leading to positive change and will be replaced by grid power plants.

Gridlock?

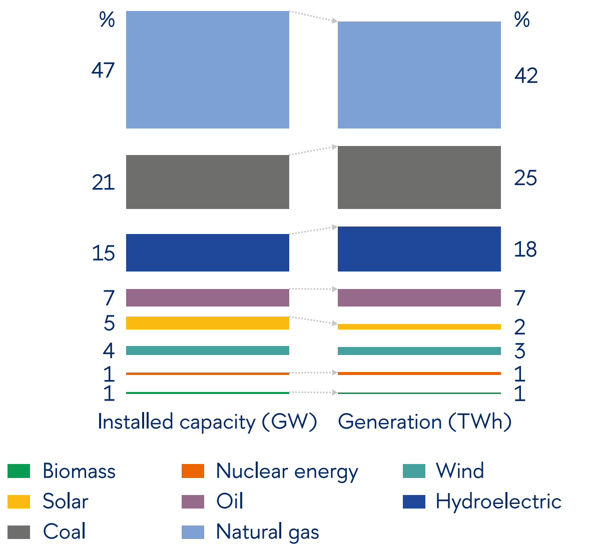
In general, grid electricity generation in Africa is not growing as fast as population or GDP – the growth rate per annum for 2013-2023 was only 1.9%, which is slightly higher than in the CIS (1.4%)[103], but much lower than in the Middle East (3.8%) and Asia (4.5%). In 2023, a record 902.9 TWh was generated, or 3% of the world total (approximately the same amount is generated by power plants in Japan alone).

Main source of electricity generation in Africa



Estimation is based on nominal installed capacity and does not take into account off-grid capacities.

Correlation between installed capacity and generation, 2022



Source: prepared by the HSE Center for African Studies based on AFREC, Climatescope, IMF and Ember data.

103 Energy Institute. Statistical Review of World Energy. URL: https://www.energyinst.org/statistical-review

So far, electricity generation is still very unevenly distributed, with seven countries cumulatively contributing more than 70% of continental generation. As of 2023, those are South Africa (25%), Egypt (22%), Algeria (10%), Morocco (5%), Nigeria (5%), Libya (3%) and Ghana (2%) – collectively totalling 650 TWh.

The structure of electricity consumption is still dominated by industry (40%), but almost half of industrial consumption is accounted for by one country – South Africa. On a continental scale, industrialisation is not expected to grow rapidly, and industry is unlikely to be a driver of energy consumption on a continental scale. Energy consumption growth will be driven by households: this is guaranteed by population growth and the gradual phase-out of biomass as the main source of primary energy.

Another driver of growth in electricity and energy consumption in general may be the development of the agriculture and the food and beverages industries. For example, food production enterprises in Algeria accounted for 10% of electricity, gas and oil products consumption by industry in 2021.

Another major factor of demand growth will be urbanisation and development of urban utilities, as well as processes related to freshwater solutions: its extraction, desalination, purification, delivery to the population in cities and to fields (irrigation). The supply of energy to desert and arid areas is necessary to overcome the consequences of climate change, droughts. In the future, this area will become one of the main drivers of energy consumption, as demonstrated by the experience of Algeria, Libya (Great River project).

The total installed capacity of Africa's grid electricity sector as of 2022 can be estimated at 248 GW[104], with gas accounting for 116 GW (47%), coal 53 GW (21%), hydropower 37 GW (15%), solar 12 GW (5%), wind 9 GW (3%), nuclear 1.9 GW (0.8%) and geothermal and biogas plants less than 1% of the total. In Sub-Saharan Africa, the lack of grid infrastructure has led to the widespread use of diesel generators and the proliferation of isolated power systems / generation facilities. With the establishment of grid infrastructure and transmission lines, gas-to-power and renewables are developing most rapidly.

At the moment, Africa has several energy zones defined by predominant energy source that largely coincide with the established division of the continent into sub-regions

Northern Africa is dominated by gas-to-power, Western Africa by oil, Central and Eastern Africa by hydropower and Southern Africa by coal.

Northern Africa is the only region where the problem of access to electricity can be considered solved. Even in Libya, despite political turmoil, the energy sector has been relatively stable. In all countries of the region, with the exception of Morocco, at least 90% of electricity is generated by natural gas. Morocco does not have significant gas reserves, so the country relies on a combination of coal and renewables. However, it is also looking to increase the share of gas through LNG imports.

In Sahel, the grid electricity deficit is the most pressing: there is no significant hydropotential or petroleum resources, so the countries of the region depend on imports of diesel and fuel oil to supply their few power plants. Even Nigeria, where most grid-connected power plants are gas-fired, actively imports diesel for off-grid generators due to frequent blackouts caused by interruptions in gas supply to power plants and outdated transmission lines. Among Western African countries, Ghana and Côte d'Ivoire have the most balanced energy policy. Over the past decade, they have taken a place among the leaders of electrification on the continent, started exporting electricity to neighbouring countries and kept electricity prices for end consumers at approximately the same level.

104 Ember. Electricity Data Explorer. URL: https://ember-climate.org/data/data-tools/data-explorer/

The topic of Africa's energy sovereignty is often limited to access to electricity, the development of electricity grid infrastructure and the supply of fuel for transportation. Households are left out of the discussion. Despite the seemingly small market in terms of volume, energy consumption by African households is growing annually. Moreover, households occupy key positions in the structure of energy consumption in all African countries, with their share ranging from 20-30% in countries with developed industry (Algeria, Morocco) to 90% in small, predominantly agrarian countries.

Along with the gradual increase in the quality of life, changes in consumer habits and urbanisation, the structure of energy consumption by households is gradually changing. Modern and more environmentally friendly fuels are replacing 'traditional' fuels. Methane, propane, butane, electricity are gradually replacing firewood, kindling and household garbage as a source of heat and energy. The specifics of Africa set a certain framework for the further process of providing access to energy for households. First, because of the warm climate, the usual mid-latitude solutions, often associated with heating infrastructure, are not suitable. Second, the lack of gas transmission infrastructure makes it almost impossible to gasify households with natural gas (methane). Third, the shortage of generating capacity and the state of the midstream infrastructure do not allow grid electricity to be considered as a reliable source of energy. All these factors are long-term, and their influence will be decisive over the next 20-30 years.

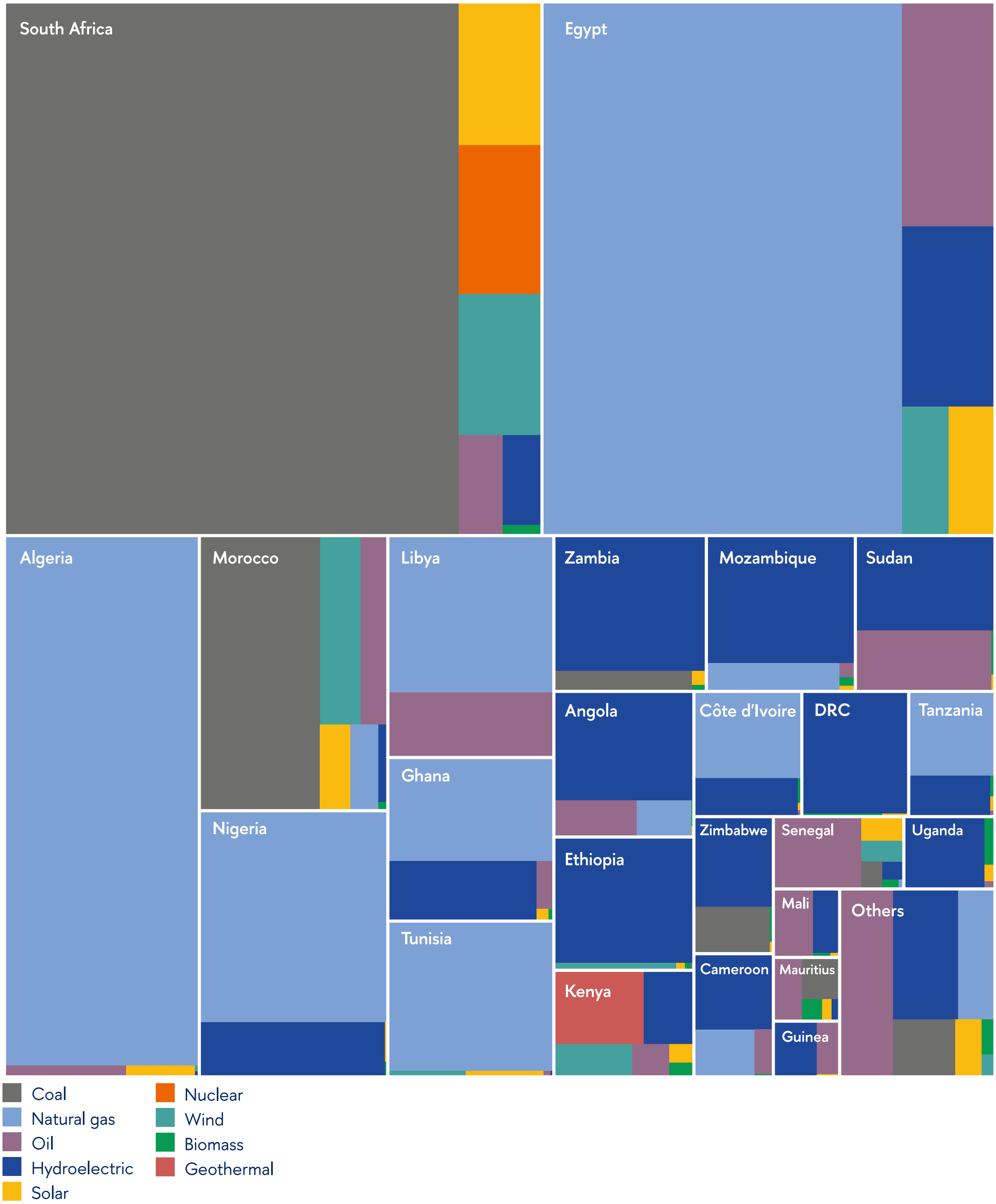
LPG: Tanzania Case

In Tanzania, households account for about 66% of final energy consumption, with biomass continuing to dominate – in the 2019/20 fiscal year, firewood, grass and garbage accounted for 64% of Tanzania's cooking energy consumption, charcoal for 26%, liquefied petroleum gas (LPG) for 5% and electricity for 3%. Against this backdrop, the consumption of LPG is growing in most African countries, including Tanzania. LPG imports to Tanzania are growing at an average annual rate of 16%. Back in the 2016/17 fiscal year, imports (no LPG is produced in Tanzania) amounted to 107,000 tonnes, in 2020/21 – already 217,000 tonnes, in 2021/22 – 252,000 tonnes, in 2022/23 – 293,000 tonnes. For consumers, LPG in a cylinder in Dar es Salaam costs about USD 2.3 per kilogramme.

LPG will continue to displace kerosene, firewood, garbage and dung as fuel in the domestic sector. It is important to take into account that LPG consumption in Tanzania is slightly lower than imports: due to re-export of LPG from Tanzania to other countries in the region (e.g. Zambia) – in 2022, of the 250,000 tonnes of LPG imported into Tanzania, 90,000 tonnes were exported. The key obstacle to increasing consumption of this environmentally friendly and safer domestic fuel remains the lack of infrastructure: receiving terminals, storage facilities and delivery vehicles. However, the overall trend is positive: in June 2024, Oryx in Zanzibar launched the first LPG terminal on the island, Mangapwani, and a new LPG storage facility in Tanga was built in 2023.

The Tanzanian authorities aim to strengthen Tanzania's position not only in the regional but also in the global LPG market. In December 2023, President Samia Suluhu Hassan's Africa Women Clean Cooking Support Program (AWCCSP) initiative was presented at the COP 28 Climate Summit in Dubai to attract funding for projects to improve African households' access to cleaner energy and move away from wood and garbage. In May 2024, Clean Cooking Summit was held in Paris, co-chaired by the President of Tanzania, the Prime Minister of Norway, the President of the African Development Bank and the Executive Director of the IEA. Also in May, the Tanzanian government published the National Clean Cooking Strategy for the period 2024-2034. LPG plays a key role in this strategy. For instance, it envisions construction and expansion of LPG storage facilities in all regions of the country; support for localisation of LPG equipment production in Tanzania; subsidisation of clean cooking projects; amendments to the sectoral legislation.

Electricity generation in Africa by source, 2022



Source: prepared by the HSE Center for African Studies based on AFREC, IMF and Ember data.

The countries of Central and Eastern Africa are located by the basins of the continent's largest rivers – Zambezi, Congo, Nile, Ruvuma – and thus largely rely on HPP in the long term. They also include Angola (inland areas rich in rivers) and Namibia, where the only HPP on the Kunene River (bordering Angola) has so far become the main source of electricity in the country. Some Eastern African countries – most notably Tanzania – are effectively supplementing hydropower generation with gas-fired generation.

The dominance of coal in Southern Africa is due to the fact (apart from thermal coal reserves) that the coal-based power sector of South Africa and other SADC countries dates back to colonial times and the dependence of the economies on energy-intensive mining industry, as well as South Africa's long political and economic autarky and limited access to hydrocarbons (due to sanctions). South Africa, Botswana and Zimbabwe, have not rebuilt their power systems since then.

However, where Western and Eastern Africa has substantial gas reserves that could eventually replace obsolete diesel generation and Central Africa has significant hydropower potential, Southern Africa has neither. The backbone of the region's power sector is outdated coal-fired generation. It will not be possible to meet the growing demand and replace the decommissioned coal-fired generation only through renewable energy sources. The pillar of the region's economy – mining – is energy-intensive and requires an uninterrupted power supply. The solution could be the use of Mozambican gas in South Africa and Zimbabwe, but investors are protecting its main reserves for LNG supplies to China and India.

The prospects are linked to the growth of gas and renewables, but each of Africa's power belts will retain its own characteristics

Thus, in **North Africa**, **gas** will remain the basis of the energy sector in the long term, complemented by renewables. Algeria, Egypt and Libya have their own sources of natural gas sufficient to cover the needs of domestic markets.

Morocco and Tunisia are also dependent on natural gas in their energy consumption, but their own production is insufficient and they are forced to import it. These countries should expect accelerated development of renewable generation, as well as LNG import projects to diversify their natural gas sources. The renewable energy sector in all these countries has, at the same time, certain limits to growth due to seasonal factors, lack of significant hydroresources, etc. In this regard, Morocco, for example, complements renewables by building coal-fired power plants.

In **Western Africa**, **gas-to-power** is projected to develop, primarily in Ghana and Côte d'Ivoire. The currently prevailing oil in most countries of the region will be replaced by natural gas and renewables, with their respective shares determined by geographical location, as well as political and economic conditions. For example, the Republic of Guinea, with its altitude differences and rivers, has good prospects for the construction of HPP, while Senegal and Mauritania are most likely to rely on their own offshore natural gas reserves.

In **Central and Eastern Africa**, **hydropower** will retain its leading position, with renewables and natural gas serving as reserve or peaking capacities.

Coal-fired power in **Southern Africa** is likely to be gradually replaced by **natural gas** and renewables, the proportions depending on market conditions

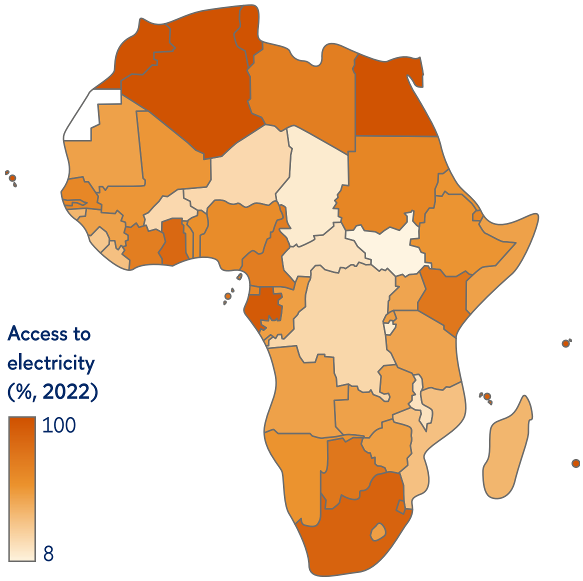
Eastern Africa has comparable reserves to those of Western and Northern Africa, but they are still incomparably less utilised and are still intended more for export. For land-locked regions and countries, as well as island states, a significant increase in renewables is expected, but also with the option of importing LNG.

Access problem

As mentioned above, access to grid electricity for households and businesses remains a key challenge in Sub-Saharan Africa. Universal (over 99% population) access to electricity is still achieved only in Northern African countries and some island states (Seychelles, Mauritius).

The past decade (2013-22) has seen significant progress towards the electricity access target. The number of people with access to electricity increased by 200 million. However, the rate of electrification growth is uneven – half of the new connections came from six countries (Ethiopia, Nigeria, Egypt, Kenya, Tanzania and Uganda).

Electricity access rate, 2022



Source: prepared by the HSE Center for African Studies based on OECD, World Bank and UNSD data.

Growth in access to electricity in most countries has been absorbed by population growth

Only 15 countries were able to electrify faster than the population was growing – excluding Northern Africa and island countries, only six: Kenya, Ghana, Rwanda, Eswatini, South Sudan and Botswana. In a number of countries, however, the growth in access to electricity is not able to cover the growing population, including Nigeria, where the number of new connections during the decade amounted to about 20 million and population growth to 42 million, and the DR Congo, with 7 million and 27 million, respectively.

Kenya is the absolute leader in Sub-Saharan Africa in terms of electrification rates

There access to electricity increased from 40% to 76% over the decade, with 12 million new connections (population growth of 9 million). Ethiopia, Ghana, Rwanda and Côte d'Ivoire are also electrifying at high rates. In all these countries, electrification has been driven by consistent state policies: governments have either invested in capacity (Ethiopia), or provided very favourable regimes for private investors (Ghana, Kenya) or both (Rwanda). And it was state investment in the energy sector that became one of the drivers of faster GDP growth in these countries, not vice versa. It is worth noting that there is not a single 'oil' economy (except for sparsely populated Gabon) among the leading SSA countries in terms of electrification rates.

The UN Sustainable Development Goal (SDG) No. 7 is to achieve universal access to electricity by 2030. The estimated investment required to achieve this goal is USD 33 billion per year. Most of African countries will not be able to meet the target by this date. Projections based on the ratio of electricity consumption to per capita GDP, population density and level of urbanisation yield 515 million people without access to electricity in 2030. Kenya, Ghana and possibly Rwanda have the best prospects for success. South Africa's strong performance may be undermined by economic stagnation and a general structural crisis in the energy sector. The biggest concerns are the pace of electrification in Sahel, CAR and DR Congo. The problem of energy supply in the interior of Africa requires significant investments – with some places requiring gas pipelines, others transmission lines and others autonomous generation and gasification.

What is hampering growth of domestic markets in Africa?

The problem of electricity and energy deficit in Africa is primarily an access problem, which is caused by a complex of factors: export-driven decision-making, when exports to global markets are prioritised over domestic consumption; transport and infrastructure deficit; non-compliance with standards; regulations and legal requirements; and ill-conceived policies on subsidies, tariffs and taxation. All of this, on the one hand, causes a shortage of resources and, on the other hand, a high price for the end consumer or unavailability of goods.

Many African countries still have laws in force that encourage the export of raw materials and energy resources, even if they are not sufficiently supplied to the domestic market. Often such post-colonial legislative frameworks are formed with the direct participation of multinationals, which artificially limit the access of African resources to domestic markets in order to secure those resources for their own production chains outside Africa. For example, in Nigeria the same Shell supplies gas to the export terminal at a price two times lower than the domestic market price[105].

The practice of multinationals influencing the legislation of African countries and directly lobbying their interests to the detriment of local communities and the environment has persisted and flourished. Tender procedures in some countries remain non-transparent, and licences are extended for long periods of time without allowing other companies to participate. Those countries that have taken the path of prioritising domestic markets, developing their own industry and supplying affordable electricity to the population are subject to external pressure. A prime example is Algeria, a country that has successfully solved the problems of energy access, including by restricting natural gas exports. In Algeria, the state-owned oil and gas company Sonatrach buys almost all natural gas output from operating companies, then prioritises supplying it to the domestic market at a subsidised price before finally exporting the surplus.

The problem of imperfect legislation and regulatory framework should not be solved with the help of foreign corporations, especially interested in importing commodities

The problem of imperfect legislation and regulatory framework should not be solved with the help of foreign corporations, especially interested in importing commodities. The arguments of foreign consultants (who may pursue their own hidden agenda) should be carefully checked and compared with solutions that work in countries that have already faced and solved similar problems. The lack of laws in Africa is compounded by the failure to enforce those that do exist. It is still often more cost-effective to violate regulations: fines for violations are less than the cost of compliance. Another facet of the same problem is the lack of tools to monitor compliance: bylaws, regulations, authorised institutions, personnel and technical means.

For African countries, an approach that combines empowering local communities with the necessary tools and power for environmental monitoring and making infrastructure operators fully liable for environmental damage that occurs because of normal or abnormal operations or any damage to the infrastructure they operate, regardless of the cause, may be recommended. Even damage from illegal taps and resulting spills of oil and oil products should also be compensated by pipeline operators, as they are ultimately responsible for the integrity of the infrastructure and are obliged to take care of it. Thus, regulators will then be better able to fulfil their functions: to correlate community signals with operators' reports on infrastructure condition and objective remote monitoring data. Operators, on the other hand, should provide regulators with

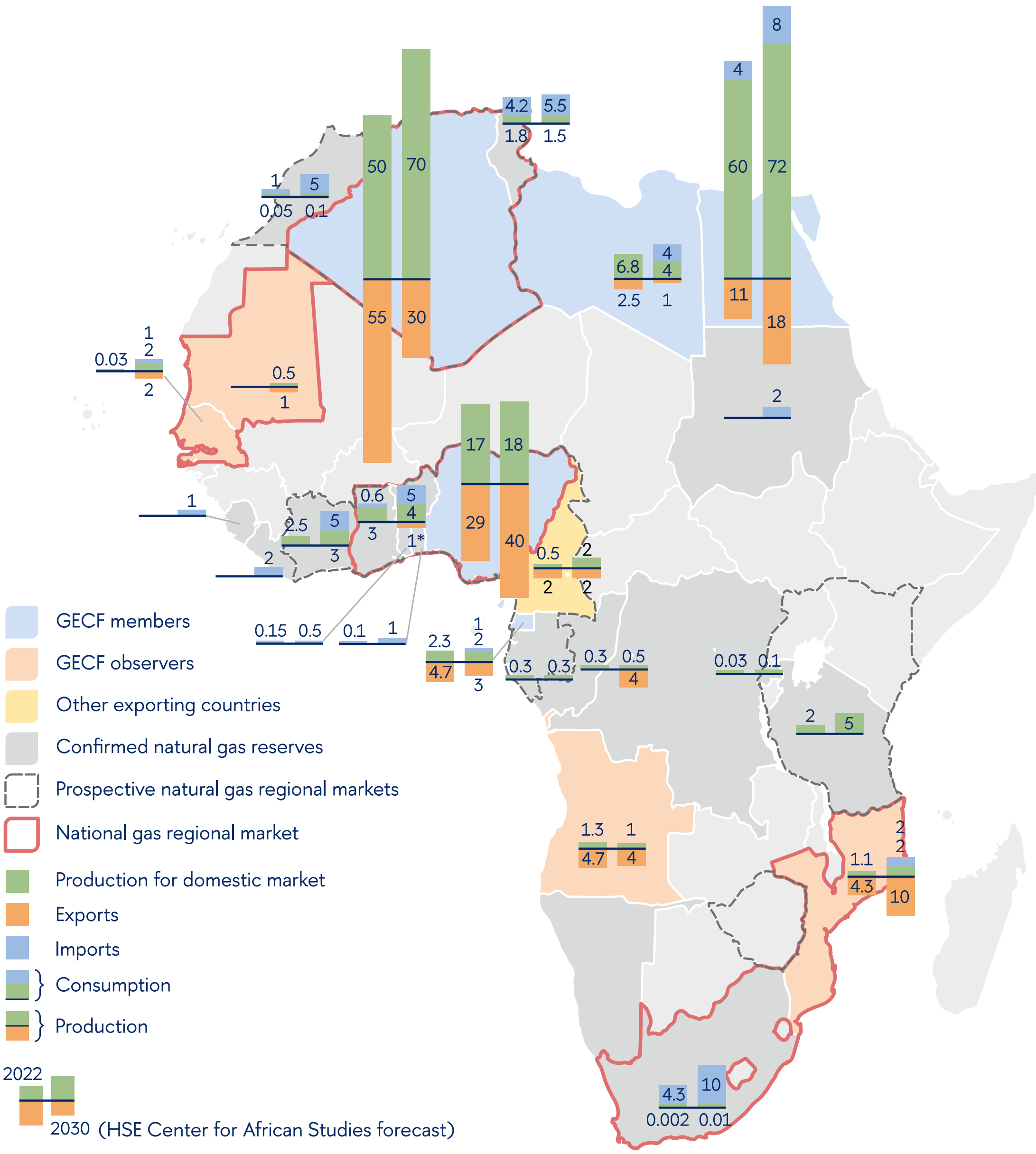
105 Thus, according to NNPC, the price of gas supplied by SPDC (a joint venture with Shell participation) to the Nigeria LNG plant in May 2021 was USD 1.3 per MMBTU. At the same time, the price for the same volume for power plants in the domestic market was USD 2.5 (reduced to USD 2.18 since July 2021), and for commercial consumers - USD 3.

timely and accurate information on technical parameters of infrastructure performance, problems and accidents, and should be held liable for failure to provide such information, commensurate with possible damage.

No continental – or even sub-regional – energy markets have emerged

In the 60 years of independence of most African countries, no continental – or even sub-regional – energy markets have emerged. In some cases,

Africa's natural gas markets, 2022–2030



*Reexports

Source: prepared by the HSE Center for African Studies based on own research, operators' data, AFREC. JODI-Gas and GECF.

pairs or triplets of countries have been formed, connected by common infrastructure, but even here it is difficult to talk about a market in its full-fledged sense. Usually, it is two or three centres of gas or oil consumption, connected by a single pipeline. For now, regional markets with a common system of pricing, distribution, storage and reservation are still absent, and the prerequisites for their emergence do not exist. The concept of regional power pools, which are proclaimed at the level of each regional economic community, is at the most advanced stage. For some countries, electricity imports within such pools form the basis of the national energy system, but even in this case it is difficult to talk about complex market relations that would allow the formation of a single electricity price market or even a joint dispatch centre. There are still two or three high-voltage power lines connecting neighbouring states.

The prospects of African energy markets and their investment appeal – at least in the medium term – may be linked to the sub-regional cooperation

As long as individual countries cannot be considered as promising investment destinations due to their low population density, low degree of industrialisation, insufficient consumption of natural gas and underdeveloped power grids, investors will be able to justify the economic feasibility of projects through plans to re-export gas, oil products, LPG, electricity, diesel fuel, etc. to the regional market.

One positive example is the emerging sub-regional markets for petroleum products, and a marker of this are such 'statistical anomalies' in trade statistics as Senegal, Tanzania, Togo, Kenya, Mozambique. These countries import two and sometimes three times more oil products than they consume just for re-export to neighbouring countries in the region. Regional companies and traders (incidentally, owned by local investors) are formed for these needs and invest in infrastructure for import, storage, transshipment and distribution.

New energy transition – new prospects and challenges

Climate change and the energy transition occurring simultaneously will determine how African countries will cope with energy shortages. The transition to renewable energies is the second energy transition that African countries are experiencing as modern and independent states. The first energy transition of this kind occurred in the 1940s-60s, led to a significant increase in the share of hydrocarbons in primary consumption and coincided with the decolonisation process. The changes now underway in global demand for energy, semiconductors and critical minerals, although still relatively volatile, demonstrate the role that Africa will play in the global energy transition and the reshaping of the world economy in the 21st century. As the oil and gas industry shows, the norms and rules, ownership structure of the main assets, and the control of reserves are difficult to revise in a fundamental way.

The oil and gas industries of Algeria, Angola and Nigeria, despite civil wars, changes in foreign and domestic policy, are developing according to the rules that were established shortly before, during and immediately after decolonisation. That influence on legislation, strategies and decision-making leaders allows foreign corporations to maintain their influence despite any political changes. Thus, the norm once established becomes rigid, a situation happening not only with oil and gas, but also with gold, platinum, uranium, etc. However, in Algeria, those norms were born in the struggle against colonial pressure, while in Nigeria they were formed by British citizens.

The competition between the United States and China in Africa is becoming fiercer by the year – e.g. in the struggle for access to the transportation and logistics infrastructure linking southeastern Congo to the ocean ports. This great power competition gives African countries the opportunity to use this for the benefit of their economic development, a right to decide and to tighten regulatory and environmental measures, as well as control over the activities of foreign investors.

The main marker of the US interest in Africa's critical minerals remains support for the development of the so-called Lobito Corridor. The Lobito Corridor is the name for a group of projects aimed at developing transport infrastructure in Angola, DR Congo and Zambia to provide them with access to the Atlantic coast of Africa. The transport infrastructure (including the Benguela railway line from Tenke in DR Congo to Lobito in Angola with a total length of 1866 km, gauge – 1067 mm) connecting the southeastern regions of DR Congo (Katanga) with Atlantic coast was built during colonial times – in the early 20th century. At that time, some of its sections were used to export uranium, tin and copper from the Belgian Congo through the Atlantic ports.

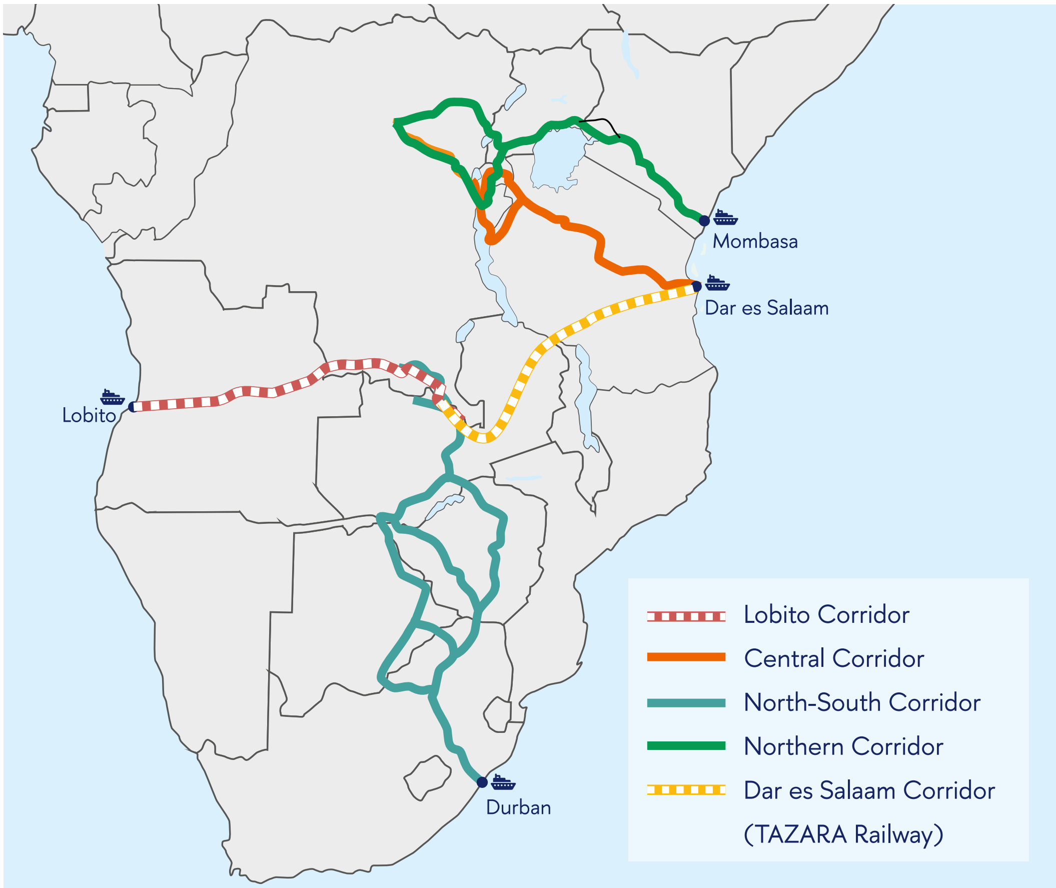
Civil wars in DR Congo and Angola in the second half of the 20th century led to the destruction of the railroad and its fragmentation. Sections of the railroad were reconstructed in the 1990s and 2000s, but were operated separately. In July 2022, the Angolan government announced the results of the tender for the concession of the Angolan railroad section Lobito-Luao (1344 km) for 30 years. The winning bid was made by the Lobito Atlantic Railway consortium (in which Singaporean trader Trafigura and Portuguese construction company Mota-Engil own 49.5% each, and Belgian rail infrastructure operator Vecturis owns 1%), which beat the bid of a Chinese consortium (CTIC, Sinotrans and CR20). In July 2023, a ceremony was held to hand over the railroad to the consortium's management.

In February 2024, the first contracts for transportation of cargoes by rail were signed. Trafigura received the right to transport 450 thousand tonnes per year from 2025, and the consortium of Canadian mining company Ivanhoe Mines and Chinese Zijin Mining, which is implementing a copper mining project in the DR Congo (Kamoa-Kakula) received the right for transportation in the range of 120-240 thousand tonnes per year from 2025 (10 thousand tonnes in 2024).

In parallel, in December 2023, AGL (a division of Swiss shipping company MSC) received in concession the port of Lobito under the obligation to invest in its development at least USD 100 million. The project to develop the Lobito Corridor enjoys the support of Western countries. At the G7 summit in 2023, the US president J. Biden announced his intention to support the project as part of the global initiative Partnership for Global Infrastructure and Investment (PGI). In October 2023, the governments of the United States, Angola, DR Congo, Zambia, the European Union Commission and the African Finance Corporation (AFC) signed a memorandum of understanding to cooperate in the development of the Lobito Corridor. In February 2024, the US state-owned DFC Corporation approved a USD 250 million loan to AFC for the Lobito Corridor project to build a rail line that would connect Zambia and a section of the Benguela railroad in Angola. The loan must be approved by the US Congress.

The Lobito Corridor project is apparently aimed at creating an alternative logistics route for the export of minerals from Zambia and southeastern Congo as opposed to the 'eastbound' route. As of May 2024, most of the ore from Katanga and the Copperbelt is trucked eastward and further exported through the port of Dar es Salaam to China. In recent years, the PRC has also been actively investing in the development of railway infrastructure in Tanzania and Zambia to optimise ore exports. In September 2024, the PRC announced its intention to finance the TAZARA railroad connecting Zambia to the Tanzanian port of Dar es Salaam.

Central, Eastern and Southern Africa transport infrastructure



Source: prepared by the HSE Center for African Studies.

African businesses are getting stronger, engaging not only in retail trade but also in large-scale investment projects across Africa

African countries are now much more independent politically and have already formed relatively stable institutions, nationally oriented political and business elites, as well as strong state-owned companies. Also, at long last, private African businesses are getting stronger, engaging not only in retail trade but also in large-scale investment projects across Africa (Oando, ARM, Dangote). The growth of domestic resources allows Africa to count on better negotiating positions with external players and, consequently, greater dividends from its natural wealth.

Moreover, while Africa's share in the world's oil and gas reserves is 8-10%, which can be replaced by hydrocarbons from other regions of the world, of its reserves of a number of strategic minerals necessary for the energy transition, such as platinum, palladium, cobalt, copper, titanium, graphite, REM, are irreplaceable and provide about half of the world's production and world reserves, which, of course, will affect the interest of foreign investors in the African resource base and lead not to the Scramble for Africa, but rather for its attention[106].

Data control in its broadest sense becomes key in this context.

106 In terms of critical minerals one can speak about 'Scramble for African Attention', not about 'Scramble for Africa'.

The lack of information, knowledge and data on Africa's natural reserves and ecosystems is another key risk preventing African countries from gaining energy sovereignty

The term 'resource curse' is often applied to Africa, but it can be complemented by another curse, namely 'the curse of non-existent resources'. There have been dozens of conflicts based on speculation about the alleged availability of resources or their scarcity, when in fact it turns out that either these resources have not been proven to exist, or they do not exist at all, or they are so scarce that only one small paramilitary group can enrich itself on them.

Speculation about the alleged presence of hydrocarbon reserves in Lake Malawi continues to contribute to tensions between Tanzania and Malawi, the myth of uranium reserves in the Central African Republic leads to ongoing conflict, speculations about declining water levels in the Nile nearly led to interstate conflict between Egypt and Ethiopia. It is not only the lack of information about resources, the political factor, military prestige, the interests of certain groups inclined to justify their actions by the presence of these or those resources play their role, but the lack of knowledge, geological information and even autonomy of African governments in analysing and interpreting geological information remains one of the most pressing issues.

Not all countries still have legal requirements to provide the host country with geological exploration results, so foreign investors do not file their survey results with the host government, but 'take' them with them and then resell them to third parties. Thereafter, the state gradually loses control over its own resources, as it does not understand the real condition of reserves and cannot take them into account when developing a general economic strategy.

The lack of data on domestic markets, real demand and consumption, as noted above, leads to stagnation of domestic markets

Companies interested in investing in domestic markets are faced with non-transparency, lack of information or deliberate manipulation by intermediaries and are forced to rely on information provided by Western consultants.

The most important problem remains the unreliability of measurements of climate indicators, such as precipitation levels, water levels in reservoirs, groundwater levels and their quality, climate zone boundaries, etc., which allows stakeholders – from governments to international non-governmental organisations – to freely speculate on baseline indicators to justify their own interpretations of climate change and recommendations within their own agenda.

From the African perspective, the industrialised countries bear the main responsibility for catastrophic climate change. However, Africa needs more tools to justify and defend this position – with the ultimate goal of receiving fair compensation in material and monetary form or in the form of other concessions from their former colonisers, China or the United States. Africa's response can be based on the establishment of its own network of measurements and observations of global climate change. Simply put, the climate agenda is owned by those who have relevant, reliable and, no less importantly, legitimate (i.e. recognised by international partners) information on the dynamics of indicators.

The great potential in this regard is clearly related to digital solutions. The spread of unmanned aerial vehicle technologies, the cheapening of data centre technologies, sattelite survey and, finally, maturing African national companies will allow African states to form integrated systems for managing their own natural resources and then integrated georgraphic information systems that can be used to monitor the state of soils and forests, water levels in rivers, fire danger, climate shocks, soil erosion and desertification dynamics. Such information systems can be both sectoral and country-wide, but they will make it possible to better understand the structure of domestic markets, forecast the dynamics of their development, and offer more promising projects to foreign investors.

African quest for digital sovereignty

New stage of African digitalisation

The digitalisation of African countries has entered into a new stage where governments tend to adopt a more proactive approach and aim to gain more control over the sector. For now, efforts have been concentrated on data governance and localisation; with data becoming a commodity and Africa generating a vast amount of this strategic asset, governments are aiming to control and leverage the resource.

33 countries have already enacted personal data protection regulations. Some of them, like Senegal and Rwanda, require data to be stored locally. Furthermore, in 2023 the African Union Convention on Cyber Security and Personal Data Protection entered into force, 9 years after its adoption. The year 2024 was marked by the release of the "Common African Position on the Application of International Law to the Use of Information and Communication Technologies in Cyberspace" communiqué.

In 2016, the Network of African Data Protection Authorities (NADPA-RAPDP) was established in Ouagadougou to provide a platform for exchange and cooperation between member authorities and represent the interests of African countries in the global arena. It now comprises data protection authorities from 18 African countries[107]. In May 2024, at the network's annual general meeting, Eliud Owalo, at the time the Cabinet Secretary at the Ministry of Information, Communications and Digital Economy of Kenya[108], called for digital sovereignty and data governance in Africa[109].

Given the critical importance of ICT in overcoming major socio-economic challenges and fostering self-reliance, there is a need to ensure not only regulation but also sovereign development of the sector

Information and communication technologies (ICTs) are widely considered as an enabler for addressing core socio-economic challenges in a resource-constrained environment, allowing developing nations to build self-reliance in the long run, thus giving rise to the need to ensure not just the regulation but also the sovereign development of the sector.

Digital sovereignty is often reduced to the localisation of data and the development of data infrastructure or government control over the sector[110].

Digital sovereignty implies sovereign decision-making about the development of ICTs in a country based on sovereign expertise and driven by national interests

This suggests independence at every stage of the process including strategising, regulation, design, operation, management and human resources development.

107 Angola, Benin, Burkina Faso, Chad, Cabo Verde, Gabon, Ghana, Côte-d'Ivoire, Kenya, Mali, Mauritius, Morocco, Niger, Nigeria, São Tomé and Príncipe, Senegal, South Africa, Tunisia, Uganda, Eswatini, Mauritania, Zambia, Zimbabwe.

108 Now Eliud Owalo serves as the Deputy Chief of Staff in the Executive Office of the President of Kenya (Performance and Delivery Management).

109 Network of African Data Protection Authorities (NADPA/RAPDP). Annual General Meeting and Conference NADPA-RAPDP. 2024. URL: https://www.rapdp.org/en/node/213

110 Sometimes, digital sovereignty and data sovereignty are even used interchangeably (e.g. one American law article states: "By "digital sovereignty" (or "data sovereignty"), I [the author] mean the state's policy or set of policies toward ensuring national sovereignty online."). (Source: Woods, Andrew Keane, 'Digital Sovereignty + Artificial Intelligence', in Anupam Chander, and Haochen Sun (eds), Data Sovereignty: From the Digital Silk Road to the Return of the State (New York, 2023; online edn, Oxford Academic, 14 Dec. 2023), https://doi.org/10.1093/oso/9780197582794.003.0006, accessed 23 Oct. 2024.) There is also an understanding of digital sovereignty in relation to cyberoperations on the territory of a foreign state with two approaches: "pure sovereignty" and "relative sovereignty". (Source: OpinioJuris. The African Union (Rightly) Endorses Pure Sovereignty in Cyberspace. URL: https://opiniojuris.org/2024/02/05/the-african-union-rightly-endorses-pure-sovereignty-in-cyberspace/)

As a result, digitalisation, along with a promise of a brighter future, brings new ways and reasons for external influence, also known as "digital colonialism". It also brings new excuses, or rather old ones under new wrapping. Under the international assistance programmes and the motto of "bridging the digital divide", external actors and transnational corporations build ICT infrastructure and digital solutions, develop strategies and laws, train Africans, all in order to lay the groundwork for expanding their own presence and revenues in the region, as well as accessing valuable data to train AI models and influence the decision-making. They also use loopholes in the data protection and competition laws to gain advantage in the African markets.

International development assistance

The untapped potential of African digital markets with the ever-growing population, ICT infrastructure and low competition has been attracting all sorts of international actors launching the "Scramble for Africa of the XXI century"[111], which includes multinational corporations, development assistance, foreign companies going international, with them all pursuing their own objectives – both political and economic.

In 2024, the World Bank estimated that USD 86 billion in investments is needed to ensure internet connection on the continent[112]. Such an assessment is a part of the effort to justify the need for and importance of foreign investment in the sector.

As for African countries, digitalisation is seen not as an end in itself but as an opportunity to address major socio-economic problems, more and more ICT initiatives are labelled as "development cooperation".

African countries tend to approach the choice of partners pragmatically, without political prejudices, and strive to diversify partnership networks. In his interview to the Global Economic Governance Programme, the Director General of the Information and Digital Systems Agency (ASIN) of Benin Marc-André Loko highlighted: *"In its digital strategy, Benin seeks to diversify its network of best-in-class partners"*[113]. The same approach is followed by most other governments.

However, external financing and assistance often go hand in hand with aid conditions and terms. For instance, Chinese institutions often tie the provision of financing to hiring a Chinese contractor[114]. Similarly, the World Bank's lending also comes with numerous conditions including hiring a contractor from a short list. Thus, external financing limits African governments' independence in decision-making.

In 1989, the continent accounted for over one-third of all ICT-related lending by the World Bank with a focus on infrastructure projects, and in 1990 over 90% of its projects in Africa contained a significant ICT component[115]. Multinational computer vendors (such as IBM France, Groupe Bull, ICL) entered the market by providing equipment to governments pursuing digitalisation. At the time, 19% of the ICT-related lending by the World Bank was in the sector of agriculture and rural development (mainly for finance and accounting, information management, management of information systems, office technology, statistics).

Modern initiatives draw on this initial experience, its failures and successes. One of the main challenges lies in the gap between reality and strategy: many initiatives failed because of unrealistic and impractical goals set and a lack of preliminary analysis. Donors tended to underestimate the funding and time required for assistance projects.

111 Danielle Coleman, Digital Colonialism: The 21st Century Scramble for Africa through the Extraction and Control of User Data and the Limitations of Data Protection Laws, 24 MICH. J. RACE & L. 417 (2019). Available at: https://repository.law.umich.edu/mjrl/vol24/iss2/6

112 Resilient. Digital Africa. Mobilizing $86 billion to connect the entire Africa. 2024. URL: https://resilient.digital-africa.co/en/blog/2024/05/02/mobilizing-86-billion-to-connect-the-entire-africa/

113 Global Economic Governance Programme. URL: https://www.geg.ox.ac.uk/content/marc-andre-loko-dans-sa-strategie-numerique-le-benin-est-dans-une-logique-de

114 Inclusive Development International. Following the money. International contracting. URL: https://www.followingthemoney.org/international-contracting/

115 Moussa, Antoun, and Robert Schware. "Informatics in Africa: Lessons from World Bank Experience." World Development 20, no. 12 (1992): 1737–52. doi:10.1016/0305-750X(92)90088-D.

Cases of international assistance in developing e-strategies for Africa

Country	Project
Cameroon	In 2011, the National Agency for Information and Communication Technology (l'Agence Nationale des Technologies de l'Information et de la Communication, ANTIC) presented a draft of its e-government strategy, EGOV.CM developed in collaboration with the **United Nations University (UNU)**[116].
Comoros	The first national digital strategy was adopted by the Council of Ministers in 2019 – Digital Comoros 2028 (Comores Numérique 2028). The **World Bank** assists in the implementation of the initiative[117].
Gabon	The Gabon Numerique 2025 was developed with financial support and consultation from the **African Development Bank (AfDB)**.
The Gambia	In September 2022, the AU-EU D4D Hub sent a technical assistance mission led by the **e-Governance Academy** and **Estonia's ICT cluster**[118] (ITL) at the request of Gambia's Ministry of Communications and Digital Economy. The mission is to assess the country's digital readiness and assist in developing a digital economy strategy[119].
Republic of Guinea	In 2015, the Ministry of Post, Telecommunications and the Digital Economy of the Republic of Guinea adopted the 2016-2020 programme which was aimed at the elaboration of a strategy for the development of telecommunications and the digital economy as an independent sector. This document was developed with material support from the West African Regional Communication Infrastructure Programme (WARCIP) of the **World Bank**[120].
Republic of Guinea	The digital road map document, aimed to provide a digital strategy for the government of the Republic of Guinea, was drafted in 2020 by the **League of Arab States**[121].
Namibia	The Namibian e-governance policy of 2005 was preceded by a study of international practices and consultations with an Indian company – one of the **international centres of excellence** created by the **Confederation of Indian Industry**[122] – which also provided a feasibility report on e-governance in Namibia in June 2004 with recommendations on further e-governance development in the country.
Senegal	In November 2022, the Senegalese government requested technical assistance from the **D4D Hub** to study the prospects of EU support for Senegal's digital strategy – Stratégie Sénégal Numérique 2025. The research was led by **Expertise France** in partnership with **Enabel**, **LuxDev** and **GIZ**[123]. The development of the strategy was supported by the **African Development Bank**.
Tanzania	In December 2022, the **e-Governance Academy (eGA)** and the **Estonian Association of Information Technology and Telecommunications** (ITL) within the AU-EU D4D Hub started a technical assistance mission with the aim of assisting the Tanzanian ICT Commission (ICTC) and the Ministry of ICT in analysing existing challenges and strengths, potential of the Tanzania's ICT sector and developing a new three-year roadmap for boosting digital transformation in the country[124].
Zanzibar (Tanzania)	The **Danish International Development Agency (DANIDA)** provided technical and financial support to assess the Zanzibar digital health sector and develop the Digital Health Strategy 2020/21-2024/25. The **USAID**, **PATH** and **D-Tree International** also supported the development of the strategy.
Tunisia	The **e-Governance Academy**[125] experts advised the Tunisian Ministry of Communication and the National Agency of Electronic Certification ("Tuntrust") by providing a policy note on developing e-IDs in the country[126]. The project was funded by the European Bank for Reconstruction and Development.

116 United Nations University. UNU assists in developing national e-Governance strategy for Cameroon. URL: https://unu.edu/news/news/unu-assists-in-developing-national-e-governance-strategy-for-cameroon.html

117 ANADEN. Comores Numérique 2028. URL : https://www.anaden.org/uploads/media/5e3969272d9f8/strat-comores-numerique-v2-3-compresse.pdf

118 A union of Estonian ICT companies aiming to export their solutions.

119 D4D Hub. AU-EU D4D Hub supports digital transformation in Rwanda and the Gambia. 2022. URL: https://d4dhub.eu/news/rwanda-gambia

120 Ministry of Posts, Telecommunications and The Digital Economy of Guinea. Document de Politique et de Stratégies Nationales de Développement des Technologies de l'Information et de la Communication de la République de Guinée. URL: https://smartafrica.org/IMG/pdf/srategie_tic_finale_v.6_28_juillet_2016.pdf

121 Guinea Digital Roadmap. URL: https://www.arab-digital-economy.org/2020/12.pdf

122 Confederation of Indian Industry. Centres of Excellence. URL: https://www.cii.in/Centres_of_Excellence.aspx

123 D4D Hub. Le D4D Hub UA-UE renforce la coopération numérique de la Team Europe avec le Sénégal. 2022. URL: https://d4dhub.eu/news/le-d4d-hub-ua-ue-renforce-la-coop%C3%A9ration-num%C3%A9rique-de-la-team-europe-avec-le-s%C3%A9n%C3%A9gal

124 D4D Hub. A new digital transformation roadmap for Tanzania. 2023. URL: https://d4dhub.eu/news/a-new-digital-transformation-roadmap-for-tanzania

125 A non-profit organisation established in 2002 by the Government of Estonia in collaboration with the Open Society Institute (OSI) and the United Nations Development Programme (UNDP). It derives from Estonian experience.

126 e-Governance Academy. Supporting the e-Identity processes in Tunisia. 2022. URL: https://ega.ee/project/supporting-the-e-identity-processes-in-tunisia/

Assistance programmes are instrumental as a soft power tool to increase external influence in African countries by promoting solutions and technologies that are beneficial to the initiators

They provide conditions for the development and implementation of laws, regulations, policies and practices in the countries, which, through management demand and requirements, contribute to the development of their political and economic relations with a donor. The result is the channels of access to the markets. Therefore, such programmes are increasingly being implemented by individual countries and the corporate sector.

Assistance at the stage of assessment and strategic planning grants external actors the opportunity to influence directions of further development of the sector and tailor it in line with their own interests

This brings to light an imbalance between the supply and demand of development assistance in the ICT sphere: the supply is often driven by interests of international actors rather than by the demand of African countries.

Assistance projects tend to set ambitious, yet unrealistic goals in line with the donor's strategies strategies, often without proper assessment and ignoring the needs of the recipient, which leads to fragmentation of efforts and waste of resources

Another aspect to consider is international cooperation in developing e-strategies and policies for African countries. External actors provide assistance at the preliminary stages – i.e. assessing the digital sector of a country, challenges and perspectives, suggesting best practices – and participate directly in developing the strategies. The Namibian e-governance policy of 2005 was preceded by a study of international practices and consultations with an Indian company – one of the international "centres of excellence" created by the Confederation of Indian Industry[127] – which also provided a feasibility report on e-governance in Namibia in June 2004 with recommendations on further e-governance development in the country. Likewise, the AU Digital Transformation Strategy was developed with the assistance of multiple international organisations including the UN Economic Commission for Africa, Smart Africa, ITU and the World Bank.

World Bank

The World Bank was among the pioneers in assisting African countries with digitalisation. The organisation has launched numerous digitalisation programmes tailored for particular countries like the Digital Cabo Verde project (approved in 2021), Sierra Leone Digital Transformation Project (approved in 2022), eTransform Ghana Project (approved in 2013)[128]. Over the last decade, its investment in digitalisation projects on the continent reached USD 2.8 billion[129]. The projects are financed mainly by the International Development Association (IDA) which is funded by contributions from the governments of member countries. Each country's share defines its voting power in IDA: the larger the share, the greater the influence on the organisation's strategy, priorities and funding decisions. The United States, the United Kingdom, Japan,

127 Confederation of Indian Industry. Centres of Excellence. URL: https://www.cii.in/Centres_of_Excellence.aspx

128 The World Bank. Ghana's eTransform Project Trains Tomorrow's Leaders. 2021. URL: https://www.worldbank.org/en/news/feature/2021/11/17/ghana-s-etransform-project-trains-tomorrow-s-leaders

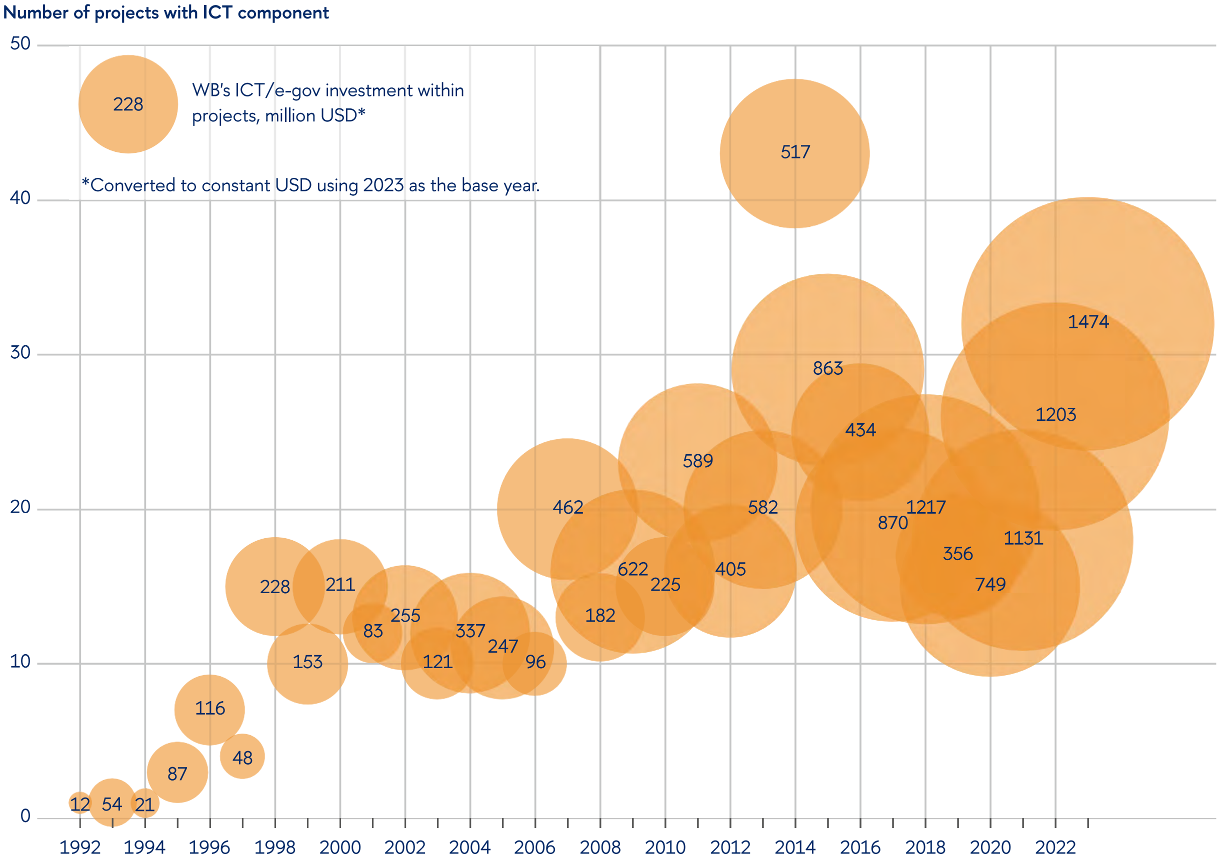
129 World Bank. Results Brief. Digital Transformation Drives Development in Africa. 2024. URL: https://www.worldbank.org/en/results/2024/01/18/digital-transformation-drives-development-in-afe-afw-africa

France and Saudi Arabia make up the top five countries by voting power[130 131].

Between 1992 and 2024 the World Bank implemented in Africa more than 600 projects with a significant ICT component, total ICT investment exceeded USD 15.5 billion[132]

Top five recipients in terms of investment are Nigeria, Kenya, Ethiopia, DR Congo, Egypt. Algeria, Eritrea, Sao Tome and Principe, Eswatini, Guinea and Zimbabwe accounted for the least lending by the World Bank.

World Bank's projects with ICT component in Africa dynamics (1992-2023)



Source: prepared by the HSE Center for African Studies based on the World Bank data (Oct 2022).

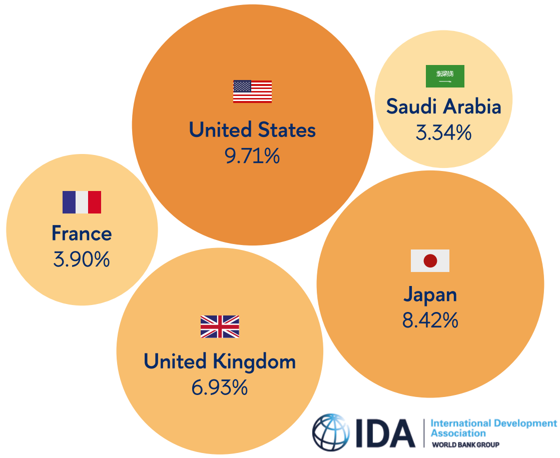
130 World Bank. Public documents. International Development Association. Voting Power of Member Countries (As of September 30, 2024). URL: https://thedocs.worldbank.org/en/doc/0d24f6d754f61643639df76dac97fda3-0330032021/original/IDACountryVotingTable.pdf

131 Noteworthy, the United States is also the only World Bank shareholder with a veto power, in particular, over structural changes in the institution. However, having 15.49% share in the IBRD, the US de facto has a veto power over its decisions, whilst the IBRD Board of Directors selects the President of the World Bank. As a result, the President has always been a US citizen. Furthermore, Catherine Gwin, who worked in operations evaluation department for corporate evaluation and methods as a lead evaluation officer (2001-2006) and for an independent evaluation group for corporate evaluation and methods as a lead evaluation officer (2006-2007), stated: "Decisions are, however, often worked out between the United States and Bank management before they ever get to the board, or among members of the board before they get to a vote". (Source: Kapur, Devesh, Lewis, John P., Webb, Richard. 1997. The World Bank, Its First Half Century, volume 2, p. 244. URL: https://documents1.worldbank.org/curated/pt/405561468331913038/pdf/578750PUB0v20W10Box353775B01PUBLIC1.pdf)

132 Authors' calculations based on the World Bank Digital Governance Projects database (October 2022) and projects information. URL: https://projects.worldbank.org/en/projects-operations/projects-list?os=0

Top-5 countries by voting power in the International Development Association

Together the largest shareholders hold **1/3** of votes



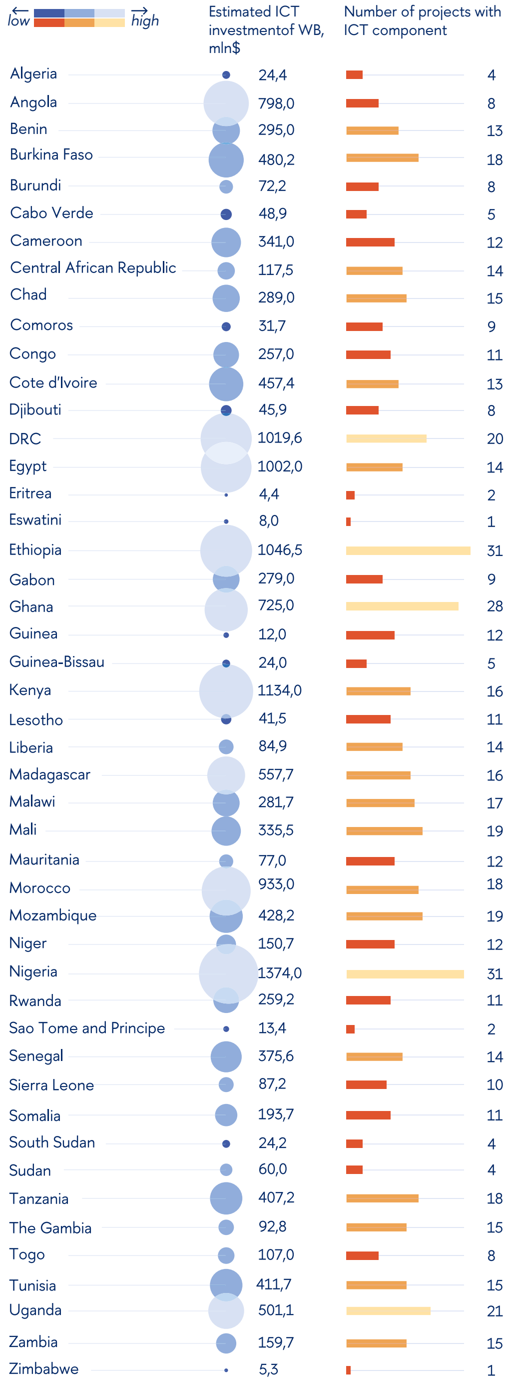
Source: prepared by the HSE Center for African Studies based on the World Bank data.

The top five recipients in terms of amount are Nigeria, Ghana, Ethiopia, DR Congo and Uganda, whereas Algeria, Eritrea, Sao Tome and Principe, Eswatini and Zimbabwe accounted for the least number the World Bank's projects with ICT component.

In assessing the degree of each country's independence in ICT development, not only international participation should be taken into account but also the share of the ICT sector in the GDP.

A specific area of cooperation for the World Bank is digital governance, or GovTech. The World Bank Digital Governance Projects database[133] set in 2015 (last updated in October 2022) contains a total of 1,450 projects with ICT or e-governance components financed by the organisation worldwide since 1992. Africa – both Sub-Saharan and Northern – accounts for 505 projects (or 35% of all projects) and USD 13.8 billion in investments (42%). It is noteworthy that not all of the projects initially included ICT components and sometimes the need for digitalisation was determined in the process of implementation (e.g. in the case of the Reforma da Administração Financeira do Estado (RAFE) in Cabo Verde).

World Bank projects in Africa with ICT component (1992-2024)



Source: prepared by the HSE Center for African studies based on the World Bank projects information and Digital Governance Projects database (October 2022).

133 The World Bank. Digital Governance Projects Database. URL: https://datacatalog.worldbank.org/search/dataset/0038056/Digital-Governance-Projects-Database

China

At the Eighth Ministerial Conference of the Forum on China-Africa Cooperation (FOCAC) held in November 2021, China unveiled a programme dedicated to digital development in Africa, according to which China plans to implement "10 projects in the field of digital economy for Africa by 2035, create centres of Sino-African cooperation in the field of digital innovation and support the development of Sino-African joint laboratories, partner institutes and bases of cooperation in the field of scientific and technical innovations"[134].

The same year, the Dakar Action Plan (2022-2024), containing points dedicated to the digital economy, the exchange of scientific and technical knowledge and experience in the field of public services, was adopted[135]. In the document, China once again promises to implement "10 projects in the field of digital economy for Africa", support the construction of digital infrastructure in Africa and continue digital dialogue via FOCAC and China-Africa Internet Development and Cooperation Forum.

In the Dakar Plan, China declares its readiness to enhance communication and exchanges with governments of African countries and organisations like "Smart Africa" to boost the innovative development of digital technology in Africa and China-Africa digital cooperation. The two sides will enhance cooperation and promote coordination on personnel training, internet connectivity and the construction of innovation centres, among others.

Both above-mentioned documents support the expansion of cooperation within the Digital Silk Road (DSR) framework. For parties participating in the initiative, China offers digital products and services at competitive prices, investments in their ICT infrastructure, joint technology projects and research programmes. In return, China receives a reduction in technological dependence on the West, new markets for its high-tech companies and the dissemination of Chinese normative and technological standards, including cyber sovereignty, respect for which is included in the list of fifteen general principles of the Digital Silk Road initiative.

16 countries have officially joined the initiative by signing a memorandum of understanding. More than 40 states, individual companies and organisations participate in the initiative without signing a memorandum. The exact list of countries is unknown. Among the 140 countries that have presumably signed a memorandum of understanding with China on joining the Belt and Road, 52 are African countries (40 of them are Sub-Saharan) with all of them also being potential participants in the DSR[136].

According to the data provided by The Economic Times, for 2021, China's total investment in Africa's digital infrastructure under the DSR is estimated at USD 8.43 billion[137]. As part of this strategy, the Chinese government is recommending its tech giants – Huawei, ZTE and Cloudwalk – to enter into mobile telephony, social media and e-commerce applications in Africa. The initiative's projects, information about which is available online, include the joint development of a plan for the inclusive development of e-commerce between China and Africa, the introduction of a technology-driven "platform for hundreds of stores and thousands of products" in Africa, the holding of an online shopping festival in Africa and the promotion of e-commerce activities in the tourism sector.

Initiatives managed by state-owned companies play a crucial role in China's assistance initiatives. Main actors include Huawei and ZTE

134 The State Council of China. China-Africa ties to spur digital field. 2021. URL: http://english.www.gov.cn/news/internationalexchanges/202112/03/content_WS61a96889c6d0df57f98e5f5a.html

135 China International Development Cooperation Agency. Forum on China-Africa Cooperation – Dakar Action Plan (2022-2024). URL: http://www.cidca.gov.cn/2021-12/02/c_1211471277.htm

136 China-Africa Joint Efforts to Build a «Digital Africa» and the Way Forward. URL: http://www.xyfzqk.org/UploadFile/Issue/202111080001/2022/6//20220610094501WU_FILE_0.pdf https://www.cfr.org/sites/default/files/pdf/Chinas%20Digital%20Silk%20Road%20and%20Africas%20Technological%20Future_FINAL.pdf

137 The Economic Times. China reportedly investing $ 8.43 bn in Africa as part of Digital Silk Road initiative. 2021. URL: https://economictimes.indiatimes.com/news/international/world-news/china-reportedly-investing-8-43-bn-in-africa-as-part-of-digital-silk-road-initiative/articleshow/87039334.cms

Government initiatives:

China-African Innovation Cooperation Center (中非创新合作中心)[138]. Created in 2018 in accordance with the results of above-mentioned China Africa Cooperation Forum and the Beijing action plan (2019-2021). It carries out technology transfer and cooperation in the field of innovation and entrepreneurship and supports the exchange of innovative achievements between Chinese and African youth.

China-Africa Internet Development and Cooperation Forum (中非互联网发展与合作论坛)[139]. The forum was held only once in 2021 but with the prospect of further meetings and cooperation. It was hosted by the State Internet Information Office of China and now is positioned as a platform for discussions and promotion of Chinese legal and ideological standards, including the promotion of the "Sino-African Initiative to Build a Community of a Shared Future in Cyberspace".

Huawei is the most active Chinese state-owned company in Africa and according to data collected by the Center for Strategic and International Studies (CSIS)[140], Huawei had already concluded 23 e-government deals in Africa by 2021. The main area of work is the creation of cloud services for data storage, with Africa accounting for the largest number of the company's transactions (36%). A few publicly disclosed examples, information are presented below. Projects funded by Huawei are classified as "assistance", although they are commercial entities.

Senegal

National Data Centre of Senegal (塞内加尔国家数据中心)[141]
Established in 2021, the national data centre is financed with a loan by the **Export-Import Bank of China** (Exim) and supported by equipment and technologies from **Huawei**. The centre is involved in data storage, digitalisation of public services, technology transfer and personnel training. The cost of the project is estimated at USD 79 million[142]. The data centre will tap into global networks through an undersea cable as well as Senegal's 6,000-km fibre optic network. At the launch of the centre, President Macky Sall said that the government would migrate all state data and platforms to the data centre. State-owned businesses such as Senelec, the national electricity company, will also move their data to the centre in tandem with government agencies. The centre will serve both the public and private sectors and offer cheaper infrastructure to Senegal's growing community of tech startups than entrepreneurs will find abroad[143].

138 China-Africa Innovation Cooperation Centre. Official website. URL: http://www.caicc.net.cn/
139 The China-Africa Internet Development and Cooperation Forum was held. 2021. URL: https://www.gov.cn/xinwen/2021-08/25/content_5633126.htm
140 Center for Strategic and International Studies is recognised as undesirable organisation in the Russian Federation by the decision of the Russian Prosecutor General's Office.
141 Seetao. The Belt and Road Initiative has shifted from infrastructure construction to digital information construction. 2023. URL: https://www.seetao.com/details/213555.html
142 Further Africa. China plans digital dominance in Africa via Digital Silk Road. 2021. URL: https://furtherafrica.com/2021/12/30/china-plans-digital-dominance-in-africa-via-digital-silk-road/
143 Reuters. Senegal aims for digital sovereign. 2021. URL: https://www.reuters.com/article/senegal-datacenter-idINL5N2O44D3

Cabo Verde

National data centre of Cabo Verde

As part of the eGovernment project, **Huawei** built a national data centre for Cabo Verde. Internal office networks and videoconferencing systems for the government, schools and hospitals were also set up. The collaboration between the Cabo Verde Ministry of Education and Huawei made it possible to establish the WebLab integrated ICT training system to foster ICT talent development in the country and encourage the exchange and advancement of social information[144].

Tanzania

In 2015, the USD 94 million investment in constructing a government data centre was announced. **Huawei** Tanzania provided advisory support to the project which was completed in 2016. The data centre is managed by Tanzania Telecommunication Company Limited (TTCL)[145].

Kenya

Huawei and **Safaricom** cooperation project for the operation of public security platforms for police surveillance in Nairobi and Mombasa, as well as for the training of ICT specialists and civil servants was launched in 2019 and is still in operation[146]. The agreement with Huawei is renewable every five years. As a result, a large number of training sessions on artificial intelligence, cybersecurity and emerging technologies were conducted. Moreover, boosted by Huawei's Kenya deal, Safaricom launched its 5G network in October 2022, a first in the region. Since then, the service provider has commissioned over 200 5G sites across 11 counties including Nairobi, Mombasa, Kisumu, Kisii, Kakamega, Nakuru, Kiambu, Machakos, Kajiado, Vihiga and Siaya.

Morocco, Kenya, Rwanda

Cooperation projects of the country's branch ministries with Chinese state-owned companies DJI and Huawei during the COVID-19 period.

With the approval of the ministries, **DJI** provided these countries with the opportunity to use commercial drones to ensure the security of local administrations, including curfews, spraying of disinfectants and public announcements in cities[147]. **Huawei** supplied diagnostic systems based on cloud computing and artificial intelligence, as well as communication platforms for hospitals[148].

144 Huawei. Cape Verde Goes Digital. URL: https://www.huawei.com/en/huaweitech/publication/winwin/31/bringing-the-digital-world-to-cape-verde-archipelago

145 Sky Scraper City. Dar es Salaam Kijitonyama $94M National Data Center| U/C. 2015. URL: https://www.skyscrapercity.com/threads/dar-es-salaam-kijitonyama-94m-national-data-center-u-c.1829633/

146 Huawei. Safaricom and Huawei are building the world's first E2E 400G backbone network. 2019. URL: https://www.huawei.com/cn/news/2019/2/safaricom-end-to-end-400g-backbone-network

147 CAAC News. Drone development in Africa: on the field of hope. 2022. URL: http://www.caacnews.com.cn/1/10/202207/t20220708_1348523.html

148 Huawei. National Center for Telemedicine: Making medical care more timely and warmer. 2020. URL: https://www.huawei.com/cn/huaweitech/publication/winwin/36/telemedicine-case

Kenya, South Africa, Zambia, Zimbabwe, Tanzania, Togo, Mali, Madagascar, Mozambique

Huawei's projects to build cloud data storage, including government data[149]

According to a database compiled by the Center for Strategic and International Studies Reconnecting Asia Project, **Huawei** has either completed or is currently building multimillion dollar data centres and cloud services in several African countries. This is part of the company's strategy to widen its reach in Africa – it is currently working on 25 projects across Africa. Most of the financing comes from Exim and China Development Bank (Huawei is a big beneficiary of credit from the China Development Bank)[150].

Mozambique, Tunisia, Senegal, Cameroon, Libya, Cape Verde, Malawi, Zambia, etc.

Huawei's project "Seeds for the Future"[151]

The youth empowerment programme founded by Chinese tech giant **Huawei** was launched in 2008. It is involved in the training and subsequent employment of relevant personnel and the holding of thematic events. In 2020, to maintain programme continuity during the pandemic, the programme moved online for the first time to deliver a wider range of online educational resources for more talented young students, while maintaining face-to-face activities and events. For example, Huawei "Seeds for the Future" successfully trained over 600 students across Africa in 2021. The project created a global network of top talent from developing countries and provided a number of participants with international internships as an opportunity to get a closer look into technology, such as exhibition hall visits, factory explorations and other enterprise insights in China. This programme will allow the company to continue to double its efforts in bridging the digital gaps and spreading its technological standards.

Cameroon

The National Emergency Telecommunications Network (RNTU) project was launched in 2022 in collaboration with **Chinese ZTE**. The project allows for the government teams to manage emergencies confidentially and securely without having to go through a public network. It also includes the e-police system, a centralised platform for managing security operations. The main services offered are: the management of police information, criminal information, registers of criminal cases and wanted persons[152].

149 SCMP. China promotes 'digital silk road' as solution to Africa's data needs. 2021. URL: https://www.scmp.com/news/china/diplomacy/article/3160525/china-promotes-digital-silk-road-solution-africas-data-needs

150 SCMP. African nations continue to put trust in Huawei for data management. 2021. URL: https://www.scmp.com/news/china/diplomacy/article/3138917/african-nations-continue-put-trust-huawei-data-management

151 China Arabcf. Huawei organizes the first Seeds of the Future Alumni Conference for Northern Africa in Tunisia. URL: http://www.chinaarabcf.org/zagx/gjydyl/202206/t20220623_10708524.htm

152 Investir au Cameroun. Télécommunications : le Cameroun se dote d'un réseau sécurisé à plus de 77 milliards de FCFA. 2022. URL: https://www.investiraucameroun.com/gestion-publique/1407-18197-telecommunications-le-cameroun-se-dote-d-un-reseau-securise-a-plus-de-77-milliards-de-fcfa

Read more about international assistance in digitalisation of African countries in the handbook by the HSE University Center for African Studies **E-Governance in Africa 2024: Challenges and Opportunities**

International assistance projects should also be chosen based on the national strategy and interests to avoid waste of resources and fragmentation of efforts. Special attention is to be paid to studying local peculiarities and adapting knowledge and solutions of the donor to the local conditions, including local experts in the transfer process in order to develop national expertise.

For African countries digital sovereignty lies not in complete withdrawal of foreign aid but in embracing a multifaceted approach to international development assistance, recognising the importance of diversifying partners and sources of aid

This includes partnering with nations outside of the list of traditional Western aid donors, such as those in Asia and the Middle East. Furthermore, at the current stage of digitalisation African countries may turn to each other and their South peers for experience, knowledge and expertise. More and more, African countries are tending to turn to **peer-to-peer knowledge sharing** in search for suitable solutions. Often, the process is moderated and supervised by international organisations or other countries[153]. However, there is an emerging trend towards intra-African initiatives.

Role of international corporations

International corporations present in the African markets invest in building ICT infrastructure and digital solutions, training, all in order to lay the groundwork for expanding presence and revenues in the region, as well as accessing valuable data to train AI models.

Even in South Africa, a Yale University scholar argues[156], digital ecosystems are dominated by foreign, notably US, entities, which endows them with unprecedented power over key sectors, whether politics, culture or the economy.

In November 2023, **Eswatini** signed a memorandum of understanding with **Rwanda** with the aim of leveraging Rwanda's expertise in developing national e-procurement and financial management information systems[154].

In May 2023, technicians from the **Burundian** Ministry in charge of community development visited **Cameroon** and **Benin** with the aim of experience exchange in the process of introducing biometric identity cards[155].

In 2023, the Korean International Cooperation Agency (KOICA) organised a knowledge sharing programme between **Rwanda** and **Nigeria** (held in Kigali) for the Nigerian Government Service Portal (GSP) team to learn about Rwanda's digitalisation journey through study visits and discussions related to policies, strategies, and programmes implemented by the country.

153 For instance, the World Bank also established a South-South Exchange Program in the frameworks of the ID4D initiative for peer-to-peer knowledge exchange. Under the Program, in 2018, the delegations of Côte d'Ivoire and Guinea visited Peru to find out from the staff of the Peruan identification agency about the process of implementing the national ID system.

154 The New Times Rwanda. Eswatini borrows Rwanda's best practices in e-Governance. URL: https://www.newtimes.co.rw/article/12120/news/africa/eswatini-borrows-rwandas-best-practices-in-e-governance

155 Burundi Eco. A quand la carte d'identité biométrique ? 2023. URL: https://burundi-eco.com/a-quand-la-carte-didentite-biometrique/

156 Kwet, Michael, Digital Colonialism: US Empire and the New Imperialism in the Global South (August 15, 2018). For final version, see: Race & Class Volume 60, No. 4 (April 2019) ; DOI: 10.1177/0306396818823172

Apart from revenues, companies gain access to data and human resources

For instance, Samasource, a US AI data training company, employs 2,000 Kenyans and Ugandans to process data for companies including Google and Microsoft[157].

Leila Janah, the founder and CEO of Samasource, a US AI data training company:
"If you use a mobile phone or laptop's facial recognition features, drive a car or shop online, there's a good chance that a person in East Africa helped train the algorithm that makes your technology work."

Corporations launch numerous pan-African conferences, hackathons and digital skills programs to train and select ICT specialists from African countries. Only Google has more than 150 active Google Developer Groups and 100 Developer Student Clubs in Africa. The final prize often includes visits or internships in these companies which actually leads to brain drain on the continent.

Corporations under the motto of "bridging digital divide" and a label "corporate social responsibility" lay the groundwork for expanding their own presence and revenues in the region

For instance, Meta[158] backs the development of the 2Africa sea cable. Another example is collaboration between the Ministry of Digital Development of **Madagascar** and Orange Madagascar in 2018 to launch the ICT Buses (TIC Bus) project: buses equipped with computers, internet connection and generators travelled to remote areas of Madagascar in order to educate residents about new technologies[159].

International corporations are also the dominant operators of the telecommunications sector in African countries. 75% of the telecommunications market in Africa is controlled by international corporations including MTN, Vodacom, Airtel, Orange, e& (ex-Etisalat), with them collectively accounting for 85% of all mobile subscribers on the continent. National or African operators are dominant in **Namibia** (99%, MTC Namibia and Telecom Namibia), **Cabo Verde** (100%, Cabo Verde Telecom under the brand Alou and Unitel T+, Angola), **Ethiopia** (94%, Ethio Telecom), **Algeria** (73%, Mobilis and Djezzy).

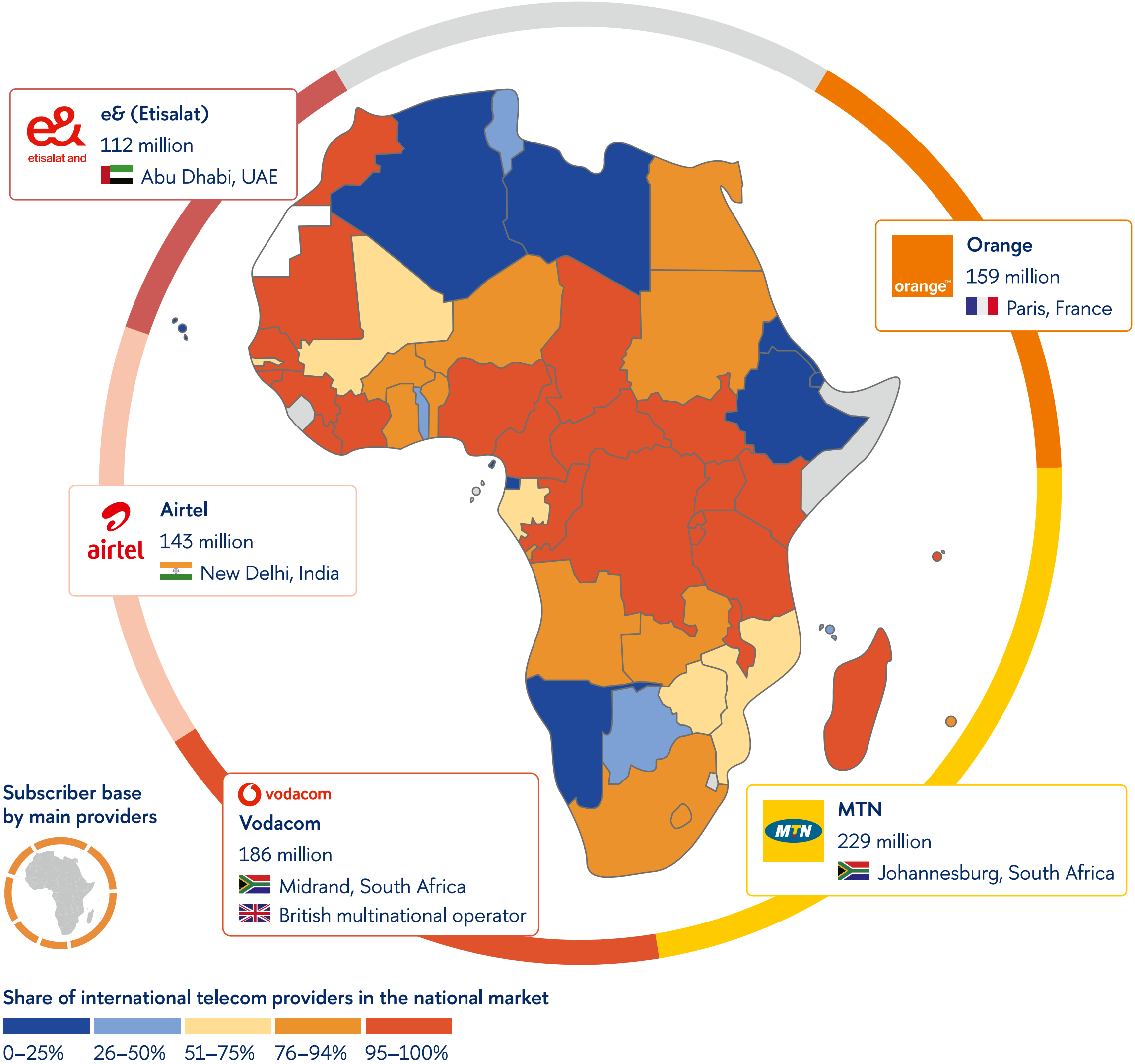
This articulates the need for modifying antitrust regulations in line with the changing market rules. **Antitrust regulations for the ICT sector** have not found wide recognition on the continent yet. However, the importance of data in the modern economy can allow tech giants to exert influence up to the point of "data colonialism"[160], indirectly regulating even non-digital markets, sometimes resorting to internet-for-all initiatives as a cover.

Digital markets have their specific features that may lead to increased concentration of the market, pre-emption of emerging markets, while complicating antitrust regulations. These include: network effects, scale and scope advantages, multi-sided platform structure, ecosystem economy, reliance on data, zero-price business models, interoperability, switching costs and multi-homing, consumer behavioural biases (e.g. default bias and saliency bias, "nested" decision-making, status quo bias) and tipping.

Contrary to common competition laws which focus on regulating the **marketing of products**, antitrust regulation in the digital market concerns the **product itself** (such as product design) and the **company's business model**. The authorities may therefore demand to redesign the product (service) or adjust a business model to make it comply with the law.

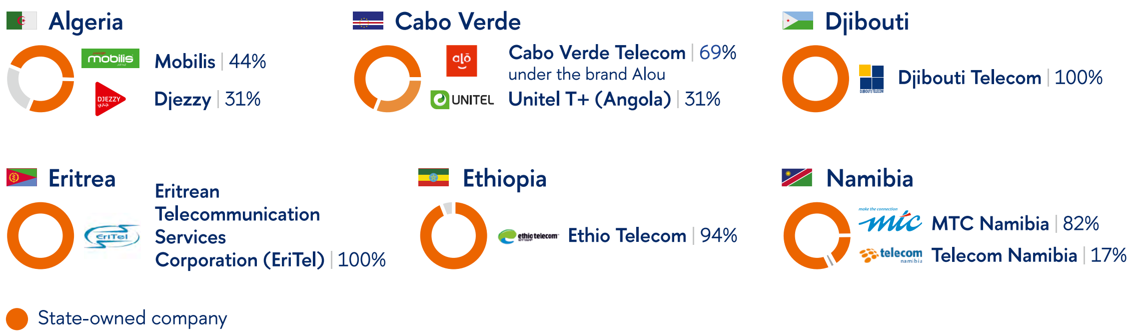
157 LinkedIn. Leila Janah. How East Africa trains AI. URL: https://www.linkedin.com/pulse/how-east-africa-trains-ai-leila-janah
158 Meta is recognised as an extremist organisation in the Russian Federation by the decision of Tverskoy District Court of 21.03.2022 (Case № 33-21933/2022).
159 Call Center Madagascar. Des TIC Bus Pour Le Développement Numérique De Madagascar. 2018. URL: https://www.callcentermadagascar.com/tic-developpement-numerique-madagascar/
160 Foreign Policy Magazine. Is Big Tech Setting Africa Back? URL: https://foreignpolicy.com/2020/11/11/is-big-tech-setting-africa-back/

International telecommunications service providers in African markets



Source: prepared by the HSE Center for African Studies based on countries' data and companies' reports 2023-2024.

African markets with largest shares of national telecom providers



Source: prepared by the HSE Center for African Studies based on countries' data and companies' reports 2023-2024.

The modernisation of competition legislation requires comprehensive approaches that would include **non-price dimensions** in defining market power and dominance and in assessing mergers. For instance, the ability to collect or generate and process big data volumes should be considered among the criteria of significant market power. Whilst assessing mergers, consequences unrelated to price should be taken into account, as mergers can affect incentives for innovation, quality of service, performance, etc.

Examples of anti-competitive practices in the digital markets include self-preferencing, refusal of data collection or data sharing, killer acquisition and exploiting consumer behavioural biases. In South Africa's practice, as analysed by the World Bank's International Bank for Reconstruction and Development (IBRD), predatory pricing and exclusivity agreements were most common when it came to abuse of market dominance[161].

As a case in point, the competition authority of South Africa expressed concern in July 2022 that Google's paid search results – without being clearly labelled as advertising – were increasing the costs for platform customers and benefiting the tech giant. The preferential placement of Google's own specialised search units is an example of unfair competition.

In 2022, five African countries – Egypt, Kenya, Nigeria, Mauritius and South Africa – held a meeting to discuss cooperation in regulating competition in the digital markets of the continent[162]. In a joint statement, heads of the national competition authorities affirmed that digital markets present "considerable challenges for competition law enforcement and policy in terms of the unique competition issues that arise".

To date, the African continent has seen several attempts of setting anti-monopoly regulations for the ICT actors. In 2018, the governments of **Uganda**, **Zambia** and **Benin** tried imposing taxes on social media. At that time, supporting local ICT projects was among the announced goals. In Uganda, a USH 200 tax was imposed on the use of 58 over-the-top (OTT) services (including Facebook, Twitter, WhatsApp) as well as a 1% tax on e-money transfers. However, this resulted in a decrease in social media usage, a trend coupled with a 74% slide in revenues of companies that relied on social media for business. Therefore, a balanced approach is needed to maximise societal benefits without reversing the natural trends in the industries.

Data sovereignty

Cloud technologies have become essential for enhancing digitalisation and delivering public services. In recent years, the corporate sector and governments across Africa have started moving their data into the cloud. However, these clouds are mostly run by the foreign providers, whose data centres are located overseas.

As stated in the Digital Transformation Strategy for Africa 2020-2030[163], plenty of IT content consumed in Africa comes from outside. For instance, in 2021 it was revealed[164] that 70% of Nigerian government agencies host their data abroad. As specified by the Oxford Business Group and the Africa Data Centres Association[165].

Allegedly 80% of the African data is stored abroad

Marseille is the main gateway[166] for offshoring the data. The data is transferred to Marseille-based Digital Realty's[167] data centres via 16 undersea cables.

161 World Bank. Antitrust and Digital Platforms: An analysis of global patterns and approaches by competition authorities. URL: https://documents1.worldbank.org/curated/en/893381632736476155/pdf/Antitrust-and-Digital-Platforms-An-Analysis-of-Global-Patterns-and-Approaches-by-Competition-Authorities.pdf

162 Cliffe Dekker Hofmeyr. Collaboration by African competition regulators with respect to the regulation of digital markets in Africa. URL: https://www.cliffedekkerhofmeyr.com/en/news/publications/2022/Practice/Competition/competition-law-alert-Collaboration-by-African-competition-regulators-with-respect-to-the-regulation-of-digital-markets-in-Africa.html

163 African Union. The Digital Transformation Strategy For Africa (2020-2030). URL: https://au.int/sites/default/files/documents/38507-doc-dts-english.pdf

164 The Guardian. 70% of govt agencies host data abroad despite $220m local infrastructure. URL: https://guardian.ng/technology/70-of-govt-agencies-host-data-abroad-despite-220m-local-infrastructure/

165 Africa Data Centres Association. State of the African Data Centre Market 2021. URL: http://africadca.org/wp-content/uploads/2021/12/ADCA-Annual-Report-2022_Final-1.pdf?succes=1686795969

166 Innovation Origins. Marseille Is Among One Of The World's Leading Data Hubs, But Growing At The Seams URL:https://innovationorigins.com/en/marseille-is-among-one-of-the-worlds-leading-data-hubs-but-growing-at-the-seams/

167 Digital Reality (main page). URL: https://www.digitalrealty.com/

Offshore hosting compromises the confidentiality, integrity and availability of the data and entails a variety of risks

Offshoring also has a negative impact on the operational performance level, which embraces the quality, dependability, speed, flexibility and cost factors.

Hence, the total costs of offshoring comprise the evaluation cost (the due diligence, contracting, etc. usually involves legal fees), cultural cost[168] (estimated to add from 3% to 27% to the total cost), transition cost, internal workforce cost and contract management cost (estimated to add an additional 6% to 10% to the total cost).

When the data is hosted abroad, the submarine cables and satellite links transport data between users and data centres located overseas through the complex routes. Given that the African continent's infrastructure at all stages of the value chain is often underdeveloped or outdated, it remains a challenge to keep the information properly secured during the transit. Poorly developed local cloud infrastructure also multiplies the expenses.

According to a report by Google[169], existing underwater cables are outdated and rely on older technology, while many countries lack redundancy. Edge locations (Telcos, IXPs, ISPs) on the continent are yet to be fully developed. As specified by the African IXP Association[170], there are 52 active IXPs located in 47 cities in 36 countries. Middle mile infrastructure is still underdeveloped, despite the estimated growth (72%) between 2015 and 2020. Internet access networks do not provide universal access, as 25% of the population does not live within the footprint of mobile broadband networks. Therefore, content has to travel further to end users, which increases cost of access and latency.

The African continent also lacks infrastructure such as data centres. All the critical equipment and applications are housed in the data centres. Africa accounts for less than 2% of the global data centre capacity.

According to the Africa Data Centers Association (ADCA) 2021 report[171], the continent has 140,000 square metres of data centre space shared among about 100 data centres. It is noticeable that the distribution of these facilities is uneven, given that **South Africa** accounts for more than two-thirds of the continent's capacity. As stated in the report, 10% of the existing DC capacity serves nearly half of Sub-Saharan Africa's economic output and broadband connections. The AIIM (African Infrastructure Investment Managers)[172] estimated that as of 2023, there is 250 MW of installed data centre capacity across Africa. Thus, there is a need to rely on data centres in Southern Africa or outside the continent.

As stated in the ADCA 2023 report[173], **South Africa**, **Nigeria**, **Egypt**, **Morocco** and **Kenya** are the main hubs of the African data centre market. According to the report, South Africa comprises 165 MW of live capacity. The figures for Nigeria and Kenya are 21 MW and 15 MW respectively. Live capacity in both Morocco and Egypt comprise 13 MW. For instance, the IT capacity per million residents in Nigeria stands at 0.60 MW, compared to 47.21 MW in the United Kingdom.

168 Includes cultural, language, organisational and work environment differences in the process of offshoring as well as experience differences.

169 Africa Practice. Equiano Subsea Cable: Regional Economic Impact Assessment. URL: https://africapractice.com/wp-content/uploads/2021/10/Equiano-Regional-Economic-Impact-Assessment-6-October-2021.pdf

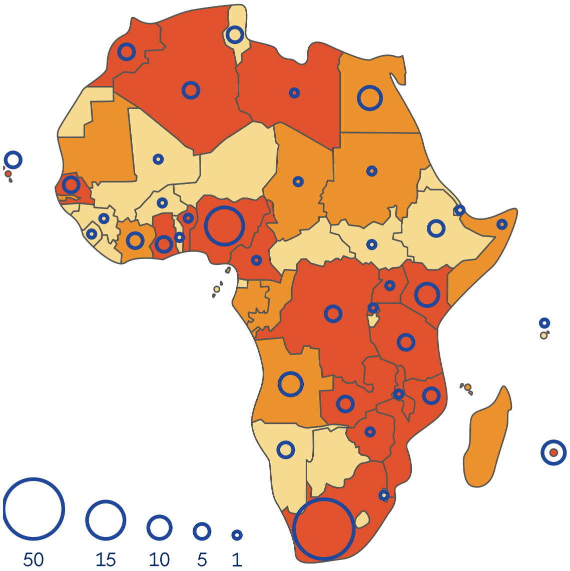
170 The African IXP Association. List of active Internet exchange points in Africa. URL: https://www.af-ix.net/ixps-list

171 Africa Data Centres Association. State of the African Data Centre Market 2021. URL: http://africadca.org/wp-content/uploads/2021/12/ADCA-Annual-Report-2022_Final-1.pdf?succes=1686795969

172 African Infrastructure Investment Managers. Africa's data centre growth opportunity. URL: https://aiimafrica.com/media/media-centre/africas-data-centre-growth-opportunity/

173 Market Spotlight. Africa's Key Data Centre Markets. URL: http://africadca.org/wp-content/uploads/2023/07/Title_Africas-Key-Data-Centre-Markets.pdf?succes=1694286277

Data centres in Africa



National data centre is constructed

National data centre is planned or under construction

No national data centre

Source: prepared by the HSE Center for African Studies based on Arizton Advisory & Intelligence and Data Center Map data.

The majority of cloud services in Africa are operated and controlled by foreign entities. Microsoft, Google, Amazon, IBM and Huawei are among the continent's main cloud services providers

For instance, Microsoft is present[174] in **Egypt**, **Morocco**, **Kenya**, **Nigeria** and **South Africa**. According to the Africa Interconnection 2021 Report[175], Microsoft's cloud business revenues within the continent come 75% from South Africa and 25% from the rest of Sub-Saharan Africa.

Google operates in Africa through Digicloud Africa[176], the distributor of all Google Cloud products. The distribution service is operational in 39 African countries.

According to the China Surveillance State: A Global Project[177] 2021 report, Huawei middleboxes (the devices that forward data and have an ability to read and manipulate data) are located in 18 African countries. Huawei Cloud services are available[178] in at least 22 African countries.

As highlighted in the Importance of Data Localisation in Cybercrime Investigations[179] report.

Technology companies have a monopoly on data, which allows them to determine their level of involvement in how the data are used

As a consequence, the government's power and autonomy over the data is diminishing.

Poorly developed local cloud infrastructure results in the lack of employment opportunities for local specialists, as well as in a shortage in training on maintenance of sensitive data for local employees. Thus, data localisation is crucial concerning the development of domestic capacity in the digital sector.

The legal basis of data protection and localisation regarding sovereignty is critical. The lack of robust data localisation laws raises concerns on data security. According to the Importance of Data Localisation in Cybercrime Investigations[180] report, a foreign state where the data is hosted may have a stronger jurisdictional basis over the cloud data. Hence, the hosting state can potentially exercise unilateral access to data if there are no legislative measures concerning data localisation.

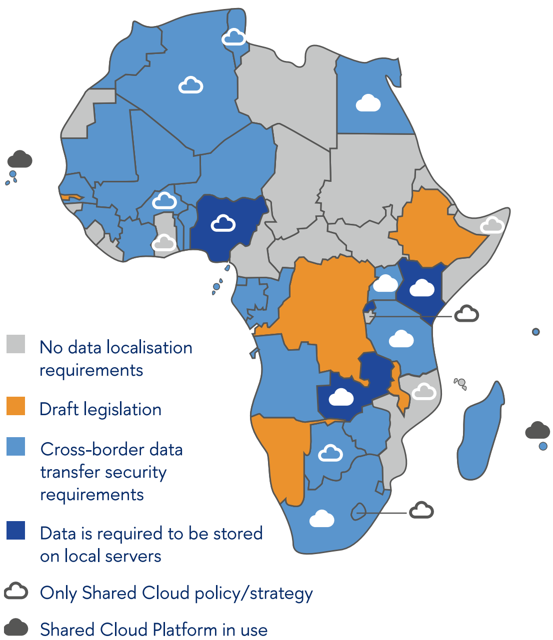
174 Cloud Skill Challenge. Azure CDN Coverage by Metro. URL: https://learn.microsoft.com/en-us/azure/cdn/cdn-pop-locations
175 HubSpot. Africa Interconnection Report. URL: https://f.hubspotusercontent00.net/hubfs/3076203/Africa%20Interconnection%20Report%202021.pdf
176 Dig Cloud Africa. Google's reseller enablement partner in Africa. URl: https://www.digicloud.africa/
177 TOP 10 VPN Digital Rights Research Grant. China's Surveillance State: A Global Project. URL: https://www.top10vpn.com/assets/2021/07/Chinas-Surveillance-State.pdf
178 Huawei Cloud. Where Can I Access HUAWEI CLOUD International Website Services?. URL: https://support.huaweicloud.com/intl/en-us/intl_faq/en-us_topic_0115884694.html
179 University of Passau. The Importance Of Data Localisation In Cybercrime Investigations. URL: https://www.digital.uni-passau.de/fileadmin/user_upload/Musoni_M__The_Importance_of_Data_Localisation_in_Cybercrime_Investigations.pdf
180 University of Passau. The Importance Of Data Localisation In Cybercrime Investigations. URL: https://www.digital.uni-passau.de/fileadmin/user_upload/Musoni_M__The_Importance_of_Data_Localisation_in_Cybercrime_Investigations.pdf

Data localisation is important in terms of ensuring data privacy, protection and cybersecurity. Furthermore, data localisation requirements are adopted in order to support local law enforcement by ensuring that local authorities have access to the data needed to investigate crimes and oversee activities in such sectors as telecommunication, banking and insurance to mitigate geopolitical risk and financial sanctions and to facilitate economic development, including job creation through fostering the local data processing industry.

According to the UNCTAD, as of 2024, 33 African countries (61%) have enacted or embraced certain forms of regulation with the aim of protecting personal data[181]. Namibia, Eswatini, Malawi and Ethiopia have enacted draft legislation. Libya, Sudan, Eritrea, Central African Republic, Burundi, Guinea-Bissau, Sierra Leone and Liberia lack relevant legislation.

As of 2024, the majority of data protection laws of African countries (52%) only prohibit or impose regulations on cross-border data transfer. Nigeria, Rwanda and Zambia require data to be hosted within the country's borders

Data localisation in African Countries



Source: prepared by the HSE Center for African Studies calculations based on the World Bank's GovTech metadata of March 2023, the United Nations Conference on Trade and Development (UNCTAD) data of December 2021, and laws and regulations of African countries.

Regional (UNECA, African Union) and subregional organisations contribute to the development of data protection legislation. Legislative tools such as the 2008 East African Community Framework for Cyber Laws, the 2010 Supplementary Act on Personal Data Protection of the Economic Community of West African States (ECOWAS) and the 2013 Southern African Development Community model law have been developed. The African Union developed the first pan-African framework with the **African Union Convention on Cyber Security and Personal Data Protection (Malabo Convention)** in 2014, which entered into force in June 2023.

Among other initiatives aimed at improving data policy on the continent are the **Policy and Regulation Initiative for Digital Africa (PRIDA)**[182] and **Smart Africa**[183]. Being a joint initiative of the African Union, the European Union and the International Telecommunication Union (ITU), PRIDA has the objective of creating a harmonised and enabling regulatory framework for the use of ICT. Smart Africa supports the creation of a harmonised framework for data protection legislation in Africa through the Smart Africa Data Protection Working Group, which aims at mapping legal frameworks, implementing guidelines for Smart Africa Member States and making recommendations on enhancing harmonisation and collaboration mechanisms between Data Protection Authorities (DPAs).

181 UNCTAD. Data Protection and Privacy Legislation Worldwide URL: https://unctad.org/page/data-protection-and-privacy-legislation-worldwide
182 European Commission. Policy and Regulation Initiative for Digital Africa (PRIDA). URL: https://international-partnerships.ec.europa.eu/policies/programming/programmes/policy-and-regulation-initiative-digital-africa-prida_en
183 Smart Africa (main page). URL: https://smartafrica.org/

Egypt

In 2023, the Human Rights Watch (HRW) revealed[184] that vast amounts of children's personal data were exposed by the Government of Egypt and the private British company Academic Assessment Ltd. The sensitive data included over 72,000 records of children's names, dates of birth, gender, home addresses, email addresses, phone numbers, schools that they attend, grade level, personal profile photos and copies of their passport or national ID.

The data contained over 350,000 files and included information on children who applied to take the Egyptian Scholastic Test (EST) between September 2020 and December 2022. In March 2022, the ownership of the exam was changed from the Government of Egypt to a UK company. According to the HRW, it is unclear exactly when and how the government sold or transferred ownership of the EST and its students' data to Academic Assessment.

The unprotected data was hosted on Amazon Web Services, Amazon's cloud storage services. The data remained accessible until it was taken down on 15 March 2023, after Human Rights Watch's notification on the child data privacy violation. The data was left unprotected on the web for at least eight months.

Egypt's 2020 data protection law recognises that children's data are entitled to special protections, but does not specify them. The Egyptian data protection authority is soon to be founded to ensure compliance with the law.

Rwanda

According to the Internet Society 2017 report[185], in 2016 the Rwanda ICT Association[186] conducted the year-long 'Rwanda Content Hosting' pilot project of transferring the websites stored abroad to local hosting.

As stated in the report, over half of all .rw and .co.rw websites were hosted in the US due to the low monthly hosting cost. According to the study, the servers for the pilot project were set up by RICTA through a sponsorship by BSC Ltd. in the Telecom House, a key hub for telecommunications in Rwanda. Three Rwandan web hosting providers (the names are not specified) participated in the pilot. Each one was provided with server capacity in the form of three virtual private servers (VPS), which were used to migrate a selection of websites previously hosted in the US (and in some cases Europe) to Rwanda.

The outcome of the project is defined by the accelerated speed of the websites when accessed from the host country, which results in greater visitor engagement, an increase in the number of page views and returns to the website and longer time spent on the website.

184 Human Rights Watch. Egypt: Data of Tens of Thousands of Students Compromised. URL: https://www.hrw.org/news/2023/04/19/egypt-data-tens-thousands-students-compromised

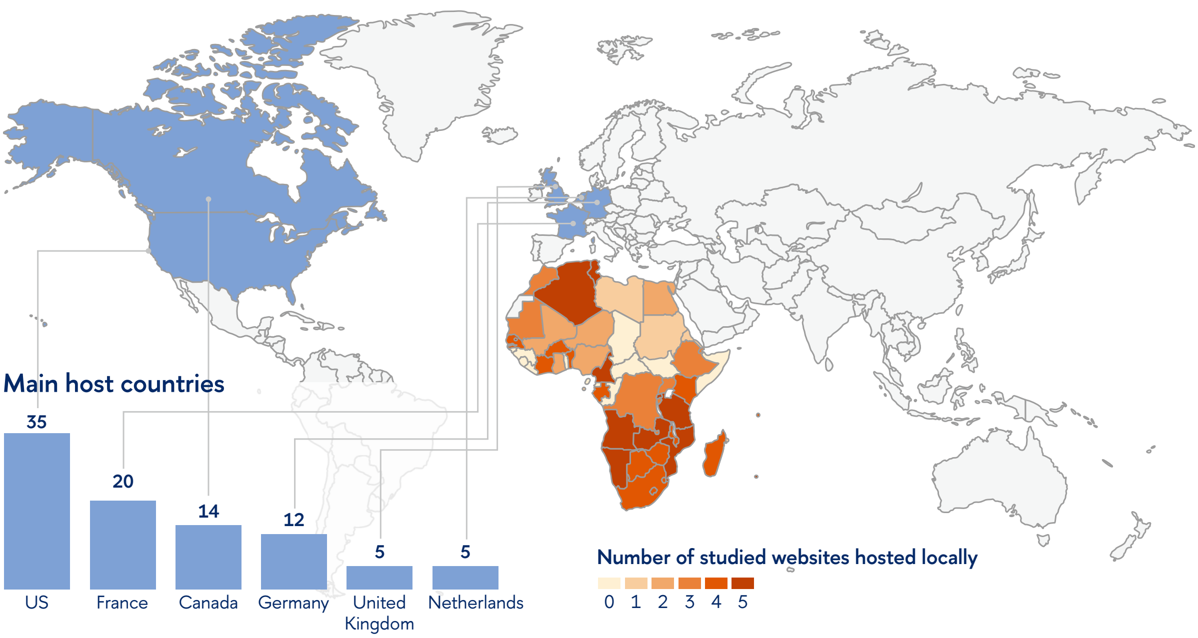
185 Internet Society. The Benefits of Local Content Hosting: A Case Study. URL: https://www.internetsociety.org/wp-content/uploads/2017/08/ISOC_LocalContentRwanda_report_20170505.pdf

186 RICTA (main page). URL: https://www.ricta.org.rw/

Hosting of government websites of African countries

In order to assess the actual status of website localisation on the African continent, a study was conducted focusing on the hosting of African government websites. This research involved analysing the geographical locations of the servers hosting these websites, examining the proportion of sites hosted within Africa compared to those hosted outside of Africa. The government websites were chosen as fundamental for digital sovereignty of the nations and indicating governments' approach toward it. Overall, 55% of the studied websites were hosted locally, illustrating an increased local capacity of African countries and a trend toward digital sovereignty.

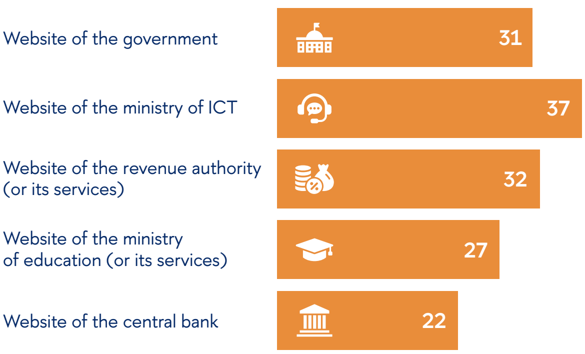
Hosting of government websites of African countries



Initial study by the HSE Center for African Studies

Overall, **55%** of studied government websites were hosted inside the country.

Share of government websites hosted inside the country



The study examined the most common sites available for the majority of the countries and were chosen considering the following factors:

- The website of the government is the fundamental website for e-governance and is indicative of the government's approach toward digital sovereignty.
- The website of the ministry of ICT is indicative of the responsible ministry's policy in the field of digital sovereignty.
- The website and services of the revenue authority transmit sensitive financial information and show the approach to its localisation and protection.
- The website and services of the ministry of education represent the digital sovereignty policy for G2C services and citizens' information.
- The website of the central bank expands the sample as banks are often considered to lead in digitalisation and shows the bank's approach toward digital sovereignty.

Source: prepared by the HSE Center for African Studies.

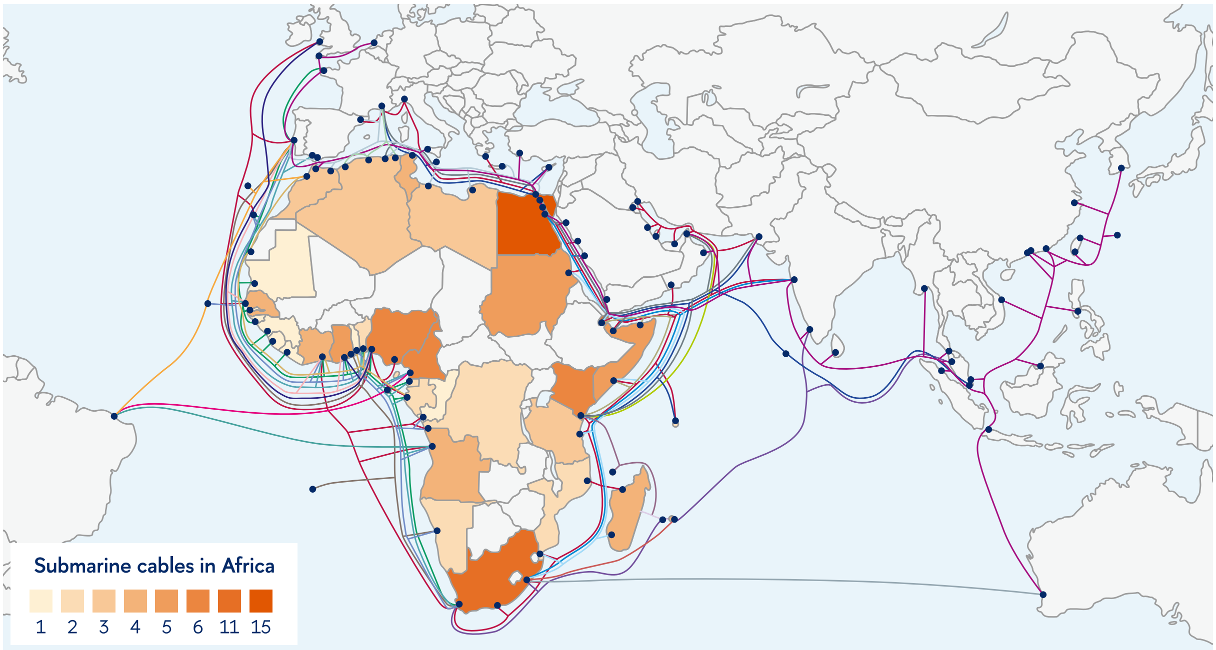
Connectivity

Another aspect to be considered is dependence on few submarine cable systems making African countries vulnerable to Internet outages due to natural disasters, cable cuts or, potentially, international sabotage.

Overall, more than 90% of world internet traffic is transmitted via submarine cables[187]

To date, Africa is connected to 71 submarine cables (out of 529 globally), active or planned, most of them leading to Europe. 17 African countries are connected to 1 or 2 submarine cables which puts them in a dependent position. Countries aim to establish more resilient cable designs, expand terrestrial fibre, diversify communication paths in order to ensure reliable Internet connection on the continent and limit reliance on vulnerable submarine cable systems. Nigeria, Kenya, Cameroon with 6 cables, South Africa and Djibouti with 11 and Egypt with 15 cables are among the leaders on the continent. Regionalising fibre networks and expanding terrestrial fibre is especially crucial for land-locked countries. For instance, Uganda has connected its network to those of Kenya, Tanzania, Rwanda and DR Congo.

Main submarine cables of Africa

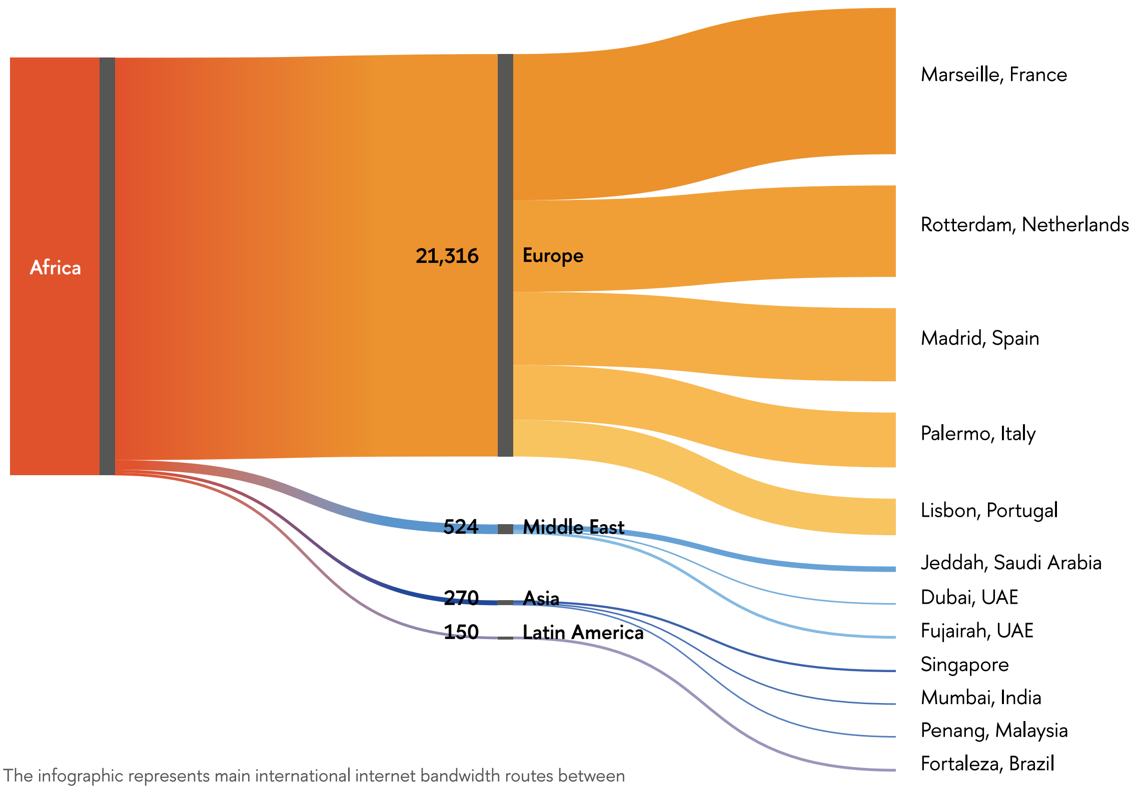


- Africa-1
- 2Africa
- Africa Coast to Europe (ACE)
- SAT-3/WASC
- West Africa Cable System (WACS)
- South Atlantic Inter Link (SAIL)
- Equiano
- MainOne
- EllaLink
- Glo-1
- Maroc Telecom
- South Atlantic Cable System (SACS)
- SAFE
- The East African Marine System (TEAMS)
- SEACOM/Tata TGN-Eurasia
- Eastern Africa Submarine System (EASSy)
- Lower Indian Ocean Network 2 (LION2)
- Lower Indian Ocean Network (LION)
- T3
- Umoja
- PEACE Cable
- Djibouti Africa Regional Express 1 (DARE 1)
- Medusa Submarine Cable System
- SeaMeWe-3
- Med Cable Network

Source: prepared by the HSE Center for African Studies based on TeleGeography data.

187 CCDCOE. Strategic importance of, and dependence on, undersea cables. 2019. URL: https://www.ccdcoe.org/uploads/2019/11/Undersea-cables-Final-NOV-2019.pdf

International internet bandwidth between Africa and metropolitan areas



The infographic represents main international internet bandwidth routes between Africa and metropolitan areas, with the routes bandwidth capacity in Gigabits per second (Gbps).

Source: prepared by the HSE Center for African Studies based on TeleGeography data.

February 2024

Due to a dragging anchor three submarine cables in the Red Sea were damaged: the Seacom/Tata cable, the Asia Africa Europe-1 (AAE-1), and the Europe India Gateway (EIG), affecting Tanzania, Kenya, Uganda and Mozambique. It was possible to reroute traffic through international cables in Djibouti.

March 2024

Due to an undersea canyon avalanche the outage happened in West Africa[188] affecting 13 countries including Côte-d'Ivoire, Liberia, Burkina Faso, Mali, Guinea, South Africa, Nigeria, etc. Four cable systems were damaged – WACS, MainOne, South Atlantic 3 and ACE. Operators used cross-border terrestrial fibre networks to reroute traffic to the Equiano cable which was not affected by the avalanche.

May 2024

EASSY and SEACOM, the submarine cables connecting South Africa and Kenya, were disrupted, leading to an internet outage across East Africa. The cables were repaired three weeks after the disruption. These outages are reported to have severely affected the banking sector, mobile phone operations, money transfer services and stock exchange markets in Mozambique, Malawi, Kenya and Tanzania[189].

188 Developing Telecoms. Internet down due to subsea cable damage in Africa. 2024. URL: https://developingtelecoms.com/telecom-technology/optical-fixed-networks/16421-connectivity-down-due-to-subsea-cable-damage-in-africa-2.html

189 Internet Society. 2024 East Africa Submarine Cable Outage Report. 2024. URL: https://www.internetsociety.org/resources/doc/2024/2024-east-africa-submarine-cable-outage-report/

Digitalisation of languages

Africa is a space of vast cultural and linguistic diversity. As of 2024, it accounts for 30% of the world's languages[190]. While the population of Northern Africa predominantly speaks Arabic (with a number of regional exceptions), the majority of countries of Sub-Saharan Africa do not have a single dominating local language. Being the second region in the world with such a multiplicity of languages after Asia, African linguistic density exceeds that of Asia. The "population per language" ratio stands at 646 thousand people per language, compared to 2 million people per language in Asia[191]. African languages are dominant in physical space; yet, they are scarcely exhibited in the digital one.

The digitalisation of African languages is a key step towards ensuring that communities can fully harness the benefits of the digital age while preserving their linguistic and cultural heritage and can be considered as a cultural aspect of digital sovereignty.

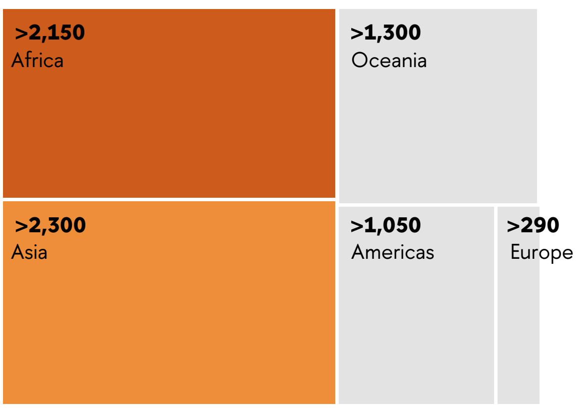
In line with Agenda 2063[192] adopted by the African Union, the governments of the states aim to:

- "implement programmes for the production of contents in national (indigenous) language and using national languages as part of administrative processes of the countries by 2025";
- "harness the indigenous African languages in a practical manner".

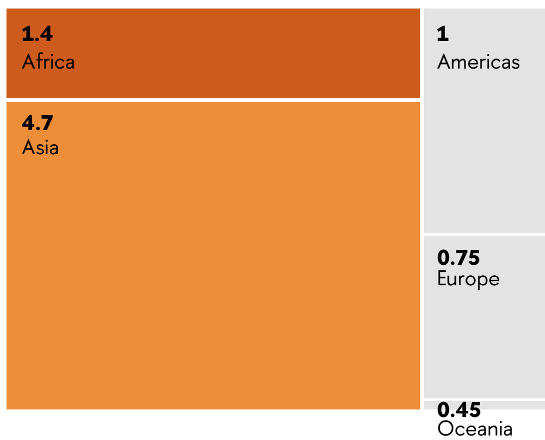
The Digital Transformation Strategy for Africa 2020-2030 sets the goal of "promoting the penetration and use of ICTs into local communities using African languages".

While more than 80% of the digital content is delivered in 10 languages, namely English, Chinese, Spanish, Arabic, Portuguese, Japanese, Russian, German, French and Malaysian[193], non-dominant languages become more vulnerable to the decline.

Languages by region



Population by region,
billion speakers



Source: prepared by the HSE Center for African Studies based on the Ethnologue and UN data.

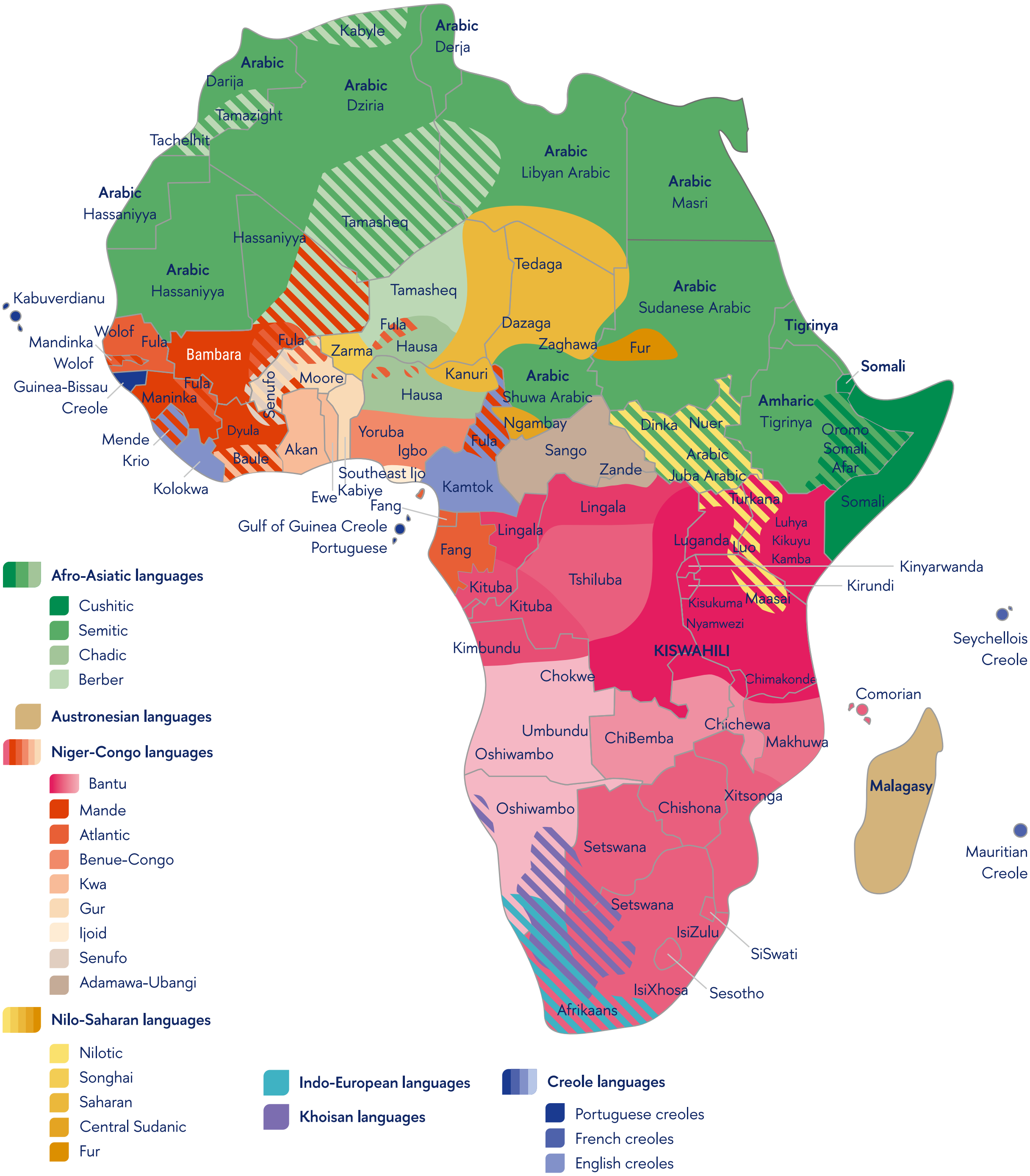
190 The Ethnologue. What continents have the most indigenous languages? URL: https://www.ethnologue.com/insights/continents-most-indigenous-languages/

191 E-Governance in Africa 2024: Opportunities and Challenges. URL: https://e-governancehub.ru/read-book-e-governance-in-africa-2024-challenges-and-opportunities/

192 African Union. Agenda 2063. URL: https://au.int/en/agenda2063/overview

193 Meital K. and Jason M. (2022) Language and Coloniality: Non-Dominant Languages in the Digital Landscape. Pollicy. URL: https://pollicy.org/wp-content/uploads/2022/08/Languages-Coloniality-Report.pdf

Main Languages of Africa's Major Population Centres and Trade Routes



Note: the map represents languages used by more than 50% of the population living on the given territory; the majority of languages have a national or regional status and serve as lingua francas.

Source: prepared by the HSE Center for African Studies.

22 out of over 2,000 languages spoken in Africa are supported and promoted by large-scale enterprises[194]

The use of African languages online is hindered by social constraints. European languages maintain the status of prestigious levels, while the majority of indigenous ones are often seen as means of informal communication. The lack of informational and scientific resources in local languages also spur the expansion of their use.[194]

The issue of indigenous languages' web presence is exacerbated by the scarcity of online resources needed to develop smart engines on language and data processing. The process of language research and analysis is predominantly supported by local communities, small private companies and academia.

With the increase in internet use, which has grown from 38% in 2014 to 63% in 2021, the number of users who are non-native English speakers has significantly risen. The web penetration still covers less than a half of the adult population of the African continent, standing at 40% and covering roughly 450 million users, compared to 614 million in Europe[195].

In 2024, 49.5% of websites implement English as a main language of content delivery[196], whilst in 2022, English along with French, Spanish and Portuguese comprised less than one-third of languages spoken by internet users. African languages, including Swahili, Amharic, Oromo, Hausa and others, constituted less than 0.1% of web content. Yet, in 2000 the average number of languages represented on global company websites stood at 6 and increased more than fivefold in 2022, amounting to 34[197].

Amharic and Somali are considered as digitally vital languages with a similarly high level of use for accessing Wikipedia and producing social media content. Online use of Tigrinya is predominantly supported by the availability of automatic translation and presence in search engine services. etc. Although the majority of web content in Ethiopia is created in local languages, English dominates in terms of content consumption[198].

In Tanzania, Swahili and English mixed use is common on social media. A pattern of regenerating the content initially coming in English to Swahili is also common. Online political activity is usually undertaken in Swahili and is viewed to be more powerful. While Swahili is a national language and a regional lingua franca, it is often considered to be "non-academic", while English is viewed as a language of social mobility. In Uganda, most national media houses produce content in English and Luganda. Swahili is an official language as well; however, publications in this language are rather uncommon[199].

As of 2020, Egyptian Arabic was a dominant African-spoken language on Wikipedia, possessing over 573 thousand texts. It was followed by Afrikaans and Swahili which comprised 91 thousand (17.5 million speakers) and 59 thousand texts respectively[200].

In 2022, English accounted for 151 million users originating from Africa, being the most common language, and followed by Arabic with 104 million internauts. French was utilised by 84 million Africans. In comparison, the online use of Swahili and Hausa did not exceed 30 million[201].

194 Lionbridge. Embrace the Online Opportunity of African Languages. URL: https://www.lionbridge.com/content/dam/lionbridge/pages/blogs/translation-localization/embrace-the-online-opportunity-of-african-languages/embrace-the-online-opportunity-of-african-languages-infographic-english.pdf

195 E-Governance in Africa 2024: Opportunities and Challenges. URL: https://e-governancehub.ru/read-book-e-governance-in-africa-2024-challenges-and-opportunities/

196 W3Techs. Usage statistics of content languages for websites. URL: https://w3techs.com/technologies/overview/content_language

197 Web Globalization Report Card 2022. The report assesses the availability of languages on 150 websites of global companies (e.g. Wikipedia, Toyota, eBay, Lenovo, etc.). URL: https://www.bytelevel.com/reportcard2022/

198 Meital K. and Jason M. (2022) Language and Coloniality: Non-Dominant Languages in the Digital Landscape. Pollicy. URL: https://pollicy.org/wp-content/uploads/2022/08/Languages-Coloniality-Report.pdf

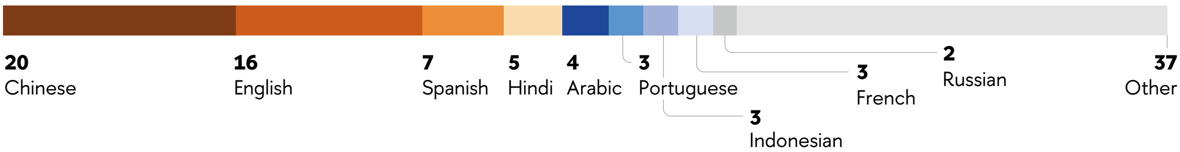
199 Ibid.

200 Nekoto W. et al. Participatory Research for Low-resourced Machine Translation: A Case Study in African Languages. URL: https://arxiv.org/pdf/2010.02353

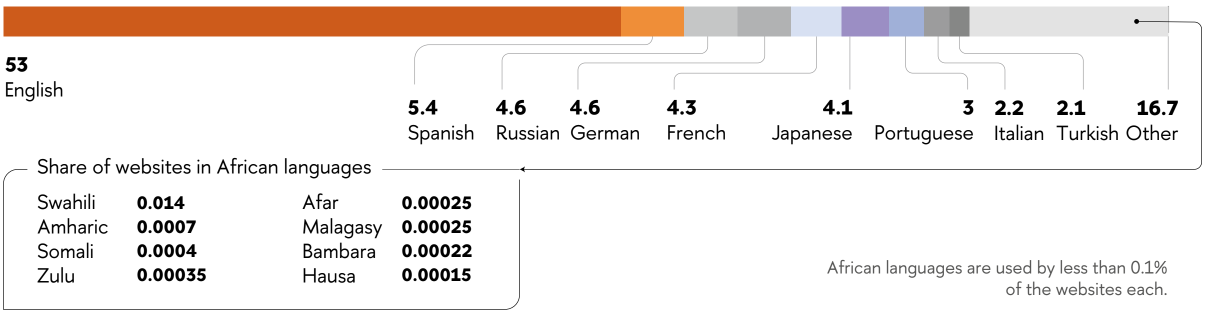
201 CSA Research. Africa: Localization's Newest Frontier. 2022

Big tech is taking action on implementing African languages. As of 2023, **Google** enabled automatic translation to 25 African languages[202], and in 2024, the corporation added[203] over 25 languages to its translation engine. **Microsoft** enables the users to access the content in 10 languages which are widespread in Africa[204], and **Amazon** offers six, namely Afrikaans, Amharic, Arabic, Hausa, Somali and Swahili. A Chinese public company **Alibaba** is the leader regarding the number of introduced languages, which amounts to 40[205].

Share of internet users by language, %



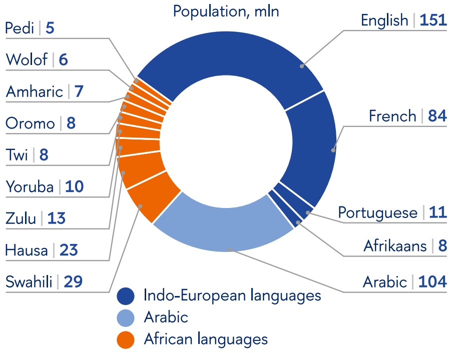
Share of websites by language, %



Source: prepared by the HSE Center for African Studies based on 22 Web Globalization Report and W3Tech data.

Main languages used by Africans online, 2022

Population, mln



Source: prepared by the HSE Center for African Studies based on CSA Research. Africa: Localization's Newest Frontier, 2022; Lionbridge. Embrace the Online Opportunity of African Languages, 2022.

Digitising a language

African languages are often viewed as "low resource"[206]. Low-resource languages are languages limited in terms of digital resources critical to perform linguistic operations based on technology use, such as machine learning and translation.

Natural language processing (NLP), which includes speech recognition, text classification, natural-language understanding and natural-language generation, faces a range of challenges when put in the African linguistic landscape.

202 Afrikaans, Amharic, Arabic, Bambara, Chichewa, Ewe, Hausa, Igbo, Kinyarwanda, Krio, Lingala, Luganda, Malagasy, Oromo, Sepedi, Sesotho, Shona, Somali, Swahili, Tigrinya, Tsonga, Twi, Xhosa, Yoruba, Zulu

203 Connecting Africa. Google Translate adds 25+ African languages. URL: https://www.connectingafrica.com/author.asp?section_id=761&doc_id=786935

204 Afrikaans, Amharic, Arabic, Malagasy, Somali, Swahili, Tigrinya, Tonga, Zulu

205 African Languages Lab. Facts & Figures. URL: https://www.africanlanguageslab.com/old-facts-figures

206 Shikali, Casper S., and Refuoe Mokhosi. «Enhancing African low-resource languages: Swahili data for language modelling.» Data in brief 31 (2020). URL: https://www.data-in-brief.com/article/S2352-3409(20)30845-3/fulltext

Among them are **lack of resources** (predominantly digital and crucial for language processing), **low discoverability** (existing research and datasets on languages are often unavailable for wide audience, requiring special academic permission), **scarcity of publicly-available benchmarks**, **low reproducibility** caused by poor research output exchange and societal issues (indigenous languages are rarely seen to become a primary communication axis)[207].

Nevertheless, implementation of the technology is exacerbated by a range of obstacles. There are several methods on technology use: **cross-lingual transfer** makes it possible to transmit models trained on high-resource to low-resource languages; however, the inclusion of languages to this methodology derives from the availability of monolingual data. Furthermore, since the benchmark tasks are sourced from English, some drawbacks exist.

Multilingual approaches were designed in order to train the same models for many languages at once and enabled to train models on translation between English and the 10 most high-resource African languages. The language resources were derived from private data and public TED talks. Hence, the models preliminary developed on high-resource languages could be inapplicable by virtue of technological limitations, linguistic differences and lack of qualified personnel, as well as data amounts and quality[208].

Furthermore, the lack of language datasets and low levels of use in the digital space exacerbate the issue of misinformation. Detection machine-learning mechanisms are often unavailable due to inability to train the engine[209].

Stakeholder engagement

African languages are predominantly being digitalised by local and academic communities, encompassing Africans either residing in African countries or those in diaspora, as well as linguists and academics[210]

In order to overcome the challenges of web language resource scarcity, a "participatory approach" is being undertaken in order to conduct the research and perform NLP and MT operations.

The key contributors to the creation and development of machine translation technologies are **content creators** (journalists, copywriters, creative writers), **language practitioners** (translators, transcribers, linguists), **curators** (content selectors), **language technologists** (software engineers, NLP practitioners) and **evaluators** (machine translation model analysts). Stakeholders involved in education, legal, public relations (PR), customer service, media, government, health, commerce, and market research are considered to be the direct users of African NLP technologies, while the general public absorbing the output of the NLP in media and literature is viewed as indirect users of the technology. The groups which are unlikely to benefit from NLP are low-income, disabled or living outside the internet penetration zone[211].

Localisation

Localisation, which stands for the adaptation of user interfaces and digital information to the local types of communication, culture and standards, is inevitable in order to adjust science and technology within the diverse societies and cultures. The process of localisation is bound to the use of language. In practical application, it implies software and content adaptation and an enterprise activity,

207 Masakhane. URL: https://www.masakhane.io/

208 Nekoto W. et al. Participatory Research for Low-resourced Machine Translation: A Case Study in African Languages. URL: https://arxiv.org/pdf/2010.02353

209 Meital K. and Jason M. (2022) Language and Coloniality: Non-Dominant Languages in the Digital Landscape. Pollicy. URL: https://pollicy.org/wp-content/uploads/2022/08/Languages-Coloniality-Report.pdf

210 Ibid.

211 Siminyu K. et al. Consultative engagement of stakeholders toward a roadmap for African language technologies. Patterns, Volume 4, Issue 8. URL: https://www.cell.com/patterns/fulltext/S2666-3899(23)00189-7?_returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS2666389923001897%3Fshowall%3Dtrue

whilst linguistic information is an integral part of such a process[212].

The main pillars of localisation are: equipping system deployment at local level in order to advance documents production and multilingual web content delivery; content production and translation; and adaptation of user interface to devices. Among the crucial factors are the availability of a standardised orthography and local data, usefulness of localised software marketing, and the user community engagement, which implies literacy and computer literacy[213].

The majority of languages originating from Sub-Saharan Africa are written with an extended Latin script, while some languages of the Sahel zone, Northern Africa and the Horn of Africa[214] use non-Latin scripts. This brings a number of challenges on user interface adaptation, as the majority of website templates are originally designed for Latin scripted languages.

A notable example of localisation is the adaptation of operating systems and software to local context. For instance, standard Microsoft Office software is available[215] in more than 100 languages, with three of them (Afrikaans, Amharic and Arabic) being widespread in Africa. In addition, an additional software MS Language Accessory Pack can be downloaded in Wolof, Zulu, Igbo, Yoruba, Kinyarwanda, isiXhosa, Sesotho, Swahili, Setswana and Hausa[216].

Product localisation and adaptation to the local context entails significant gains to eGDP (the share of GDP that is generated by e-commerce), as indicated by online consumer behaviour[217].

Case study. Languages in e-governance in Africa

During the initial study of representation of African languages on official websites of public entities, websites of 15 African countries were covered, including four North African countries and 11 Sub-Saharan countries. More than 10 websites of selected domains were studied for each country[218], with the total coverage amounting to 182 websites. The availability of translation not only in any other language, but especially indigenous African languages was examined along with the methods of translation.

The results show that only 41.5% of the websites provide translation in at least one language (76/183) whilst 58.5% do not have any translation (107/183). At the same time, the regional distribution suggests that North African governmental websites are almost twice as likely to have translations, as compared to e-services of Sub-Saharan countries. Overall, findings of the digital linguistic landscape study show that French-Arabic and French-English pairings were the most prevalent.

However, in North Africa, websites usually allow translation in European languages, mainly French despite the fact that French is not the official language of any country in Northern Africa. Indigenous languages are available only on some Moroccan platforms, whereas in Sub-Saharan Africa the percentage is much higher and more than two-thirds of government websites with translations available offer translation into indigenous languages (Table 1). That said, it is noteworthy that only three out of 11 Sub-Saharan countries account for 76% of websites with translation in indigenous languages – Tanzania, Ethiopia and Rwanda.

212 African Languages in a Digital Age.

213 Ibid.

214 E.g. Arabic, Amharic, Tamazight, Nko script, etc.

215 Microsoft. What languages is Office available in? URL: https://support.microsoft.com/en-us/office/what-languages-is-office-available-in-26d30382-9fba-45dd-bf55-02ab03e2a7ec

216 Microsoft. Language Accessory Pack для Microsoft 365. URL: https://support.microsoft.com/ru-ru/office/language-accessory-pack-%D0%B4%D0%BB%D1%8F-microsoft-365-82ee1236-0f9a-45ee-9c72-05b026ee809f?redirectSourcePath=%252fen-US%252farticle%252fOffice-Language-Interface-Pack-LIP-downloads-D63007C2-E8AE-41FD-8BFB-FCE2857010E1

217 Google. IFC. E-Conomy Africa 2020. URL: https://www.ifc.org/content/dam/ifc/doc/mgrt/e-conomy-africa-2020.pdf

218 The countries selected are: Algeria, Angola, Benin, Comoros, Democratic Republic of Congo, Ghana, Egypt, Ethiopia, Kenya, Nigeria, Morocco, Rwanda, Tanzania, Tunisia, South Africa. The spheres selected are: e-taxes and finance, business, tourism, public procurement, education, healthcare, legislation, and a platform that is supposed to serve as a one-stop shop.

The most represented languages include **Swahili** (Tanzania, to a lesser extent Kenya), **Amharic** (Ethiopia), Kinyarwanda (Rwanda), and **Tamazight** (Morocco), whilst Somali, Afrikaans, Yoruba, Hausa, Lingala, and Malagasy are much less popular.

Government portals in English-speaking countries rarely offer translation (only some 16% of the studied websites or a total of 10 out of 64) with Tanzania and Rwanda being exceptions to this rule. In Tanzania, nine websites in English have a Swahili translation (45%, and there are also websites only in Swahili), whilst there are only three in Kenya (20%) and one in Nigeria (less than 10%). In Rwanda, four websites provide a Kinyarwanda translation (25%).

The countries with French and Portuguese speaking populations showed a similar pattern and on average are more likely to have translation than English-speaking countries; even so, the rate remains low (35% or 14/40 websites[219]).

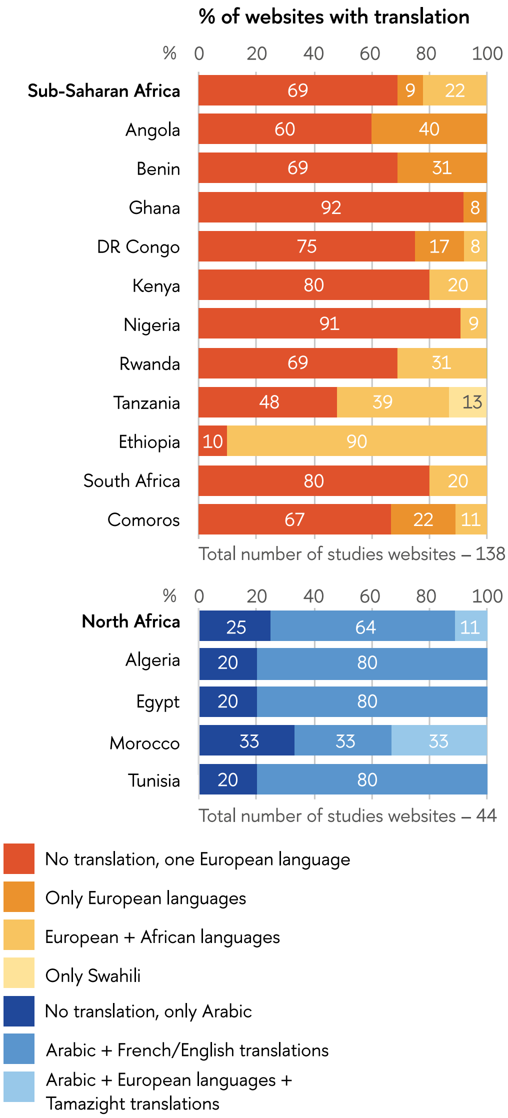
As for the spheres, government websites for tourists predictably more often have translations, usually in English and sometimes in other European languages or Arabic. Tanzanian, Rwandan, Kenyan and Ethiopian portals also have translations in African languages – Swahili, Kinyarwanda, Swahili and Amharic respectively. Following close behind in terms of the availability of translations are government websites aimed at integration of services (i.e. "one-stop shop portals").

Indicatively, services in the educational sector are the least likely to have translation, especially in indigenous languages – only five out of 15 websites examined provide translation. Yet, some of them (e.g. website of the South African National Department of Basic Education) have educational content such as workbooks in native African languages.

Though about one-half of websites of legislative bodies have translations available, PDF files of the documents published on the websites do not tend to have translations available in indigenous languages, which also could serve as a constraint for achieving universal legal literacy on the continent.

Availability of translation on selected government websites in Africa

a preliminary study



Source: prepared by the HSE Center for African Studies.

It is worth highlighting that the stage of e-government development does not significantly influence the linguistic landscape of services offered and does not guarantee multilingualism in the digital sphere. Existing studies of e-government routinely fail to account for this factor as a means of promoting

219 Without counting North African countries.

the use of digital public services and facilitating citizens' access to them and do not consider multilingual provision as a way to promote social inclusion.

For instance, despite being the continental leader according to the UN e-government Development Survey of 2022[220], South Africa does not provide citizens with multilingual digital public service: of 11 examined websites, only two have a translation. The South African one-stop shop platform for e-services[221] allows a Google-powered translation in 133 languages, including the country's 11 official languages. The website of the South African government[222] provides a translation in 11 official languages; however, it is not available on the home page, but rather only on pages with a service description. Moreover, the services are delivered predominantly in English.

Whilst the same characteristic can be applied to Ghana and Kenya, which ranked in the UN E-Government Development ranking 7th and 10th on the continent respectively, the countries with the most translations available in indigenous African languages – Tanzania and Ethiopia – were ranked 26th and 43rd by the UN.

By contrast, Tunisia, Morocco, Egypt, and Algeria are among the top 10 of e-government development in Africa, and the countries' governmental websites systematically provide translations in Arabic, French or English.

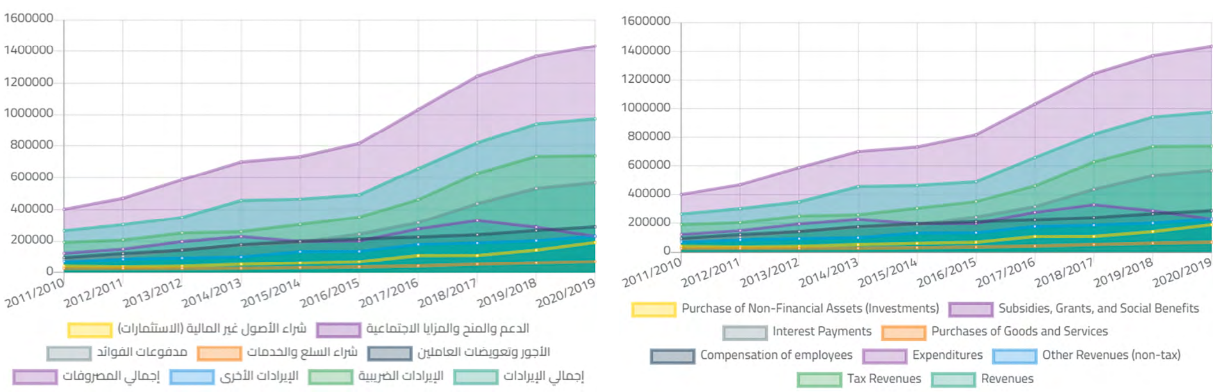
Regarding the methods, an automatic translation powered by Google is the most commonly used; however, since it does not translate pictures, graphs, etc., mixed methods of translation are used on some websites (e.g. website of the Egyptian Ministry of Finance[223]).

Among the noted peculiarities of the digital linguistic landscape of African government websites are some technical issues with the functionality of the translations, which have not been fixed over the years and therefore can be perceived as an integral feature of the landscape. For instance, even though some websites offer the translation, it does not function properly and not all the content is translated, resulting in information being provided in a mixture of two languages on the pages (Ethiopian E-Services Portal[224]).

Another interesting feature applies mostly to Northern African countries. For instance, despite offering a translation in French or Arabic, most Algerian and some other Northern African websites do not have a button to toggle between the languages. Instead, the language can be changed via the link to the page.

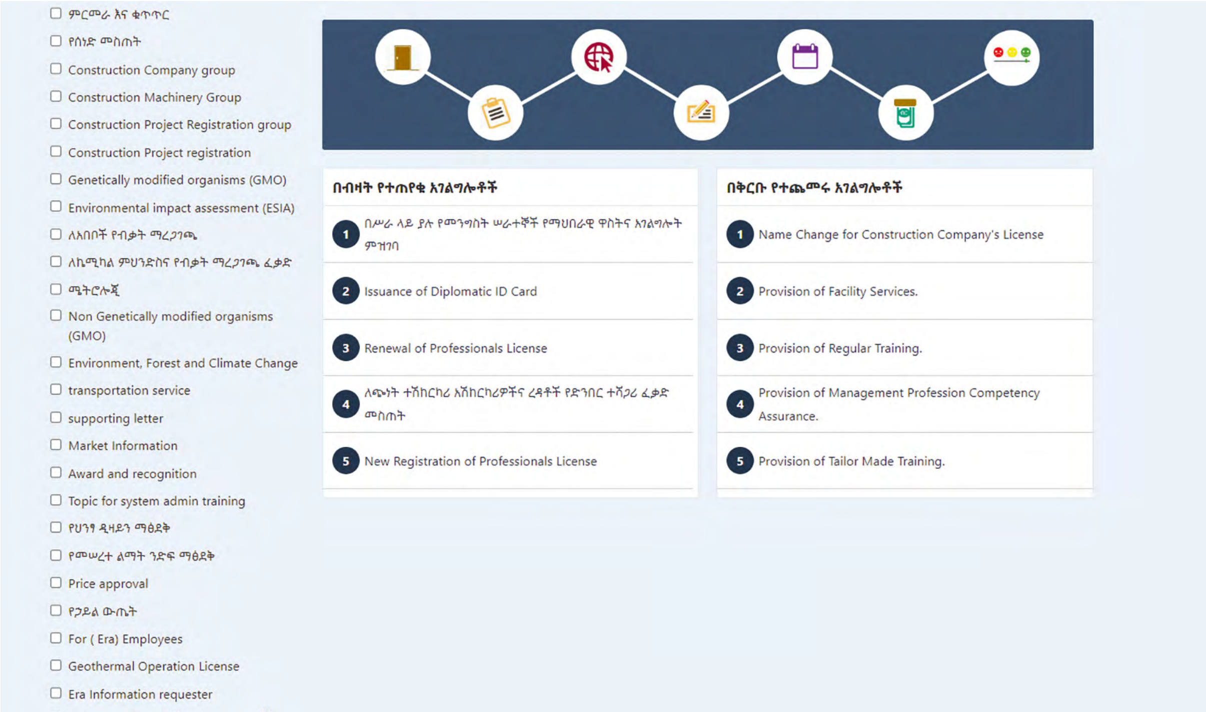
Based on the initial results of the study, local initiatives can be suggested as a means to boost the use of African languages in digital governance.

Picture 1.

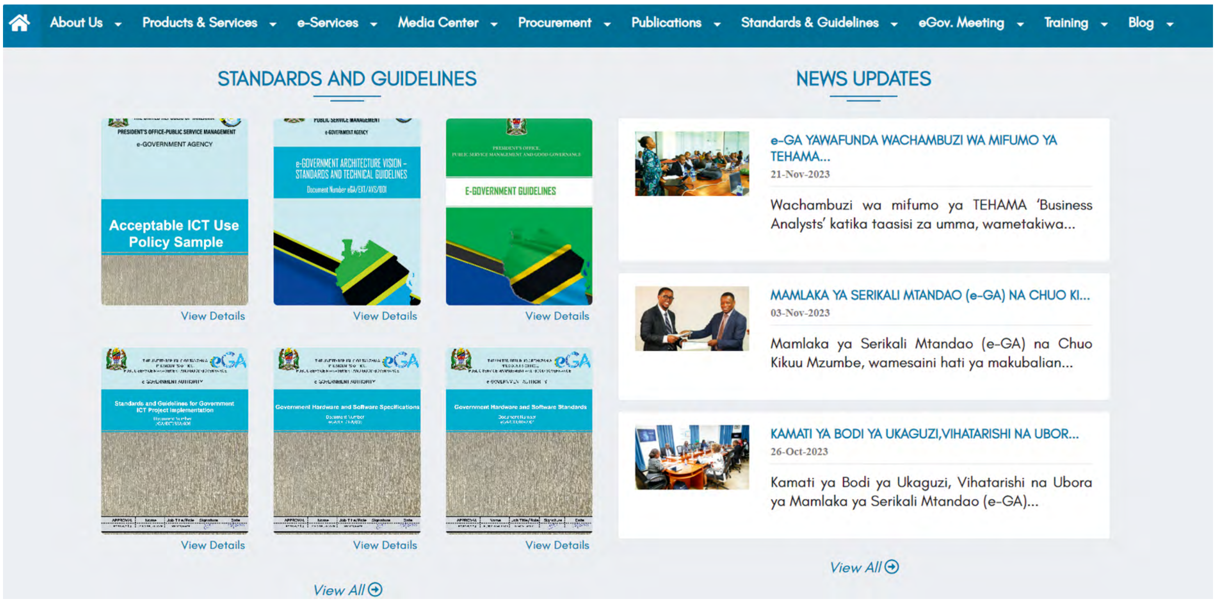


Source: Egyptian Ministry of Finance

220 UN E-Government Knowledgebase. URL: https://publicadministration.un.org/egovkb/data-center
221 South African e-Services Portal. Official website. URL: https://www.eservices.gov.za/
222 South African Government. Services for residents. Official website. URL: https://www.gov.za/services/services-residents
223 Arab Republic of Egypt. Ministry of Finance. Official website. URL: https://mof.gov.eg/en
224 Ethiopian E-Services Portal. Official website. URL: https://www.eservices.gov.et/



Source: Ethiopian E-Services Portal[225]



Source: Tanzania E-Government Authority website[226]

225 Ethiopian E-Services Portal. Official website. URL: https://www.eservices.gov.et/
226 Tanzania e-Government Authority. Official website. URL: https://www.ega.go.tz/

Forging sovereign digital future

The pursuit of digital sovereignty in Africa is a multifaceted endeavour that cannot be reduced to mere control over data and infrastructure

While these elements are undoubtedly critical, a holistic approach must incorporate various dimensions, including the diversification of foreign aid sources, the mitigation of technological dependency, and the assurance of reliable infrastructure. As Africa navigates its digital future, it must also prepare for potential disruptions by developing alternative solutions that ensure continuity and resilience.

Central to achieving digital sovereignty is the development of human capital. Digital sovereignty cannot be realised without a robust pool of expertise and decision-makers who are equipped to address the unique challenges of the continent. This includes fostering homegrown talent capable of innovating and leading within the tech sphere.

Moreover, the current stage of digitalisation presents an invaluable opportunity for African nations to collaborate and learn from one another. By sharing experiences and best practices, countries can accelerate their digital agenda while fortifying the continent's collective sovereignty.

Education is power: who teaches African leaders

The main challenges of education in Africa

During the 37th African Union Summit held in Addis Ababa in January 2024, the countries of the continent, at the proposal of AU Chairperson Moussa Faki Mahamat, chose "Educate and Skill Africa for the 21st Century" as the key theme for 2024.[227] [228]

Some of the most important goals set for 2025 and announced at the summit were to reduce the out-of-school rate to 11% for primary schools and to achieve a 46% reading proficiency rate by the end of primary school. African Union countries committed to training 79% of teachers at the pre-primary level and 85% at the primary level.

These promising targets are generally achievable for African countries, as they have already made notable efforts in the 21st century to implement education programmes and address the challenges facing education, showing marked and sustained growth in key indicators. However, even today the situation requires attention of those responsible for developing education policy on the continent.

According to UNESCO, the current primary school enrolment rate in Africa averages over 80%, with the continent experiencing one of the largest increases in primary school enrolment in the world over the last few decades (up 18 percentage points since 2000).[229]

More children in Africa are now in school than ever before[230]

The proportion of children of lower secondary school age who are out of school has fallen from 43% to 33% over the past two decades, while for upper secondary school children it has fallen from 63% to 53%.

In Africa, the rate of out-of-school children fell from 35% in 2000 to 18% in 2020, but **Sub-Saharan Africa still has the lowest enrolment rates in the world**. In 2022, about 100 million primary and secondary school-age children in Africa were out of school, representing 40.5% of the global total.[231] Only 41% of pupils who start school complete their primary education and 23% complete secondary education.

This is because in many parts of the continent, especially in fragile and conflict-prone regions, social barriers remain, keeping many children out of school and preventing them (especially girls) from getting an education and becoming active members of society.

Equality of opportunity remains an important challenge. According to the UNESCO Institute for Statistics, some 9 million girls are not receiving any education (compared to 6 million boys).[232] Gender inequality starts early, with 23% of girls already out of primary school compared to 19% of boys. By adolescence, these proportions increase to 36% for girls and 32% for boys.

227 Theme of The Year 2024: "Educate and Skill Africa for the 21st Century" URL: https://au.int/en/theme/2024/educate-african-fit-21st-century

228 In previous years, the themes of the year for African Union have not been education-related, in 2021 – "The AU Year of the Arts, Culture And Heritage: Levers for Building the Africa We Want", in 2022 – "Strengthening Resilience in Nutrition and Food Security on the African Continent", and in 2023 – "Acceleration of the AfCFTA implementation".

229 UNESCO Institute for Statistics URL: https://data.uis.unesco.org/

230 Musau Z. Africa grapples with huge disparities in education URL: https://www.un.org/africarenewal/magazine/december-2017-march-2018/africa-grapples-huge-disparities-education

231 UNESCO. Out-of-school numbers are growing in Sub-Saharan Africa URL: https://www.unesco.org/gem-report/en/2022-out-school

232 UNESCO Institute for Statistics URL: https://data.uis.unesco.org/

According to the UNESCO Institute for Statistics, the largest numbers of primary school-age children out of school in 2020-2021 were in Ethiopia (3.8 million, 22% of all children of this age in the country), Niger (1.8 million, 41%), Tanzania (1.8 million, 15%), South Africa (0.92 million, 12%), Burkina Faso (0.88 million, 25%), Senegal (0.8 million, 27%), Chad (0.6 million, 22%).

The largest number of secondary school-age children out of school in 2020-2021 was in Niger (3 million, 78% of all children of this age in the country), Cameroon (2.3 million, 56%), Côte d'Ivoire (1.9 million, 46%), Burkina Faso (1.9 million, 55%), Chad (1.8 million, 66%), Mozambique (1.7 million, 44%), Guinea (1.3 million, 62%), Benin (0.9 million, 47%).

According to the UNDP education index, which is a part of the Multidimensional Poverty Index for October 2022,[233] Niger, Mali, Chad, Burkina Faso, South Sudan, Djibouti and Sudan are among those lagging behind in terms of the quality of education. Leading states on the continent include Mauritius, South Africa, Seychelles, Egypt, Tunisia.

This is underscored by the huge gaps in educational performance between the richest and poorest segments of the population in Africa. In Sub-Saharan Africa, only 13% of children from the poorest households complete secondary school, compared to 66% of children from the richest households.

African countries still lack qualified teachers. According to UNICEF 2020 data, the average ratio of qualified teachers per country in Sub-Saharan Africa was 89% at the primary level and only 80% at the secondary level. Experts estimate that 15 million new teachers will be needed to meet the demand for schooling in Africa by 2030

At the same time, the problem remains complex. Without solving the issues of security, infrastructure development, development of road links, investments in connectivity, and the need to improve the quality of life, it is impossible to fully solve the problem of education.

In this context, urbanisation is playing a pivotal role in the African continent, influencing not only economic development, but also education. Urbanisation has led to increased learning opportunities for African youth by providing easier access to schools.[234] Moreover, according to researches, living in an urban environment improves literacy rates by 4-5%, emphasising that longer schooling leads to better learning outcomes also.[235]

But still low levels of attainment mean that children in Africa are less prepared for future work than their counterparts in the rest of the world. The labour market mismatch could become even more serious in the near future, as according to the World Bank, **more than 230 million jobs in Sub-Saharan Africa are expected to require digital skills by 2030**.[236]

In addition, one of the most important challenges for education in Africa is its inefficiency and inability of graduates to take up jobs in the labour market. The World Economic Forum estimates that at the current level of educational development, only 52% of the continent's working-age population will be able to complete secondary education by 2030.[237] According to the latest data from the UNESCO, the literacy rate among young people (aged 15-24) in Sub-Saharan Africa averages about 77%, which is the lowest in the world.[238]

233 2022 Global Multidimensional Poverty Index URL: https://hdr.undp.org/content/2022-global-multidimensional-poverty-index-mpi#/indicies/MPI
234 van Maarseveen, R. (2021). Urbanization and educational attainment: evidence from Africa. Available at SSRN 3836097.
235 Bold, T., Filmer, D., Martin, G., Molina, E., Stacy, B., Rockmore, C., ... & Wane, W. (2017). Enrollment without learning: Teacher effort, knowledge, and skill in primary schools in Africa. Journal of Economic Perspectives, 31(4), 185-204.
236 Digital Skills in Sub-Saharan Africa Spotlight on Ghana URL: https://www.ifc.org/content/dam/ifc/doc/mgrt/digital-skills-final-web-5-7-19.pdf
237 The Future of Jobs and Skills in Africa URL: https://www3.weforum.org/docs/WEF_EGW_FOJ_Africa.pdf
238 UNESCO Institute for Statistics URL: https://data.uis.unesco.org/

This is explained by the persistence of poor infrastructure, social, economic and cultural factors that significantly reduce not only the number of students but also their ability to effectively study. In general, African countries with the exception of Algeria, Egypt, Ghana, Kenya, South Africa and the sparsely populated island states face similar problems.

Given that school education is considered the most important factor in shaping the rest of a person's life, the situation in Africa remains extremely challenging. Improving the quality and accessibility of education will determine Africa's participation in the process of restructuring the global division of labour that has already begun.

According to expert estimates, by 2030, China could lose 85-100 million jobs in labour-intensive industrial sectors by 2030, and a significant proportion of these jobs could be shifted to Africa.[239]

The current demographic patterns also present an opportunity for countries of the continent to leverage soon, as this high proportion of young population will not last forever. While 60% of Africa's population was under the age of 25 in 2020, by 2050 around 50% of Africans will belong to this age group. UNICEF estimates that by 2050, the number of people under 18 in Africa will reach 1 billion, representing 40% of all children and adolescents in the world.[240]

However, in order to harness this potential, **quality education and job creation for young people must be ensured so that they can successfully adapt to the labour market and contribute to the Africaan economy**.

On the one hand, the growing population makes Africa attractive as a potential destination for a number of industries, but imbalances, including in education, can lead to the opposite effect: not industries will be attracted to the growing and educated population within Africa, but educated Africans will be attracted to other regions to work for these industries.

Migration and education

Moreover, the complex nature of the problem of education is not merely a question of access.

Perhaps even more important is the provision of opportunities for students and graduates to further apply their knowledge in practice

In this situation, possible points of growth are people for growing sectors of the economy who will be able to apply their knowledge effectively for the benefit of their countries. For example, technical education and training in agriculture is one of the key factors for effective economic and social development in African countries.

Studies confirm that educational programmes for retraining farmers, how to efficiently use technological innovations such as adapted crop seeds, fertilisers, irrigation technologies, have a positive impact on productivity and propensity to innovate.[241] In particular, the FAO implements farmer field schools in Africa, which are institutionalised in the national policies and extension systems of Kenya, Ethiopia, Uganda with the participation of local universities.[242] Such programmes require both training existing workers and placing greater emphasis on agricultural training programmes at partner institutions.

239 Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages URL: https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages

240 TRANSFORMING EDUCATION IN AFRICA URL: https://www.unicef.org/media/106691/file/Transforming%20Education%20in%20Africa.pdf

241 Kirui, O. (2019). The complementarity of education and use of productive inputs among smallholder farmers in Africa. ZEF-Discussion Papers on Development Policy, (277).

242 A paradigm shift in Farmer Field Schools methodology in Eastern Africa URL: https://www.fao.org/news/countries-good-practices/article/en/c/1382854/

This is why the 'brain drain', where educated African youth leave their countries in search of jobs that match their skill set, is still a major problem.

African migrants play an increasing role in the economies and politics of Europe. Demographic decline, aging populations and a shrinking number of young people are reducing the number of workers in European economies (expected to fall by 44 million by 2050). This reduction is expected to be replaced by, inter alia, African migrants.[243] The Centre for Global Development predicts that around 24.5 million migrants will add to Europe's working-age population between 2015 and 2050, of which more than 7 million will be from Africa.[244]

It is through this framework that European countries' investments in education programmes in Africa should be perceived. Supporting school and university education becomes an opportunity for them to 'offshore' personnel training for their own economies. As European populations age and the cost of labour rises, it is worth waiting for this cooperation to grow further. For example, since 2021, the Talent Partnerships initiative is being implemented, which aims to provide financial support to stimulate "mutually beneficial" international mobility based on matching labour market needs and skills between the EU and partner countries.

EU Commissioner for Home Affairs Ilva Johansson said in June 2021: "We need legal migration: the working age population in Europe is shrinking and many key sectors are facing skills shortages, such as health and agriculture. Talent Partnerships will help match the skills of candidates for jobs in Europe with the needs of the labour market".[245]

Pilot projects on legal migration funded by the European Commission and the Migration Partnership Fund (MPF) have been running since 2016. The MPF has channeled EUR 30 million to more than 40 projects in 15 EU member states and 12 partner countries (mainly Northern Africa). In this model, the migration destination country agrees to provide technology and funding to train potential migrants in targeted skills in the country of origin before they move and receives workers with the skills they need to integrate and contribute to the economy.

While the programme's organisers claim that the country of origin can receive support to train the population and increase human capital, the nature of the programme itself targeted at participants who are motivated to emigrate, so it is unlikely that many of its participants will stay in their home country.

At the same time, migration may also be beneficial to African countries, as even workers who leave the country often provide a major boost to the economy of the sending country by remitting a significant portion of their foreign earnings back home (15 to 20%), which becomes a crucial factor in the foreign exchange of African countries.[246] Overall, this is a 'human capital dilemma': every dollar transferred from Europe or the Middle East means more systemic losses for the country in the long run - shortages of skilled labour, changes in demographics, culture, etc. In any case, migration policies on the part of African governments need to be calibrated more carefully.

This is even more relevant considering that the majority of migrants leaving Africa are economically active, hardworking and ambitious.

Thus, about 80% of African migrants are in search of better economic prospects; moreover, only 7.2% of African migrants in EU countries are refugees.[247] A 2019 study by the United Nations Development Programme reports that African migrants are often more educated than their peers who stayed in their home countries.[248]

243 Kenny C., Yang G. Can Africa Help Europe Avoid Its Looming Aging Crisis? URL: https://www.cgdev.org/publication/can-africa-help-europe-avoid-looming-aging-crisis
244 Kenny C. Good News: Africa Needs More Jobs While Europe Needs More Workers URL: https://www.cgdev.org/blog/good-news-africa-needs-more-jobs-while-europe-needs-more-workers
245 Talent Partnerships: Commission launches new initiative to address EU skills shortages and improve migration cooperation with partner countries URL: https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2921
246 Africa and Europe Facts and Figures on African Migrations URL: https://mo.ibrahim.foundation/our-research/data-stories/aef-african-migrations
247 Africa and Europe Facts and Figures on African Migrations URL: https://www.friendsofeurope.org/wp/wp-content/uploads/2022/01/AEF_Summit_African-Migrations.pdf
248 Scaling Fences URL: https://www.undp.org/publications/scaling-fences

Those who travelled to Europe had, on average, received three more years of education compared to their peers of the same age in the countries they left. According to the Migration between Africa and Europe (MAFE) study, Africans with higher education are more likely to migrate to Europe.[249]

Some researchers (e.g. Dustmann C., Theodoropoulos N.) have noted that children of African migrants are more successful in education than their peers in the local population.[250] However, it is still noted that employment of African skilled professionals is often below their skill level upon arrival in Europe.[251]

African migrants were much more likely to be in skilled employment if they had studied in Europe rather than arriving after holding a skilled occupation in Africa

At the same time, the gradual increase in the number of African descendants living permanently in Europe has led to an increasing number of African descendants, or their children, taking up high positions in private companies and public institutions in European countries. Children of African migrants of the first generation who were able to get a quality education in Europe and find a qualified job are successful. For example, in the UK, the Nigerian community is distinguished by a high level of education, and as a consequence, there are many businessmen, scientists and media workers with Nigerian roots in the country.[252]

The number of African migrants is high in such areas as health care and construction. Thus, **in France, about one-half of migrant doctors came from Africa**, mainly North Africa (the figure exceeded 7 thousand people). **In Germany, Italy and the UK every sixth migrant doctor is from Africa**, but if their number in the first two countries is about 2,000, in Great Britain it exceeds 15,000 doctors.[253] Thus, it can be noted that some areas of the European labour market are becoming increasingly influenced by African descendants.

In an increasing number of European countries, African descendants are occupying important positions at the political level, including in the cabinet of ministers, and this trend is likely to increase. According to the authors' analysis of European governments for 2024, African descendants are represented in the cabinets of the UK, France and Belgium, as well as in the parliaments of these countries. African descendants are also present in the parliaments (at national and regional levels) of Germany, Ireland, Italy, Portugal, Finland, Sweden and Switzerland.

Illustrative cases include the Prime Minister of Wales (March 2024 to August 2024), Zambian-born Humphrey Won ap David Gething (Welsh father, Zambian mother), who has held ministerial positions in the cabinet since 2016. The parents of former British Prime Minister Rishi Sunak, similarly migrated to the island from Eastern Africa where they were born. Farnce's youngest prime minister, Gabriel Attal, was born in France but has Tunisian ancestry through his grandfather.

Belgian Foreign Minister since 2022, Hadja Lahbib was born to migrant parents from Algeria. Bundestag MP Karamba Diaby, born and raised in Senegal, moved to Germany for education and stayed on, becoming one of the first two African MPs in 2013, retaining the position today.

249 Final Report Summary - MAFE (Migration between Africa and Europe) URL: https://cordis.europa.eu/project/id/217206/reporting

250 Dustmann C., Theodoropoulos N. Ethnic minority immigrants and their children in Britain // Oxford Economic Papers, New Series. April, 2010. Vol. 62. №.2. P. 209-233.

251 Final Report Summary - MAFE (Migration between Africa and Europe) URL: https://cordis.europa.eu/project/id/217206/reporting

252 Карпов, Г. А. (2016). У Великобритании-африканское будущее? Азия и Африка сегодня, (1), 59-64.

253 Кузнецов, А. В. (2020). Экономическая деятельность выходцев из Африки в крупных странах ЕС: новые подходы. Контуры глобальных трансформаций: политика, экономика, право, 13(1), 6-27.

The greater number of African descendants in important public positions in the three countries (the UK, France, Belgium) is not only due to a long colonial history, but also to a lesser language barrier that reduces the difficulty of assimilation for Africans in these countries. This trend underscores the fact that people from Africa are playing an increasing role in the political life of European countries, meaning that the opportunity to play such a role in their home country was not available to them for various reasons.

Higher education in Africa

However, the challenges faced by education in Africa are not limited to primary and secondary education. Higher education on the continent also faces serious difficulties.

Adopted by the African Union in 2015 Africa Agenda 2063 and **the Continental Education Strategy for Africa (CESA) 2016-2025** place higher education and research at the centre of Africa's growth and development. This is particularly important in the context of the 21st century, where science and technology are the foundation of a knowledge-based economy.

Despite the growing number of African universities, which increased from 784 in 2000 to 1,700 in 2021, there is a serious shortage of places for all school graduates. Between 2011 and 2021, university enrolment increased from 5% to 11% The number of Africans in tertiary education is rising – the figure has increased by more than 30% in the past decade to 16.1 million (14.1% of the tertiary-age population, 121 million in 2020), outpacing the rate of population growth (+18% over the same period). However, this is still not enough.

Higher education enrolment in Africa represents only 3% of enrolments at all levels of education on the continent and 4% of all students globally. In terms of the number of students, the leading countries in Africa are Egypt (2.4 million, 28% of the tertiary age population), Nigeria (1.8 million, no data), Algeria (1.6 million, 53%), South Africa (1.2 million, 25%), Morocco (1.1 million, 39%) and Kenya (0.6 million, 11%).[254]

In this context, Africa accounts for 9.2% of the world's universities, about 1% of the world's R&D expenditure, 2.5% of the world's researchers and scientists, and 3.5% of academic publications throughout the world.

The continent is characterised by a high concentration of universities in a few countries with a developed academic tradition, which is illustrated by Africa's position in international university rankings, in which Egypt and South Africa traditionally lead by a significant margin.

For example, in **the QS World University Rankings 2025**, which compiles a list of the world's top 1,500 universities, Africa is represented by 40 universities (the year before there were 41, and in 2023 only 32): 15 from Egypt (two in the top 500), 11 from South Africa (of which five in the top 500), four from Tunisia, two from Nigeria, Kenya and Ghana, as well as one each from Morocco, Sudan, Ethiopia and Uganda.

This is also reflected in the issue of funding of major universities. Our study reveals that South African and Egyptian universities lead the list of the most well-funded universities.[255] Public universities in Kenya, Nigeria, Uganda and Ghana are also on the list of the most financially endowed universities. More importantly, South African universities lead in terms of spending per student, which compares favourably with other universities on the continent.

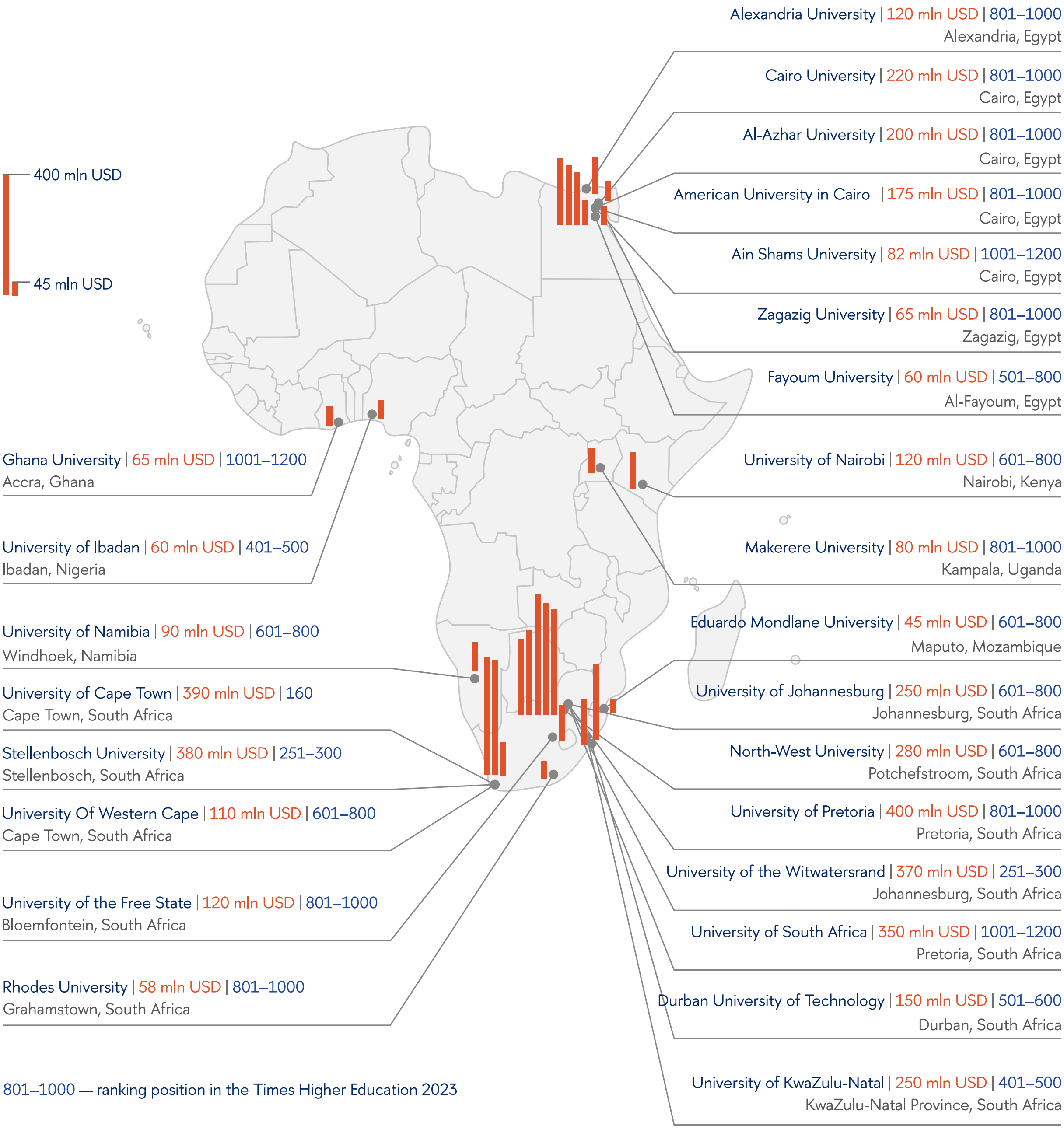
At the same time, even Africa's largest universities face funding challenges, pushing them to actively seek external funding

254 Sub-Saharan Africa: Tertiary Education URL: https://thedocs.worldbank.org/en/doc/908af3404023a2c31ef34853bba4fe60-0200022022/original/One-Africa-TE-and-COVID-19-11102021.pdf

255 Маслов А. А. и др. Африка 2023. Возможности и риски. – 2023

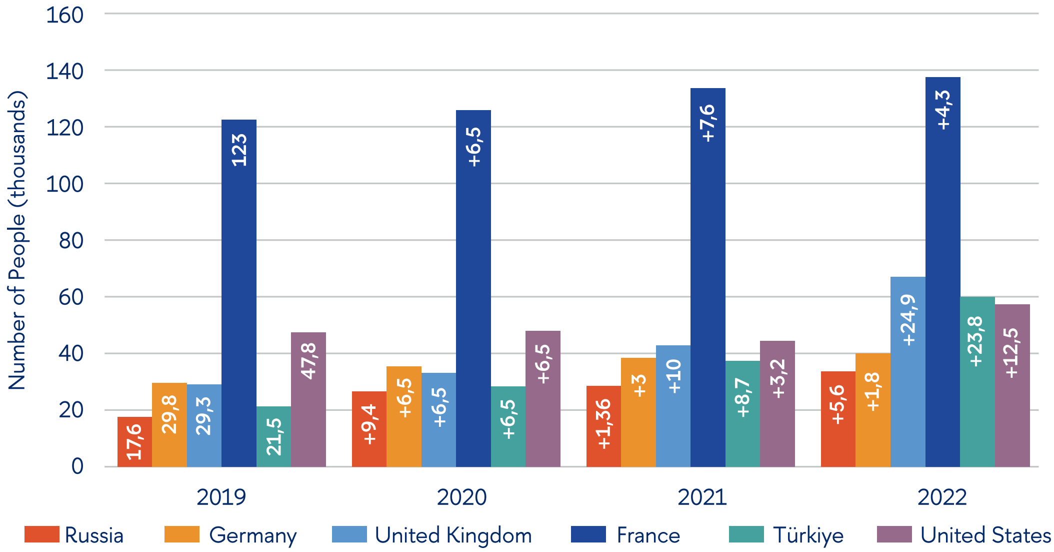
According to the World Bank, Sub-Saharan Africa accounted for USD 3.8 billion in educational aid (39% of all funds allocated to higher education) from 2015 to 2020. There is a notable lack of funding from within Africa, apart from small salaries secured by the government and fee-paying students, there are still no visible initiatives from foundations and philanthropists.

Leading universities in Africa by revenue from all sources



Source: prepared by the HSE Center for African Studies based on data from the media, UNESCO Institute for Statistics and foreign ministries of the relevant countries.

African students around the world



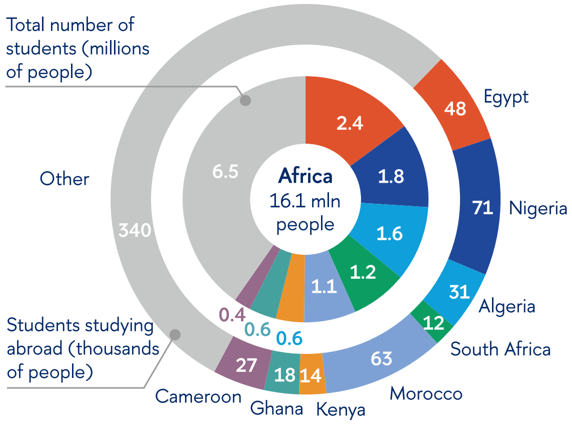
Source: prepared by the HSE Center for African Studies based on data from the media. UNESCO institute for Statistics and foreign ministers of the relevant countries.

Universities' financial constraints are leading to increased outward mobility from Africa. According to UNESCO, **Sub-Saharan Africa has the world's second highest outbound student mobility rate** (4.78), behind Central Asia (16.3), while the rate in Northern Africa is close to the world average (2.7) at 2.6.

Africa is one of the largest importers in the higher education market. The total number of African students studying abroad in 2020, according to UNESCO, is 624,000 (135,000 of which are in other African countries) or 10 % of the world total. The value of higher education services for African students studying outside the continent exceeded USD 13 billion.

In total, the number of students studying abroad more than doubled between 2000 and 2022. The leading countries in admitting African students outside the continent are France (138,000), China (more than 80,000), the UK (68,000), Türkiye (61,000), and the US (57,500); within Africa those are South Africa (30,000), Morocco (20,000) and Senegal (15,000).

African countries by number of students 2020 (inside and outside Africa)



Source: prepared by the HSE Center for African Studies based on data from UNESCO Institute for Statistics.

At the turn of the century, calls for the improvement of African universities and the need to link higher education to development were increasingly voiced internationally and at the African level. In early 2000, UN Secretary-General Kofi Annan stated that "The university must become a primary tool for Africa's development in the new century".[256]

256 Cloette N. Universities and Economic Development in Africa. URL: https://www.aau.org/wp-content/uploads/sites/9/2018/04/Universities-and-Economic-Development-in-Africa.pdf

With knowledge playing an increasingly important role in development, universities are seen as a critical link in national development as they are institutions that can provide an adequate foundation for the emerging knowledge economy in Africa by providing skills, competencies and knowledge that are oriented towards direct application by public institutions and influencing policies.[257]

University-based centres of competence, technology transfer centres are increasingly being established in Africa, and universities are developing and commercialising software, technology and their own expertise. Universities' development efforts also focus on helping to reduce poverty and health problems, improve agricultural production and support business development, mainly through advising public institutions.

External influence on education in Africa

A review of the current challenges facing education in Africa reveals that lack of funding remains a critical challenge, so the continent continues to rely on external support for development programmes and education financing.

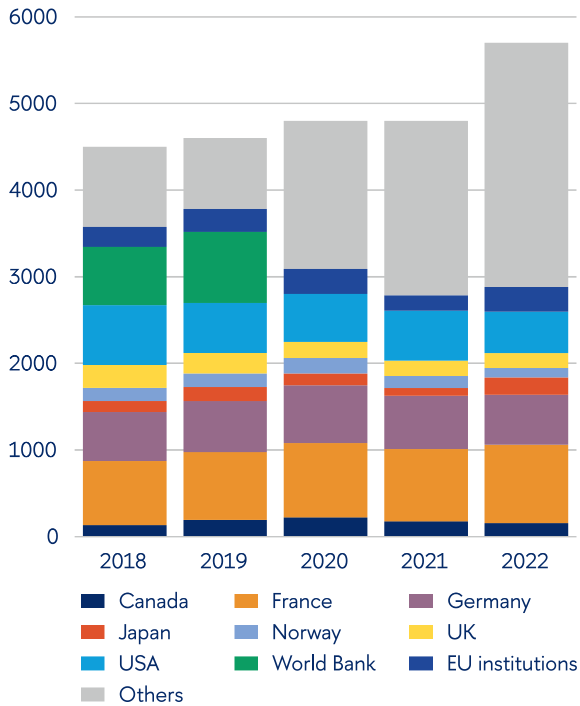
While aid still accounts for about 5% of total education spending in Africa, its importance cannot be overestimated. According to the OECD, growth in aid to education in Africa slowed in 2021 to USD 4.8 billion, the same as in 2020. The coronavirus pandemic contributed to this, but in 2022 there was a marked increase in aid to USD 5.7 billion.[258]

The majority of aid is concentrated in Sub-Saharan Africa (83%), while Northern Africa has a less significant share (17%). Regarding the distribution of funds among other regions in Sub-Saharan Africa, Eastern Africa (35.5 % of all aid to Africa), Western Africa (32%), Central Africa (13%) and Southern Africa (1.5%) receive the largest amount of aid.

The World Bank is the largest donor, averaging around USD 1 billion annually, but in 2022 the amount reached a record high of USD 1.9 billion, focusing entirely on Sub-Saharan Africa. In 2022, Eastern Africa accounted for 44.6% (USD 867 million), Western Africa 38.7% (USD 752 million), Central Africa 16.4% (USD 319 million) and Southern Africa only 0.3% (USD 5.8 million).

While traditional external influences on education have centred on the financing of projects on the ground as well as the infrastructure, in recent years there has been increasing cooperation at institutional level, including collaboration between universities and university associations, the growing provision of educational scholarships, training, promotion and foreign language teaching. If we assume that the **main objective of aid is to secure the flow of migration and improve its quality**, the shift in priorities is well explained.

Foreign aid to education in Africa (USD mln)



Source: prepared by the HSE Center for African Studies based on OECD data.

257 Cloete N., Bunting I., van Schalkwyk F. Research Universities in Africa. URL: https://library.oapen.org/handle/20.500.12657/27492
258 OECD Data Explorer URL: https://data-explorer.oecd.org/

European states

Western countries have long had the greatest influence on education in Africa, which can be explained by their historical ties and the European role in establishing academic institutions in Africa. When African countries gained independence, they mainly adopted the education systems of the former colonial powers.

The high level of European influence on education in Africa remains relevant today. European states are still the most popular destinations for African students. According to the UNESCO Institute for Statistics, more than 320,000 Africans are studying in European countries in 2022, which corresponds to about 50% of all African students studying abroad. The largest number of students study in France (138,000), the United Kingdom (68,000) and Germany (41,000).

In addition to the **World Bank and the US**, the list of the largest donors of foreign aid to education in Africa includes **France, Germany, the EU (as an institution) and the UK**. According to the OECD, these actors account for about 75% of external aid to education in Africa.

According to European Union data for the period 2014-2020, the EU has allocated more than EUR 1.5 billion to support education in Africa. This assistance is not limited to basic education, but also includes significant cooperation in higher education, to which European countries pay particular attention. Such funding for universities provides both access to human resources and to sites for joint research, which is also important for data collection.

According to reports from the European Union's Erasmus+ academic exchange and mobility programme: funding allocated under the programme for Sub-Saharan Africa in 2021-2027 was EUR 570 million, compared to only EUR 120 million from 2014 to 2020. The funding for 2021-2027 will account for more than 25% of the programme's overall total, highlighting the continent's increasing importance. The aim of the programme is to increase annual mobility between Europe and Africa from around 16,000 in 2021 to 105,000 by 2027. Given the interest of European countries in skilled labour, it can be noted that the focus of aid in education remains the selection of future migrants.

The importance of the educational sphere in cooperation with the countries of the continent is emphasised at the highest political level. Thus, at the end of the summit of the European and African Unions in February 2022, a final declaration was adopted,[259] which stressed that higher education and research are areas of joint action (where the long-term beneficiary is likely to remain the EU) within the framework of the Erasmus+ programme The declaration referred to the need to promote vocational education and training in Africa.

An investment package was also announced to support the implementation of the African Union Agenda 2063, including education, with a focus on enhancing student mobility and employability, improving quality and increasing access to the digital and information economy. The EU has allocated EUR 970 million for this purpose. Other notable initiatives include the EU's EUR 100 million allocation for teacher training for Africa, as well as the Skills and Vocational Education Training Initiative with over EUR 500 million in funding.

The EU is also actively involved in other projects, notably **the Global Partnership for Education organised by the World Bank**. In 2021, ahead of the G7 summit, European Commission President Ursula von der Leyen announced that the EU will allocate EUR 700 million to support GPE projects. In 2023, former Tanzanian President Jakaya Kikwete was appointed as the first African president of the GPE Board of Directors, highlighting the continent's importance in the organisation's activities.

EU countries are the GPE's largest donors after the UK (15%) and the US (8.2%): the European Commission (12.33%), Norway (9%), the Netherlands (8.3%), Denmark (6.8%), France (6.3%).

Africa is the largest recipient of financial support from the GPE. Almost all countries in Africa (except South Africa, Namibia, Botswana, Gambia, Gabon,

259 6th European Union - African Union Summit: A Joint Vision for 2030 URL: https://www.consilium.europa.eu/media/54412/final_declaration-en.pdf

Equatorial Guinea, and Libya) are partner countries and recipients of GPE support. Ethiopia, DRC, Uganda, Nigeria, Mozambique, Tanzania, Niger, Somalia are among the largest recipients of partnership funding (USD 2.7 billion from 2003 to June 2024), receiving about 30% of all aid.[260]

Despite large amounts of aid, it often does not reach desired results, keeping local levels of under-education high.

Big African businesses have not yet realised the strategic importance of local universities as a potential infrastructure for expert, human resources and GR support for their business and therefore have limited investment in the universities' development. Moreover, it has been argued that, due to over-reliance on external aid, many African governments are neither leading nor fully committed to the reform process itself.[261] This illustrates that funding and external aid are no guarantee of effectively overcoming the challenges facing education in Africa.

European countries are also implementing projects at bilateral level. France, for example, has been implementing campus programmes in Africa since 2017, with two pilot projects launched in Senegal and Côte d'Ivoire, offering programmes, often in partnership with local universities, allowing students to obtain a degree while continuing their studies in Africa. French universities are increasing their collaboration with African universities and opening branches in Africa, with École Centrale de Lyon establishing branches in Morocco and Mauritius.

Since 2021, France has been implementing the Partnerships with African Higher Education programme through the French Development Agency (AFD). The second phase of the programme runs from 2023 involving 14 higher education institutions from Africa and 35 from France. Providing a network of partner courses via the programme costs EUR 20 million.

Germany through the German Agency for Development Cooperation and the German Academic Exchange Service (DAAD) promotes programmes for higher education and supports centres of excellence. For example, since 2012 DAAD, together with the Alexander von Humboldt Foundation and with funding from the Federal Ministry of Education and Research, has been supporting the Next Einstein Initiative. African master's students study applied mathematics at The Africa Institute for Mathematical Sciences (AIMS) centres in South Africa, Cameroon, Ghana, Rwanda, Senegal, Tanzania and Ghana. Non-surprisingly, the geography of this initiative partly coincides with the archipelago of the former German colonies in Africa.

In July 2024, Germany with the World Bank, agreed on a joint initiative to support education and skills development in Sahel region through the centres of excellence in the region.

The UK is implementing development programmes through the DFID (Department for International Development), the British Council and UK Research and Innovation both at primary education level and also developing collaboration with the network of universities in Africa.

For example, in 2023, the University of Nottingham signed a relationship development agreement with the Association of African Universities (AAU) to support research, mobility and academic collaboration between the parties. The British Council has launched Innovation for African Universities (IAU), a learning and collaboration platform that brings together UK and African universities to engage and collaborate, creating centres of excellence with one UK and one African university (specifically Ghana, Kenya, Nigeria and South Africa).

The initiative to deliver UK Transnational Education (TNE) through the formation of overseas campuses and joint programmes with overseas universities is seen as an important part of the impact.[262] In 2022, over 550,000 people were studying in UK degree programme outside the UK. Similar opportunities are present in several countries in Africa, such as Egypt, Nigeria, South Africa and Ghana.

260 GPE Partner countries URL: https://www.globalpartnership.org/where-we-work/partner-countries

261 Woldegiorgis ET, Jonck P, Goujou A (2015) Regional HE reform initiatives in Africa: A comparative analysis with the BP. International Journal of HE 4(1): 224–253.

262 Developing equitable TNE partnerships: where to begin URL: https://www.universitiesuk.ac.uk/universities-uk-international/insights-and-publications/uuki-insights/developing-equitable-tne-partnerships

These initiatives also have a business component, acting as an important revenue stream: presenting migration opportunities and well-known brands in a comfortable English-speaking environment, without there necessarily being any guarantee of quality.

USA

In contrast to European countries, the United States is much more focused on investment in supporting primary and basic education.

The main actor in this process is the development agency USAID, which in 2021-2023 provided nearly USD 1 billion in foreign aid to Sub-Saharan Africa in the field of education. This includes USD 240 million in 2021, USD 255 million in 2022, USD 391 million in 2023 (and over USD 145 million as of July 2024).[263]

At the same time, there is less interaction at the higher education level. At the end of the US-Africa Leaders Summit 2022 in December 2022 in Washington, DC, the topic of education was not prioritised.

Among the most notable initiatives implemented in recent years is **the University Partnership Initiative**, mainly implemented with universities in South Africa with the prospect of expanding to other African countries. The US State Department-funded initiative is aimed at exchanges of scientists and students between the parties. Since 2016, Michigan State University has been implementing an initiative called the Alliance for African Partnerships (AAP) with ten leading African universities and a network of African research institutes.

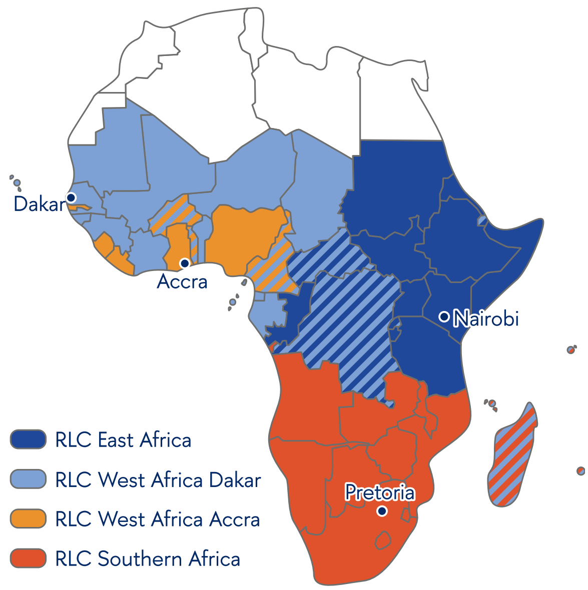
There are several campuses and joint programmes of American universities operating in Africa. In particular, Carnegie Mellon University's Rwanda campus, the first US university to offer master's degrees on the continent, has been open since 2019.

In May 2024, the US entered into a framework cooperation agreement with the Kenyan government to support university-industry partnerships to foster innovation, research and job growth in STEM-related fields.

Map of recipients of the US education aid in 2023

Source: prepared by the HSE Center for African Studies based data from USAID.

Map of YALI regional centres



Source: prepared by the HSE Center for African Studies based on official data.

263 Foreign Assistance URL: https://www.foreignassistance.gov/

The Young African Leaders Initiative (YALI) is the most notable educational programme implemented by the United States on the continent.[264] This initiative was launched in 2010 under the Obama administration. The programme includes the Mandela Washington Fellowship, a six-week training course in the US. The programme provides leadership training courses for young people between the ages of 18 and 35. Since its launch, **more than 28,000 people have participated in the programme**. In 2023, 700 scholarships have been awarded. Participants receive online and face-to-face training and professional development opportunities in business, civil society and public policy management, and governance.

The US has opened four regional centres in Ghana, Kenya, Senegal and South Africa, which are also responsible for interaction with neighboring countries. Moreover, as of 2019, these centres have begun to jointly coordinate and collaborate under YALI Africa, a body that brings the centres together and serves as a central point for mobilising resources and 'maintaining a unified vision and development.'

China

At the same time, it is not only Western countries that are focusing on education to expand their influence. At the Forum on China-Africa Cooperation (FOCAC) in 2012, it was made clear that greater emphasis would be placed on education.

Back in 2010, China launched **the China-Africa University Cooperation Plan 20+20 partnership**, bringing together the interaction of 20 Chinese universities with 20 African universities from 17 countries. This partnership was subsequently expanded. In 2023, a new format was launched: the **China-Africa 100 University Cooperation Program**.

In August 2023, at the BRICS Summit in South Africa, China launched the China-Africa Talent Development Cooperation Plan, aimed at training 500 principals and highly qualified vocational college teachers each year, as well as 10,000 technicians with Chinese language and professional skills and internships for African civil servants in China.

China is rapidly expanding its network of Confucius Institutes, offering language and cultural courses for Africans. 66 Confucius Institutes have been established in 46 African countries. The first was launched in Nairobi, Kenya in 2004, and South Africa hosts the most Confucius Institutes on the continent (7). Although exact statistics are not available, many stu-

China also is implementing education and training programmes within the political sphere by building party schools in Africa: the Mwalimu Julius Nyerere Leadership School in Tanzania in February 2022 and the renovation of the Herbert Chitepo School of Ideology in Zimbabwe for the ruling ZANU-PF party in 2023.

Burundi, Republic of Congo, Equatorial Guinea, Morocco, Uganda, Kenya have also expressed interest for similar projects. In addition, in 2019, China launched the China-Africa Institute, which is based in Addis Ababa and aimed at training African party and government leaders.[265]

China also runs training programmes for African parties and government officials, both in Africa and in China. These programmes are aimed at promoting the Chinese model of development and strengthening friendly ties between states. China is expected to receive more than 50 such delegations over 2024.[266]

264 Young African Leaders Initiative URL: https://www.usaid.gov/yali

265 Nantulya P. China Escalates Its Political Party Training in Africa YRL: https://africacenter.org/spotlight/china-escalates-its-political-party-training-in-africa/

266 China's Political Schools: Expanding Influence in Africa URL: https://www.riotimesonline.com/chinas-political-schools-expanding-influence-in-africa/

dents who have received language training at the institutes later continue their studies at universities in China, becoming an important area of educational cooperation.

New institutional forms are being established to systematise cooperation between countries. At the first Joint Conference of Confucius Institutes in Africa held in Kenya in May 2024, 16 Institutes from 9 East African countries established the East African Confucius Institute Alliance.

In this context, **16 countries in Africa have incorporated Chinese into their national education systems**, and about 30 universities now offer degree programmes specialising in Chinese.

African students have been studying in China since the 1960s, but their numbers have increased in recent years, reaching 80,000 in 2018. In 2018, the Chinese government, as part of FOCAC, pledged to provide 50,000 scholarships for African students to pursue higher education in China over the next three years.

Chinese Confucius institutes in Africa

Source: prepared by the HSE Center for African Studies based on official data.

Japan

Japan is also in the race to influence and support the education sector in Africa. According to the OECD, Tokyo provides more than USD 196 million in educational aid to Africa in 2022.

The Japan International Cooperation Agency (JICA) has been implementing the School for All programme to strengthen education in Africa since 2004. As of 2023, the project has been implemented in 53,000 schools in eight African countries (Niger, Senegal, Mali, Burkina Faso, Côte d'Ivoire, Madagascar, Djibouti and Ghana). A feature of Japanese involvement was the use of outsourcing practices: JICA worked with government agencies to develop a tailored strategy for the local environment, providing advice and expertise rather than doing everything itself.[267]

From June 2020, JICA is implementing the AFRICA-ai-JAPAN project, which aims to transform partner institutions on the continent into leading regional centres for science, technology and innovation. The project is being implemented at the Jomo Kenyatta University of Agriculture and Technology (JKUAT) in Kenya and the Pan African University Institute for Basic Science, Technology and Innovation (PAUSTI), based at JKUAT. Projects are being implemented in applied areas important for the continent's development: agriculture, engineering and ICTs.[268]

Türkiye

The influence of non-Western actors has been increasing in Africa in recent years, with Türkiye being one of the most active contributors. Ankara's most visible presence in Africa are the **Turkish Maarif Foundation schools**. As of 2024, more than 17,500 students are in Turkish Maarif Foundation schools in 26 African countries.[269]

The number of schools in Africa has increased sharply in recent years, from 18 in 2016 to 125 in 2024. More than half of the schools (63) are located in the ECOWAS region.

Maarif schools offer a curriculum with elements of Turkish, including science, coding and IT classes, and classes on local culture. This strategy and affordable price allows the foundation to compete with other international schools in each country where it operates. Maarif Foundation schools also play a key role in attracting students to Turkish universities.

But the presence is not limited to schools. There are 14 **Turkish language centres of Emre Yunus Institute**, and the stated goal is to open another 11.

Ankara is increasingly offering scholarships for education in Türkiye. According to the country's foreign minister, the number of African students studying at colleges and universities in Türkiye rose to 61,000 in 2023 (of which more than 14,000 are scholarship students).[270]

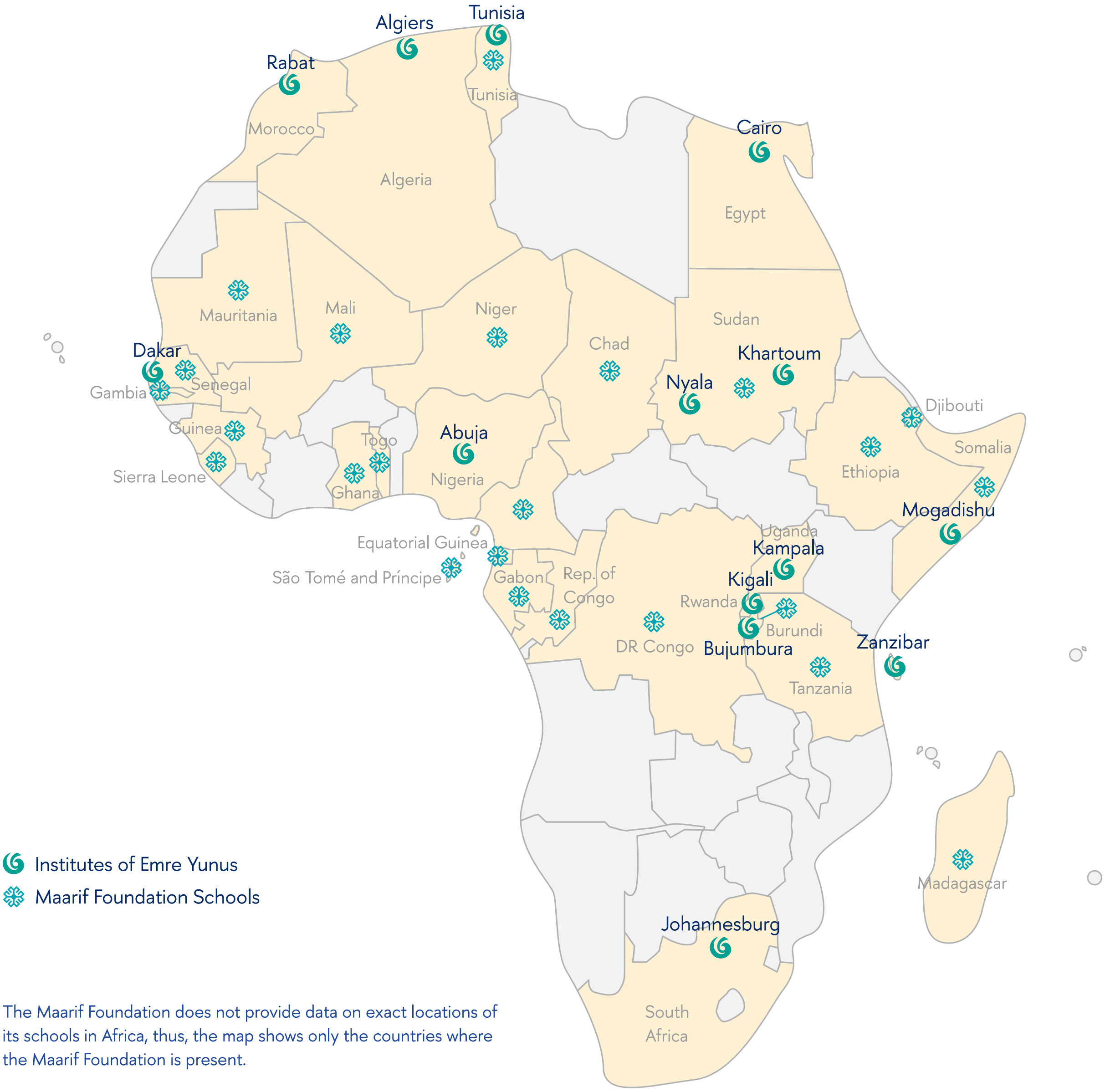
Russia

Russia is also regaining its educational influence in Africa. In the days of the Soviet Union, Moscow was actively involved in building educational infrastructure in Africa, establishing universities, schools and colleges. In recent years, Russia has focused on institutional cooperation.

During the Soviet period, more than 70,000 specialists from African countries were trained. These people returned to their countries and held important positions in the economy and public service. For example, according to the Russian Embassy in Nairobi, in Kenya every tenth doctor was educated in Russia (USSR).[271]

267 School for All is a key part of Japan's educational support of Africa URL: https://japanupclose.web-japan.org/policy/p20221014_1.html
268 Waruru M. Japan-backed science hub to involve 10 African universities URL: https://www.universityworldnews.com/post.php?story=20240331163854340
269 Turkey's Maarif schools educate over 17,000 students in Africa URL: https://www.dailysabah.com/politics/diplomacy/turkeys-maarif-schools-educate-over-17000-students-in-africa
270 Waruru M. Scholarships attracting African students to Turkey URL: https://thepienews.com/turkey-african-student-numbers-grow/
271 Интервью Посла России в Кении в преддверии Дня дипломатического работника агентству Россия Сегодня URL: https://www.mid.ru/ru/maps/ke/1426523/

Turkish institutes of Emre Yunus and Maarif Foundation Schools in Africa



The Maarif Foundation does not provide data on exact locations of its schools in Africa, thus, the map shows only the countries where the Maarif Foundation is present.

Source: prepared by the HSE Center for African Studies based on official data.

Today, there are a large number of Africans studying in Russia, a number that has already exceeded the Soviet level, and the number of scholarships awarded is increasing. In 2023/2024, **more than 34,000 Africans studied in Russia** and the number of state scholarships totalled 4,700 (2,300 in the 2022/2023 academic year).

African students traditionally choose the following programmes of study: medical (up to 30% of Africans students in Russia medical specialties), engineering and technology (about 20%), as well as management, finance and economics, which are specialisations with practical relevance to the development of countries on the continent.

Russian companies operating in Africa are involved in supporting practical education for African students with subsequent employment as a strategy for the future (Rosatom, RUSAL in Guinea).

Having significantly increased its quantitative presence in the African market (more African students now study in Russia than studied in the USSR), Russia began to offer executive education courses focusing on public administration.

The first notable example here – outside of defense and security sectors – was the Winter e-Governance Knowledge Sharing Week held in December 2023 in the HSE University with the support of the Russian Ministry of Finance. More than 40 African senior civil servants from 23 countries came to Moscow for training. The programme will be continued in 2024 and 2025.

Other Russian organisations have also started to participate in similar initiatives. For example, the Agency for Strategic Initiatives together with the Russian Academy of National Economy and Public Administration is developing a training programme for African managerial personnel.

Other Russian universities are also implementing initiatives in Africa. For example, In August 2021, **the Russian-African Network University** (RAFU) consortium was established, bringing together 12 Russian universities and research centres. The RAFU educational model works as a single pool of courses and disciplines available to consortium members in Russian, English and French. In 2024, the number of Russian RAFU member universities increased to 63 and the number of African universities reached 31.

The oldest Russian technical university, **St. Petersburg Mining University**, which is one of the leaders in the number of educated Africans in St. Petersburg in July 2023 signed an agreement with universities from nine African countries to create a professional community of universities Subsoil of Africa, developed for the mineral complex and aimed at improving the effectiveness of technical education in these countries. In December 2023, branches of **Kazan Federal University and St. Petersburg State University** started operating in the Egyptian capital Cairo.

Russian universities open their representative offices in African countries on the basis of local universities, which carry out preparatory work and provide opportunities for learning Russian language. As of 2023, such centres have been opened and are operating in Cameroon, Madagascar, Algeria, Tunisia, Egypt, Uganda, Seychelles. There are plans to open similar centres in South Africa, Zimbabwe, Botswana, Namibia and Mali.

To sum up, we can note that Russian educational initiatives in Africa are becoming more quality-oriented, advanced and flexible.

Languages and the education of the African leadership

Investing in higher education has long been one of the best ways to influence and indirectly control decision-making at various levels. Africa has never been an exception. Moreover, Africa has welcomed foreign influence through education, which has become a key competitive tool for former metropolises and their rivals.

Metropoles invested in the education of the local elites with the aim of shaping the ruling class of Africans who would serve as a link between colonial power and the local population.

The first generation of postcolonial leaders in Africa also grew up with European education (e.g. Leopold Sedar Senghor was educated in France, Patrice Lumumba was educated as an *évolué*).

Nowadays the quality of education in Africa is gradually increasing, African 'forges of talent' are being formed, so the share of leaders educated in their own countries is steadily growing. The 'educational sovereignty' may become a trend for the next generations of political leaders

Where have the African leaders of today been educated?

The conducted research involved all 54 countries on the continent. Given the heterogeneity of cabinet compositions, the following key ministerial portfolios and government positions were selected for analysis: presidents (kings), prime ministers, speakers of parliament (in the case of the bicameral system, speakers of the lower houses were selected for accuracy), foreign ministers, finance ministers, defense ministers, interior ministers, energy ministers, higher education ministers, health ministers, agriculture ministers, mineral resources ministers, ICT ministers and chief justices of the Supreme Courts. 719 African statesmen in cabinet and key government positions as of September 2024 made up the group we researched.

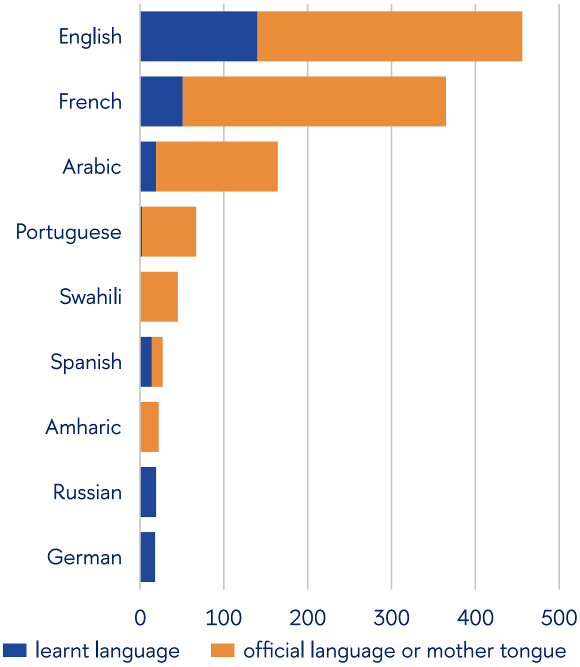
Primary information was collected on the country of tertiary education (or other forms of education if spending more than one year in the country) and the languages spoken. Information was primarily collected from official sources, including government websites, official biographies, social media profiles and their own interviews. Often, it was possible to find and confirm information in local media. Finding information on proficiency in African languages proved more difficult, so they were taken into account to a lesser extent in the analysis. In our further assessments and interpretation of the data, we will say that a certain language is spoken by "at least X" statesmen, as there is a possibility that other public figures may also speak the language, about which there is no available information in the public domain.

Key findings

English and French remain the dominant languages spoken by government officials and statesmen in Africa

This is easily explained by the official status of these languages in most African countries. French is the official language in 26 African countries, and in seven is administrative or de facto official language, English is the official language in 21 African countries. **English** is spoken by at least 456 decision-makers considered in the study (approximately 63%), while **French** is spoken by at least 365 (approximately 50%).

Most widespread languages spoken by African officials



Source: prepared by the HSE Center for African Studies based on official data.

This is followed by **Arabic**, spoken by at least 164 (22%) and it is the official language in 12 African countries. **Portuguese** is spoken by at least 67 (9%) and is an official language in five African countries. At least 45 speak **Swahili** (6%), the official language in three African countries. At least 27 speak **Spanish** (3.7%) – the official language in one African country, at least 22 – **Amharic** (3%) – the official language in one country. At least 19 speak **Russian** (2.6%) and at least 18 speak **German** (2.5%).

In terms of languages which are not official in the country of origin, it is noteworthy that both **English and French remain the most widely learnt languages among African statesmen**, English is learnt as a second or third language by at least 140 African statesmen and French by at least 51 statesmen.

This is followed by Russian with at least 19 of the group, Arabic also learnt by at least 19 and German is familiar for 18. Spanish has been learnt by at least 14 and at least eight have learnt Dutch as a second foreign language. At least three of the group speak Japanese, at least three speak Chinese and at least 2 speak Swedish.

The situation regarding the country of tertiary education presents a broadly similar picture.

Of the 719 government ministers, heads of state, judges and speakers of parliament covered in this study, not less than 114 were educated at **French universities**. In second place is the rest of Africa, with at least 109 African statesmen having studied in other African countries. Next is predictably **the United Kingdom**, with 94 leaders having studied there. Meanwhile, in third place among the countries are **the USA**, with 78 leaders educated in the US universities. No fewer than 41 of them were educated in **Portugal**, and if in the first three countries these are representatives of various states, not always reflecting the colonial past, then in Portugal are mainly educated representatives of Portuguese-speaking Cabo Verde, Angola, Guinea-Bissau, Sao Tome and Principe.

The next most popular destination for education was the first African country on the list, **South Africa**, where 39 statesmen were educated (12 national, and 27 from other states). This reflects the high level of local higher education and universities from South Africa also top the list of the most endowed universities in Africa. South Africa as an educational destination has gained the greatest popularity with neighbouring countries: Mozambique, Namibia, Eswatini, Botswana, but also with Kenya and Tanzania.

No less than 21 received their higher education in **Cameroon**, (12 from Cameroon, nine from other countries) it is a popular destination with Francophone leaders from Chad, Central African Republic, the Republic of Congo. **Kenya** is similarly popular, with no fewer than 21 leaders (13 Kenyans, eight from other countries) educated in Kenya, ranging from regional neighbours Uganda, Sudan and Somalia, to Liberia and Malawi.

Ethiopia and Egypt, recorded the same score of 21 leaders each. In the case of Ethiopia, the number includes mostly Ethiopians (14), but also representatives of neighbouring Eritrea (6), who were educated when the countries were part of the same state. In Egypt, on the other hand, the geography is more diverse, with representatives from Arab countries: Sudan, Mauritania, Libya and Djibouti.

17 leaders studied in **Uganda** (13 national and four from Rwanda and South Sudan); **Morocco hosted education** of 15 leaders, eight of them from abroad, mainly neighbors (Mauritania, Senegal, Comoros).

Russia (USSR) was also among the top ten most popular destinations, with 20 statesmen having been educated there. Russia as a destination was popular with leaders from Angola, Namibia, Mali, Mozambique and the Republic of Congo, countries that maintained a trusting dialogue with the Soviet Union.

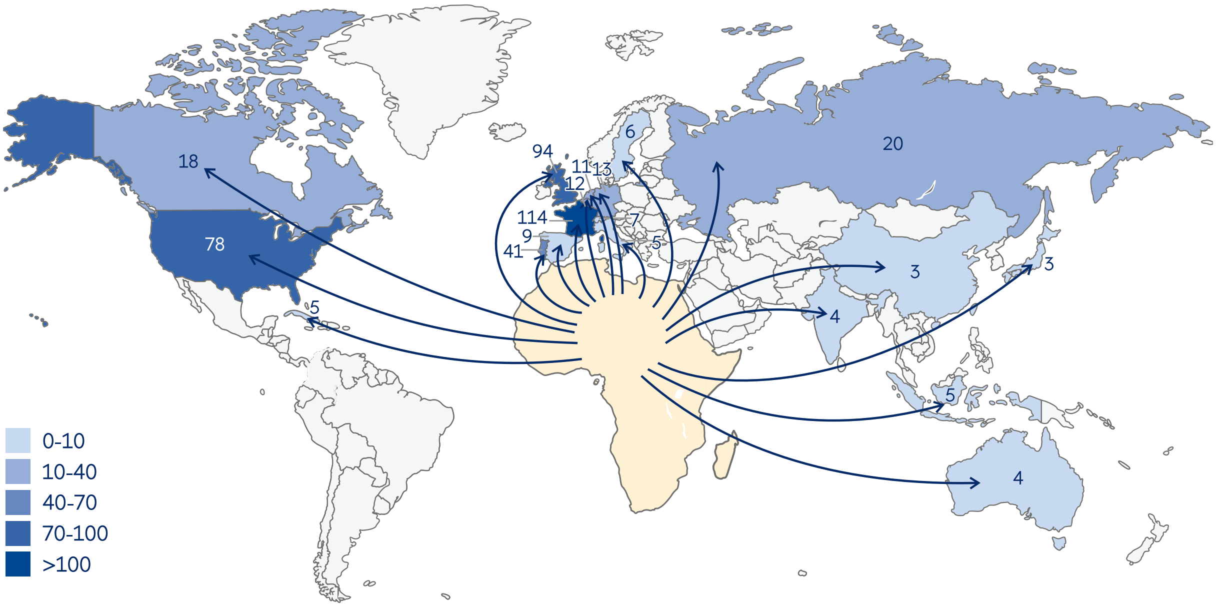
It is followed by **Canada**, where at least 18 statesmen from Africa (mainly from Francophone Guinea, Gabon, Burkina Faso, Burundi) studied, **Germany** with 13 (statesmen from different African regions), **Belgium** with 12 (from Rwanda, DRC, Burkina Faso, Burundi), **Netherlands** with 11 (from Egypt, Namibia, Ghana), **Spain** with nine (mainly from Equatorial Guinea).

Five leaders each studied in **Malaysia**, **Italy** and **Cuba** (mainly representatives of Portuguese-speaking Angola, Sao Tome and Principe, Guinea-Bissau).

It is noteworthy that a relatively low representation of the group studied were educated in **Australia** (4), **India** (4), **China** (3), **Japan** (3). It can be assumed that in the coming years, given the large number of scholarships provided by these countries, people who studied there may become more represented.

In the following, we propose to examine the main ministerial posts and government positions to identify where the leaders responsible for the most important areas of state development in Africa have been educated.

Foreign countries and regions of tertiary education of the African political leaders and ministers



Source: prepared by the HSE Center for African Studies based on collected data.

In most African states, presidents (kings) represent full-fledged heads of state. Thus, most African heads of state to date have received part or all of their education outside their home countries (46 statesmen). A significant number of African leaders (43%) were educated in the former colonial powers, and the absolute minority strictly in their home country (13%), while as many as 17 heads of state were educated in other African countries, which is also a significant indicator (32%).

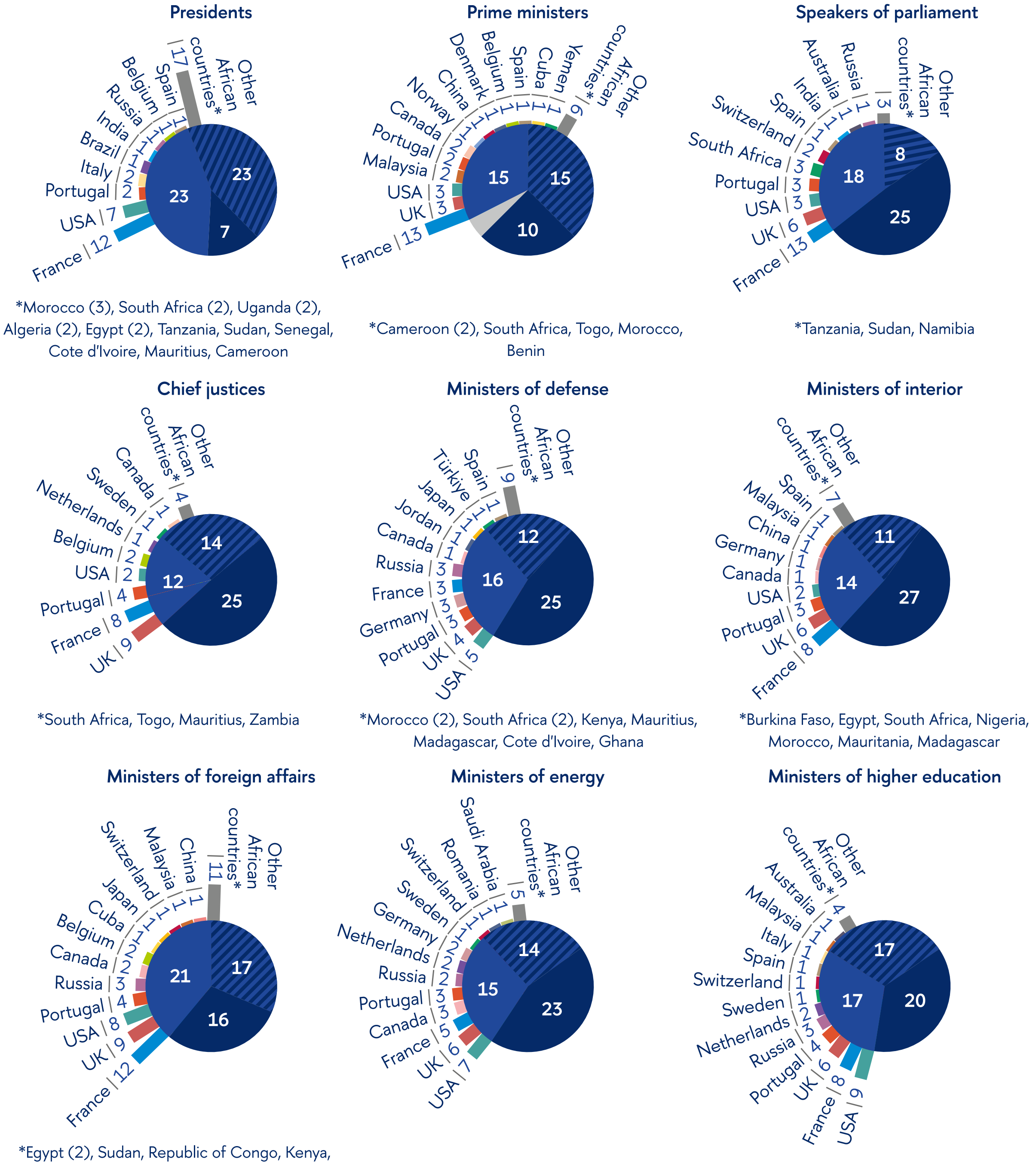
Among African heads of government (prime ministers) who studied abroad we can note the dominant position of France (13), where representatives of francophone and Portuguese-speaking countries (Mozambique, Sao Tome and Principe) were educated, and the fact that among the heads of government only six (15%) were trained in other African countries (South Africa, Togo, Cameroon, Benin, Morocco).

The majority of security-linked ministers studied in their home countries. 40% of them were educated strictly in their home countries. This may be due to the fact that most of them come from military backgrounds, which traditionally are more likely to be trained in their home countries and further received supplementary training abroad. 37 ministers of defence in Africa were educated in their home country (at least partly), while only 16 African ministers of defence were educated strictly outside their home countries. 38 African ministers of the interior were educated in their home countries (at least partly), while only 14 of them strictly abroad.

The judicial systems of countries are also mostly headed by people who have been domestically educated: 39 African chief justices (76%) were educated in their home countries (at least partly), while 12 of them studied only abroad (24%). The same situation with the speakers of parliament in African countries, where 33 statesmen were educated in their home countries (65%), while 18 (35%) were educated strictly abroad.

Interestingly, it is the finance and economics sector in Africa that appears to be most influenced by studying abroad (89%). The majority

Where African officials have studied



Presidents: *Morocco (3), South Africa (2), Uganda (2), Algeria (2), Egypt (2), Tanzania, Sudan, Senegal, Cote d'Ivoire, Mauritius, Cameroon

Prime ministers: *Cameroon (2), South Africa, Togo, Morocco, Benin

Speakers of parliament: *Tanzania, Sudan, Namibia

Chief justices: *South Africa, Togo, Mauritius, Zambia

Ministers of defense: *Morocco (2), South Africa (2), Kenya, Mauritius, Madagascar, Cote d'Ivoire, Ghana

Ministers of interior: *Burkina Faso, Egypt, South Africa, Nigeria, Morocco, Mauritania, Madagascar

Ministers of foreign affairs: *Egypt (2), Sudan, Republic of Congo, Kenya, Cameroon, DRC, Botswana, Benin, Algeria, Tunisia

Ministers of energy: *South Africa (4), Guinea

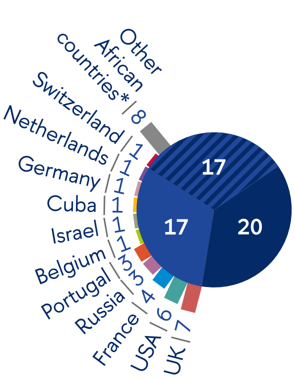
Ministers of higher education: *Sudan, Cameroon, Guinea, Madagascar

As of September 2024

Foreign country
Foreign and home country
Home country
No tertiary education

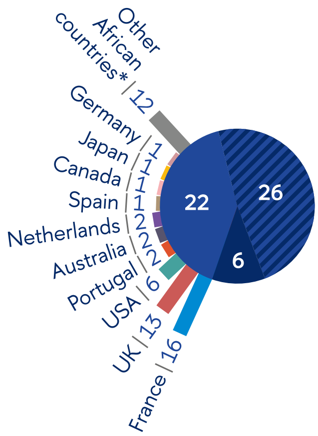
Source: prepared by the HSE Center for African Studies based on data from the media, UNESCO institute for Statistics and foreign ministers of the relevant countries.

Ministers of health



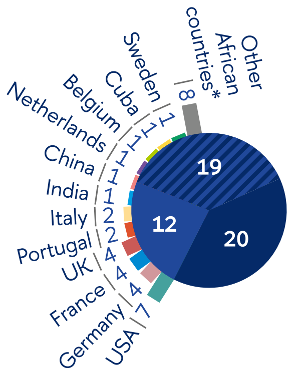
*Kenya (2), South Africa (2), Cote d'Ivoire, Senegal, Madagascar, Egypt

Ministers of finance



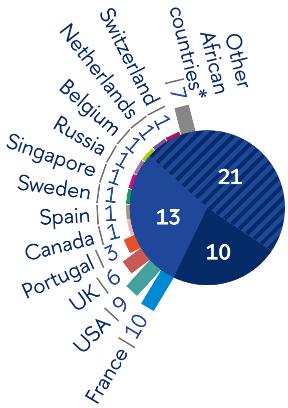
*South Africa (3), Kenya (2), Cameroon (2), Uganda, Ethiopia, Morocco, Cote d'Ivoire, Botswana

Ministers of agriculture



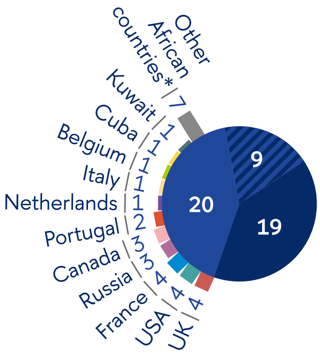
*South Africa (6), Madagascar, Senegal

Ministers of ICT



*Cameroon (2), Burkina Faso, Kenya, South Africa, Cote d'Ivoire, Senegal

Ministers of mineral resources



*South Africa (3), Egypt, Algeria, Uganda, Kenya

As of September 2024

Foreign country
Foreign and home country
Home country

Source: prepared by the HSE Center for African Studies based on data from the media, UNESCO institute for Statistics and foreign ministers of the relevant countries.

of finance ministers were educated abroad – 48 ministers, with only six of them (11%) being educated only in their home country. This emphasises that most professionals in this field had to seek more opportunities for education outside their home country. Similar situation with African foreign ministers, mostly educated outside their home countries – 38 ministers, with 16 of them studying only in their home country (29%).

Based on the data collected, it can be noted that the vast majority of ministries and countries are headed by highly educated professionals who have received higher education both at home and abroad

Only ten of the statesmen considered in the study do not have tertiary education or the fact that they have it is disputed; yet, these statesmen have gained significant experience that they employ as part of their public service.

While 472 of 719 leaders considered in the study had obtained one of their degrees in their home country, at least 223 of them had also studied abroad. 249 of them received their education only in their home country without studying abroad, while 237 received their education only abroad.

Several major conclusions can be drawn from the findings.

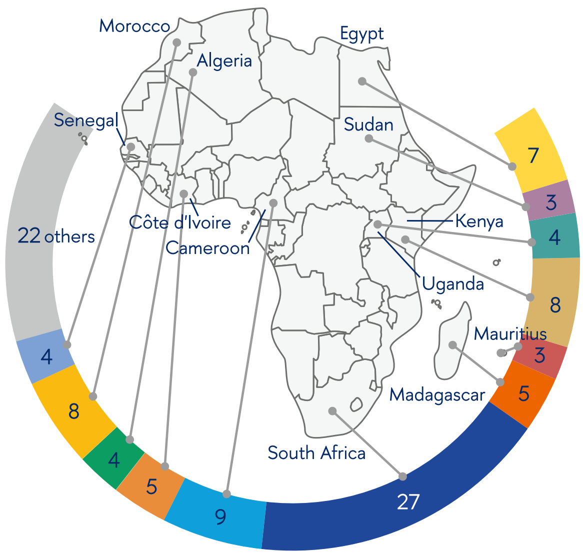
Firstly, at the level of African leaders and leading African government ministers, the key roles are played by people educated in the former metropolises who speak English and French. This is also due to the fact that current political elites are on average over 55 years old, but these trends may begin to change in the coming years, given the rise of non-Western states in Africa as well as intra-African student mobility.

Secondly, a notable number of individuals in African leadership received their education in other African countries, which is also a notable factor in education that will also increase in importance with the further development of higher education in the continent.

Thirdly, it can be noted that in many areas, there is a notable importance of local education, which in one way or the other was received by about 2/3 of the group considered in the study.

Fourth, the higher the level of local education in a country, the more often national leadership is educated in their own country without travelling abroad (e.g. South Africa, Cameroon).

Destinations for tertiary education among African statesmen inside Africa



As of September 2024

Source: prepared by the HSE Center for African Studies based on collected data.

Who is going to teach next generation of African leaders?

Education continues to be a significant challenge and a space of opportunities for African states. The future of the continent's economic, political and social development lies in successfully overcoming the challenges facing Africa in education.

Transformations in the ICT sector offer new opportunities to address the challenges of education in Africa. It is directly linked to solving the continent's infrastructure problems, developing digital technologies, increasing access to such services for the local population and the growing number of African youth.

What is required is continued and sustained investment in infrastructure, support for initiatives aimed at building the necessary competences, sustainable formats of interaction and ensuring the effective functioning of local institutions, and the development of educational policies that support these changes.

This emphasises the need for further investment and development of higher education in African countries in order to strengthen their own sovereignty and create effective governance solutions

At the same time, Africa's growing and highly promising higher education sector remains underinvested, both by governments and local big business. While most of South Africa's leading universities still exist in isolation from the rest of Africa and are closely tied to the former metropolises, the research shows that universities in the rest of Africa remain vastly underfunded even in terms of the purchasing power of the population – most universities in other countries (Nigeria, as an example) have a huge potential for growth.

In the field of education at all levels, deeper strategic planning is needed, including identifying priority areas consistent with national strategic goals. Such areas could include agriculture, medicine, engineering and programming, STEM. It is the mismatch between the level and quality of education and the needs of the labour market that leads to the outflow of the most promising personnel outside Africa.

External involvement in supporting educational programmes within Africa also needs to be more carefully monitored to ensure that this deep integration into the educational process does not become a stimulus for brain drain, but only complements the needs of African countries themselves.

African countries need to invest more in educational sovereignty. Despite widespread international support, most external actors are ultimately interested in obtaining skilled workers for their own countries, which contributes to 'brain drain' and increased migration from Africa. The opportunities for African countries and entrepreneurs are growing and external assistance needs to be managed, which can be an important part of educational sovereignty and have a positive impact on the development of the entire continent.

Given the continued high level of external influence on key education processes in Africa, initiatives aimed at strengthening domestic African solutions to emerging challenges should be supported.

Vision of Africa in the mirror of think tanks around the globe

How do think tanks around the globe perceive Africa?

We define a **think tank** as "an institute, corporation or group organised for interdisciplinary research with the objective of providing advice on a diverse range of policy issues and products through the use of specialised knowledge and the activation of networks"[272].

Think tanks serve as both objects of analysis and important political actors in the system of international relations. On the one hand, think tanks create narratives about Africa based on ideas that dominate among political and economic elites. On the other hand, an analysis of think tanks publications allows us to identify the main attitudes that ruling elites, the private sector and NGOs, relying on the expertise of intellectuals, follow when taking decisions interacting with African countries. Thus, they simultaneously influence the political processes.

This chapter relies on a **qualitative analysis of articles that were published by think tanks in 2024 and the second half of 2023** (although in some cases the analysis period was somewhat extended due to lack of information) and also mentioned the word 'Africa' in the title or text. Our survey covered more than 300 publications.

The sample was stratified by **'global poles'**. Thus, we surveyed publications of think tanks registered in the **United States**, **Europe**, **China**, **India** and **Russia**. For each global pole, five think tanks were selected. When forming the sample, we relied on data from the **Global Go To Think Tank Index Report** of the University of Pennsylvania, the latest version of which was published in 2020[273]. The index authors catalogued 11,175 think tanks around the world. For each global pole, we selected the top five think tanks based on their position in the ranking.

Think tanks sample

China
- Institute of International and Strategic Studies Peking University
- Shanghai Institutes for International Studies
- China Institute for International Studies
- Center for China and Globalization
- China Center for International Economic Exchanges

US
- Brookings Institution
- Peterson Institute for International Economics
- Center for Strategic and International Studies[1]
- Carnegie Endowment for International Peace[1, 2]
- The Heritage Foundation

Europe
- Chatham House (UK)[1]
- Bruegel (Belgium)
- Clingednael Institute (Netherlands)
- IFRI (France)
- Elcano Institute (Spain)

India
- Observer Research Foundation
- Delhi Policy Group
- Center for Policy Research
- Gateway House
- The Hindu Center

Russia
- Russian International Affairs Council
- Primakov National Research Institute of World Economy and International Relations
- Russia in Global Affairs
- Moscow State Institute of International Relations
- Valdai Discussion Club

[1]Carnegie Endowment for International Peace, Center for Strategic and International Studies, Chatham House are recognized as undesirable organizations in the Russian Federation by the decision of the Russian Prosecutor General's Office.

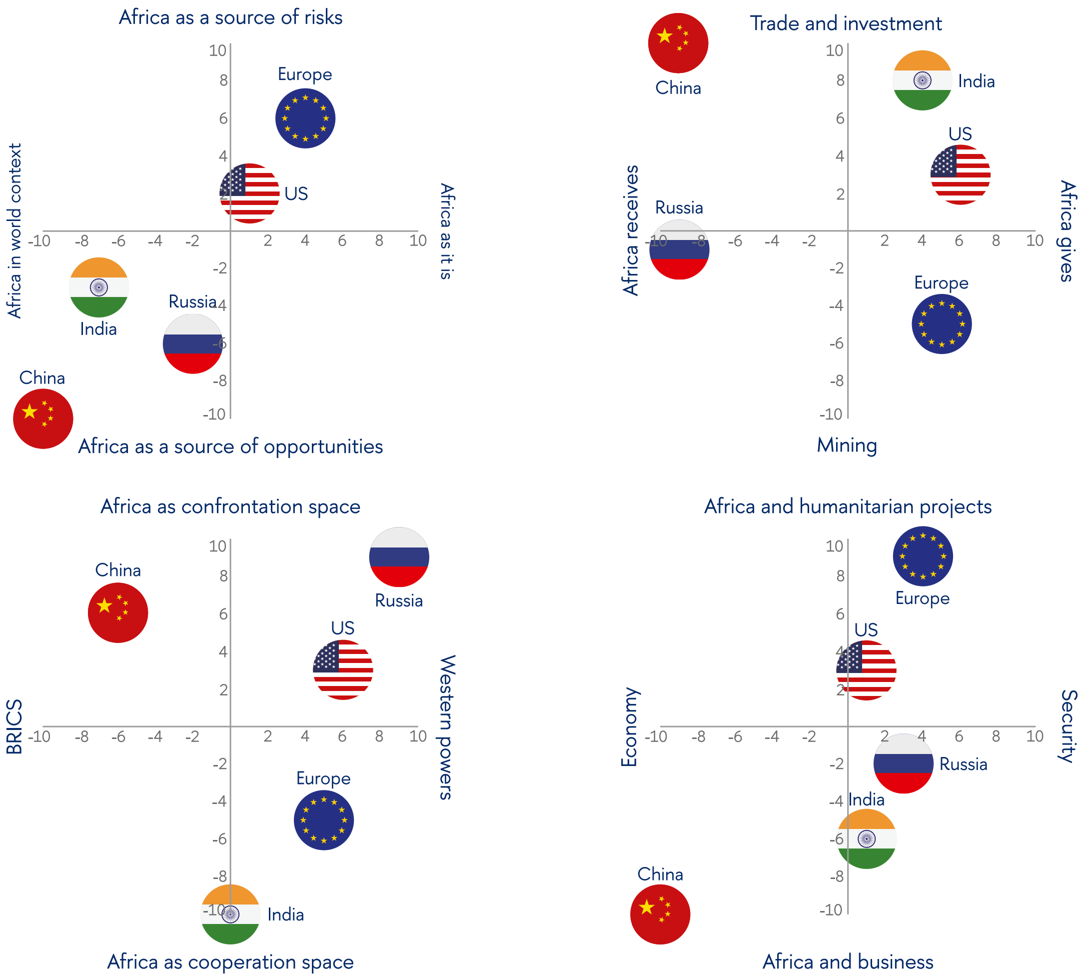
[2]Carnegie Endowment for International Peace is included in the register of NGOs performing the functions of a foreign agent by decision of the Ministry of Justice of Russia.

Source: prepared by the HSE Center for African Studies.

Unfortunately, a couple of times we had to abandon this strict scheme of sampling for methodological reasons. Firstly, in some cases the top five included think tanks that either focused on too specific matters (Urban Institute, USA) or did not cover Africa in their publications during the period under review (several think tanks from the top five for India). Secondly, due to technical limitations, we considered publications only in English, Russian and French.

272 Britannica. Think Tank. URL: https://www.britannica.com/topic/think-tank

273 James G. McGann. 2020 Global Go To Think Tank Index Report. URL: https://www.bruegel.org/sites/default/files/wp-content/uploads/2021/03/2020-Global-Go-To-Think-Tank-Index-Report-Bruegel.pdf



The scales are formed on the basis of normalisation with base 10 of the difference in frequencies of occurrence of items belonging to one or the other pole

The sample includes materials for the years 2023 and 2024

Source: prepared by the HSE Center for African Studies.

For this reason, we had to exclude some of the top five Chinese think tanks, since they publish their materials only in Chinese. Thirdly, the Russian think tank market has undergone significant changes in recent years, so only in this case centres for analysis were selected based on the authors' expertise.

Europe, to a much greater extent than other regions of the world, views Africa as a source of risks. The US shares almost the same attitude

We have reflected the metanarratives inherent in the think tanks of each of the poles on two-dimensional spaces.

The discourse of risks is almost completely absent in the publications of Chinese think tanks. They perceive Africa as a space of opportunities which is almost the same case with Russia, while India sticks to a more balanced approach. At the same time, Europe and the US to a much greater extent tend to view Africa as it is, without references to the relations between 'global players'.

China views Africa almost exclusively in a global context

While Russia occupies a middle position and India is located between them.

India, Europe and especially China are interested in Africa as a promising partner for trade and investment

The US sees Africa as a storehouse of natural resources, and Russia is quite balanced in this issue, striving for all forms of cooperation.

Moreover, Russia and China occupy the extreme position in terms of 'Africa receives – Africa gives'. On this scale, the extent to which national think tanks write about what the continent can give to the outside world is reflected as well as to what extent they are focused on what it can get from it. Experts from Russia and China focus mainly only on questions about what they can give to Africa, keeping silent about what they can receive in return. India and, somewhat more clearly, the US, on the contrary, mostly write about what Africa can offer to them and other countries. Europe is located in the middle, but somewhat gravitates towards 'Africa receives'.

In terms of 'cooperation-confrontation' logic India clearly assesses the continent as a room for cooperation among all interested parties, Russians experts almost always pursue the narrative of Africa as a space for the confrontation between foreign powers, which may be explained by the fact that right now this country faces strong pressure from the US and Europe in terms of economic and financial sanctions all around the globe as well as attempts to prevent governments of the developing world from cooperation with it. The US and, especially, China are also closer to the confrontational pole. Europe generally shares the views of Indian experts, trying to push the decision-makers towards the reassessment of its current policy on the continent.

It is also noteworthy that Russia writes about the interests of Western countries in Africa more often than about BRICS countries interests in Africa. China, on the contrary, pays somewhat more attention to BRICS, focusing mostly on the role of South Africa in the club as well as prospects for the inclusion of some new African countries, while India maintains a balanced position, and Europe and the US are more interested in their own prospects.

Finally, there is a slight bias in all poles towards discussing Africa in economic rather than security terms. For example, China almost does not touch on security (at least in English-language materials).

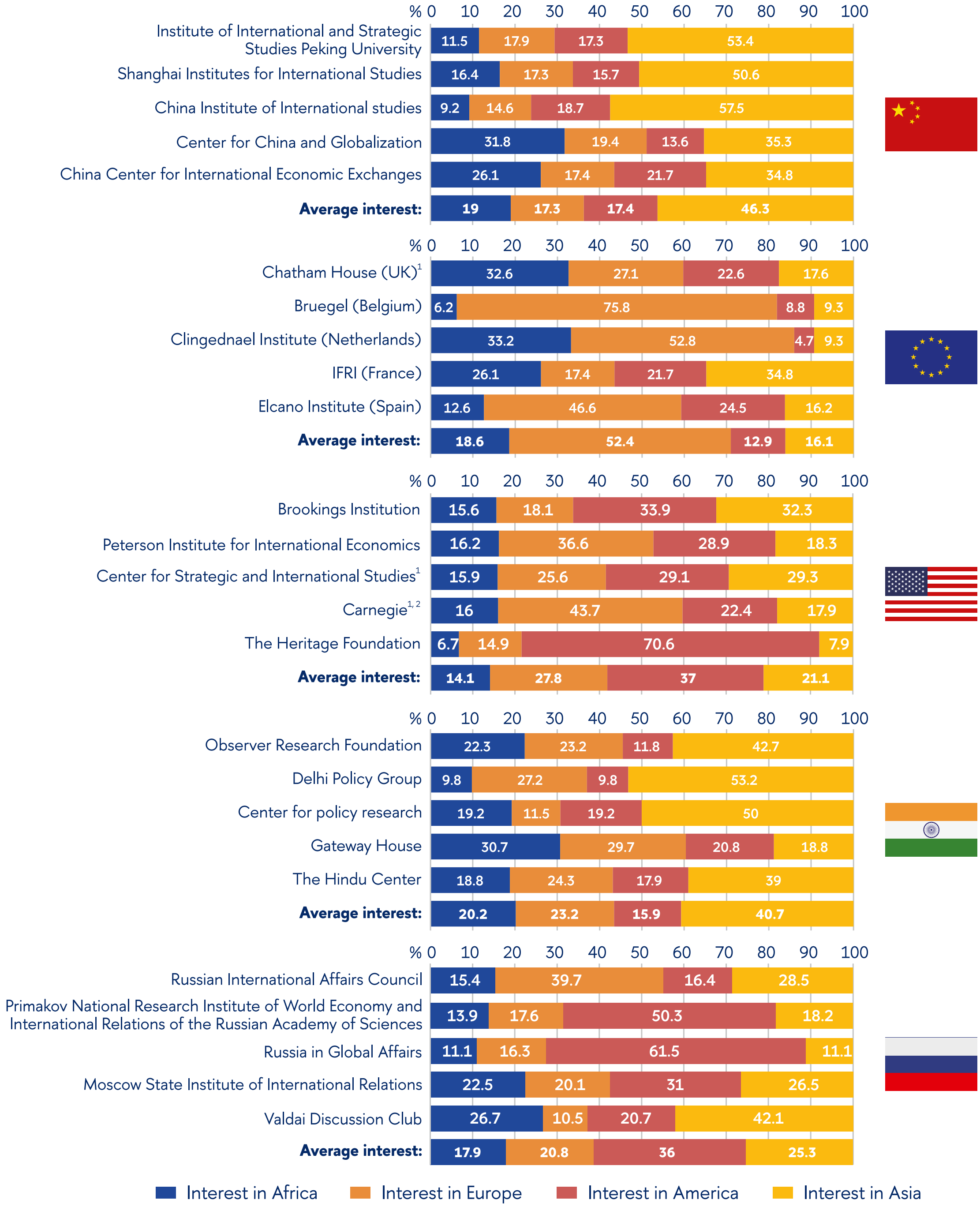
In addition, Europe is much more likely than others to talk about humanitarian issues on the continent, and the US is also focused on this rather than the business pole.

Methodological note on think tanks interest in Africa

If the website's built-in search engine allowed a time limit for searching, we entered the search query and either counted the articles manually or copied the number representing the quantity of target articles. Otherwise, the results were arranged chronologically and then counted manually.

However, the sheer number of articles mentioning Africa does not tell us anything about the extent of a think tank's interest in the continent. To avoid this problem, three comparative categories were added to the analysis: the number of articles mentioning the words 'Europe', 'America' and 'Asia'. So, for each think tank, we came up with the four values, which were then converted into percentages of the total number of articles mentioning any of the keywords. In addition to calculating the shares for each think tank, the average level of interest in Africa, Asia, America and Europe across the five global poles was also calculated.

Think tanks interest towards different regions



[1]Carnegie Endowment for International Peace, Center for Strategic and International Studies, Chatham House are recognized as undesirable organizations in the Russian Federation by the decision of the Russian Prosecutor General's Office.

[2]Carnegie Endowment for International Peace is included in the register of NGOs performing the functions of a foreign agent by decision of the Ministry of Justice of Russia.

Source: prepared by the HSE Center for African Studies.

Russia and India are much more balanced, although they tend towards the 'Africa and business' extreme. China overwhelmingly discusses only business.

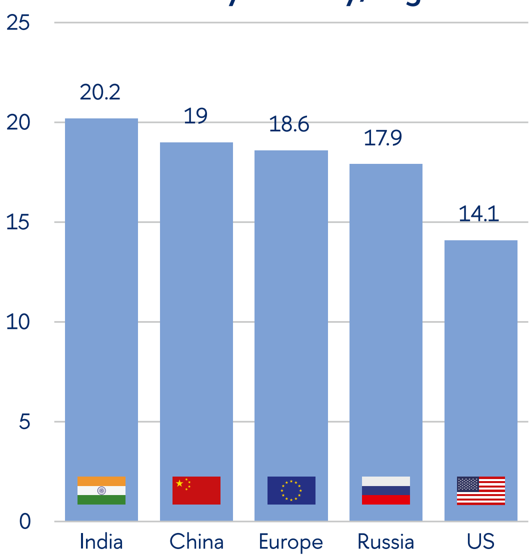
Russia and Europe are slightly more biased towards security than the others

In addition to meta-narratives, one may also assess each think tank's interest in Africa by counting the number of articles mentioning the keyword 'Africa'. We did this for the period from August 2023 to September 2024: the raw numbers were later transformed into the shares indicating the think tanks' interest in different world regions. Finally, the average interest towards Africa for each global pole was calculated.

China's interest in different geographic regions outside of Asia is almost perfectly balanced. The level of interest of local think tanks in Africa is 19, roughly the same for Europe (17.3) and the Americas (17.4).

For European think tanks, Africa is the second priority destination after the Europe itself: on average, 18.6 out of all articles mention Africa, followed closely by Asia (16.1), while the interest in the Americas is significantly lower (12.9).

Average think tanks interest in Africa by country/region



Share of articles dedicated to Africa.
The sample includes materials for the years 2023 and 2024

Source: prepared by the HSE Center for African Studies.

The United States think tanks are writing relatively rarely about their home region, the Americas (37). Interest in Europe is only 9 percentage points lower, at 27.8. Moreover, for US think tanks, Asia is a higher priority than Africa: 21.1 interest points versus 14.1.

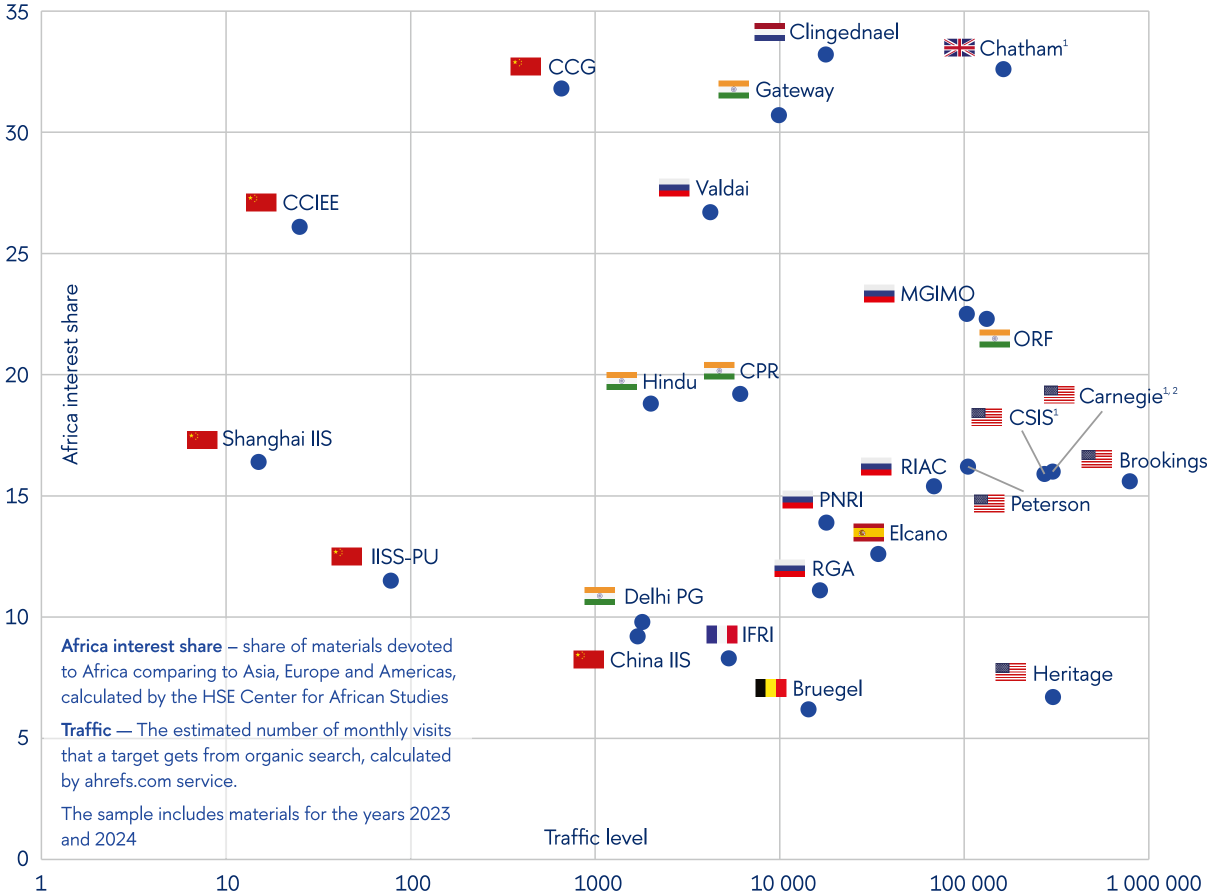
As our meta-narrative analysis suggested, **Indian think tanks show the strongest interest in Africa**, at 20.2. This is still lower than the think tanks' interest in Europe (23.2), but significantly higher than in America (15.9). Russia shows the most interest in America (36), followed by Europe (25.3), Asia (20.8) and Africa (17.9).

If we compare the interest in Africa across the global poles, India will occupy the first place with an index of 20.2, followed by China with 19. Europe shows slightly less interest with a figure of 18.6, Russia is quite close with 17.9. The US comes in last with 14.1. However, all the values for each of the global poles are relatively close to each other. Therefore, the main takeaway from this study may be that by 2024, all global players – without exception – have realised the importance of studying Africa.

At the think tank level most involved in studying Africa in the sample is the **Dutch Clingednael Institute**, closely followed by the **Center for China and Globalization**, and the Indian **Gateway House**. The top also includes one Russian think tank, **the Valdai Discussion Club**, with a score of 26.7. Notably, there is not a single American think tank among the centres most interested in Africa. However, almost all of them are located in the middle of the ranking. Among the institutes least interested in Africa, one can find the **China Institute of International Studies (CIIS)**, Indian **Delhi Policy Group**, **Russia in Global Affairs**, **Institute of International and Strategic Studies of Peking University (IISS)** and Spanish **Elcano Royal Institute**.

Calculating the average interest of think tanks in different regions around the world shows that Africa is of interest to them overall at 17.96 points out of a possible 100, Europe at 28.3, America at 23.84 and, finally, Asia at 29.9. Given that Africa's current economic and political role in the world is much lower, this interest can be considered extremely high and linked to projections of the continent's growing role in world politics.

Think tanks interest in Africa and internet users interest in think tanks



CCG	Center for China and Globalization
CCIEE	China Center for International Economic Exchanges
Shanghai IIS	Shanghai Institutes for International Studies
IISS-PU	Institute of International and Strategic Studies Peking University
Delhi PG	Delhi Policy Group
China IIS	China Institute of International studies
Clingednael	Clingednael Institute
Chatham	Chatham House[1]
Gateway	Gateway House
Valdai	Valdai Discussion Club
MGIMO	Moscow State Institute of International Relations
ORF	Observer Research Foundation
Hindu	Hindu Center
CPR	Center for Policy Research
IFRI	Institut français des relations internationales
Bruegel	Bruegel
CSIS	Center for Strategic and International Studies[1]
Carnegie	Carnegie Endowment for International Peace[1,2]
Brookings	Brookings Institution
PNRI	Primakov National Research Institute of World Economy and International Relations
RIAC	Russian International Affairs Council
Peterson	Peterson Institute for International Economics
Elcano	Elcano Institute
RGA	Russia in Global Affairs
Heritage	The Heritage Foundation

[1]Carnegie Endowment for International Peace, Center for Strategic and International Studies, Chatham House are recognized as undesirable organizations in the Russian Federation by the decision of the Russian Prosecutor General's Office.

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Source: prepared by the HSE Center for African Studies.

China: business is business, global game is global game

When analysing the image of Africa in the publications of Chinese think tanks, several features inherent to the intellectual centres of this country should be taken into account. Firstly, Chinese think tanks are the most closely intertwined with the state, so their opinion should be considered as a reflection of the attitudes of the state apparatus or one of the many influence groups within the **CPC (Communist Party of China)**. Secondly, analytical groups rarely post English-language publications on their websites, and those that are published should be perceived primarily as a broadcast of China's position for an international, rather than domestic audience. This may create some bias but does not completely exclude the opportunity for analysis.

One of the most prominent narratives present in the discourse of Chinese think tanks is the constant comparison of the Chinese and Western policies in Africa

Thus, it is argued that Chinese loans are more beneficial for the countries of the continent, as Chinese banks primarily focus on promoting the comprehensive development of borrowing countries (i.e. infrastructure development and industrial growth). It is implied that Chinese investments lead to increased productivity and, ultimately, financial returns. At the same time, Western banks and governments are much more focused on financial market conditions (i.e. credit ratings), making them more susceptible to cycles in the global economy and, thus, a less reliable source of financing[274]. In addition, the political conditionality of US energy and economic programmes is emphasised[275], and skepticism is expressed regarding the **US** ability to resolve security problems in Africa – e.g. in the Red Sea[276]. It is acknowledged that the **EU** is actively rethinking its policy in Africa, but so far these efforts are held back by the **"Cold War mentality"**[277].

It is important to note that criticism of Western approaches does not mean idealising Chinese policy in Africa. For example, there is an open discussion about the shortcomings of loans secured by African natural resources, as fluctuations in commodity prices can complicate loan repayments[278]. Moreover, criticism of external efforts to ensure security on the continent does not mean that China is trying to offer its own approaches.

The topic of China exporting security to Africa is almost completely absent from the analysed publications

There is no doubt that for Chinese think tanks, Africa is an arena of geopolitical competition (but not open confrontation). Analysts mainly talk about this in terms of the **Global South** and the **Global North**. It is acknowledged that the Global South, of which Africa is a key component, is dissatisfied with the current world order and is ready to make efforts to change it, while China is positioned as the clear leader for developing countries. As for the role of the Global North in this process, think tanks promote two competing narratives in this regard. On the one hand, it is mentioned that the **EU** and the **US** are trying to drive a wedge between the countries of the Global South and compete with the **Belt and Road Initiative** with their own investment and economic programmes. On the other hand, it is mentioned that "Africa is non-Western, but not anti-Western"[279], which implies the coexistence and even cooperation of various geopolitical poles on

274 Xiaoyang Tang, Shuai Pan. Impact of market-based financing on Africa's debt and development. URL: https://link.springer.com/article/10.1007/s42533-024-00164-7

275 Yu Hongyuan. The US is seeking to form an exclusive energy club based on its alliances and partnerships which will impact on the global transition. URL: https://www.siis.org.cn/sp/15391.jhtml

276 Jin Liangxiang. U.S. Motives in the Red Sea Go Beyond Bringing Stability. URL: https://www.siis.org.cn/Commentary/15458.jhtml

277 Wang Yi. Self-Confidence and Self-Reliance, Openness and Inclusiveness, Fairness and Justice, and Win-Win Cooperation. URL: https://www.ciis.org.cn/gjwtyj/ywqk/202404/t20240407_9217.html

278 Zhou Yuyuan. Does China's oil-for-infrastructure lending model in Africa need a rethink? URL: https://www.siis.org.cn/Commentary/15613.jhtml

279 Zhao Minghao. The belt & road initiative and U.S.-China competition over the global South. URL: http://en.iiss.pku.edu.cn/info/1015/3591.htm

the continent. At the same time, Chinese think tanks do not put much focus on the substantive prospects of cooperation with Russia, the US or Europe. Russia is mentioned only in the context of BRICS as one of its core members.

To a much greater extent than all other global poles, China is focused on cooperation with African countries within the framework of international institutions and agreements

Many analytical materials are devoted to the potential expansion of **BRICS** and the role of the organisation in the continent's development. It is emphasised that African countries and BRICS share a common historical experience, as well as the fact that this organisation can play an important role in strengthening the continent's voice in the international arena[280].

The G7 is perceived as an association competing with BRICS for influence in the Global South. In addition, attention is paid to the **G77** (China sees itself as the leader of this group[281]), as well as the African Union. Chinese think tanks express hope that China can benefit from the **African Continental Free Trade Area (AfCFTA)** and also call for considering the possibility of a **China-Africa Continental Free Trade Area, CAFTA**[282].

Chinese intellectuals are quite transparent in defining the country's national interests on the continent: trade and sales of Chinese goods. However, the situation with the Belt and Road Initiative seems a little more ambiguous. Think tanks pay great attention to describing the benefits that Africa can gain from cooperation within the framework of this initiative, but do not describe at all how this programme will enrich China itself. In addition, economic plans noticeably prevail over descriptions of humanitarian projects, although think tanks also write about sharing experiences in public administration, fighting poverty, and talent management.

Last but not least, Chinese think tanks are characterised by their attention to the continent in the context of world politics and the interests of the great powers, but events within the continent itself seem to remain terra incognita for analysts: it is difficult to find publications that would describe the internal politics, conflicts or economic changes within a single African country. It is highly likely that in the Chinese intellectual context, materials of this kind are treated as impolite and colonial-looking. Therefore, Chinese experts try to avoid the discussion of African domestic affairs in public.

China prefers to present Africa in a long-term macro perspective, without going into the details of current events

EU and UK: we failed, but we will become better

In 2024, European think tanks were most focused on rethinking Western policies in Africa, this process has been going on in Europe since decolonisation and seems to be never-ending. First of all, the trigger for this new wave of interest towards rethinking European approaches were recent developments in the Sahel region.

The unexpectedness of this turnaround is emphasised, as is the inability of the **EU** and the **United States** to quickly find common grounds with new rulers of Sahel countries[283]. **France** is recognised as the main 'loser' in this context. Despite the fact that the think tanks represent various countries (**Spain**, **Belgium**, **Great Britain**, **France**, **the Netherlands**), most authors share the idea that the era of unconditional dominance of the West

280 Haibin Niu. A Greater Voice for Developing Countries. URL: https://www.siis.org.cn/Commentary/15108.jhtml

281 Yuan Sha. G77+China to Play a Bigger Role in the Global South Agenda. URL: https://www.ciis.org.cn/english/COMMENTARIES/202309/t20230918_9072.html

282 Zhuo Li. Prospects for China–Africa continental free trade area (CAFTA). URL: https://link.springer.com/article/10.1007/s42533-023-00148-z

283 IFRI. After the Failure in the Sahel, Rethinking French Policy in Africa. URL: https://www.ifri.org/en/publications/briefings-de-lifri/after-failure-sahel-rethinking-french-policy-africa

on the continent is firmly in the past: **"external actors – and in particular Western governments – have consistently overestimated their ability to influence and effect real change in the region and have to become more modest in their objectives"**[284]. This is complemented by a discussion about how the number of international actors active in Africa, as well as their interest in expanding their presence in the region, has increased.

Some authors note that the developing countries often view the EU as "self-serving, hypocritical and postcolonial"[285]. It is also acknowledged that, in seeking to resolve conflicts on the continent, Western governments have often made deals with elites that have not benefited citizens. Typically, such arguments end with calls for the recognition of greater African agency as well as for more flexible and people-centered strategies for engagement on the continent.

External actors operating in Africa are most often described in terms of competition rather than conflict

However, there are notable exceptions. **Spanish think tank Elcano** notes that the Global South is a battleground between the West on the one side and China and Russia on the other, positioning Spain as a possible vanguard of this clash[286]. Another intriguing implication of the **Global South and Global North** division for European analysts is that the two groups of countries have competing interests in the global economic system: the South's growth model is built on the sale of resources, while the North is increasingly focused on the export of technology. Finally, if the reference country for **China** is the **United States**, then European think tanks, in turn, are concerned about comparing European policies with Chinese ones. A competitive advantage for Europe is that trade with it is more balanced and surplus for Africa, in addition, Europe is still able to provide more direct investments on the continent[287]. Much attention is paid to the **Belt and Road Initiative**. Experts urge a more sober look at its prospects and learn to separate the promises of Chinese from real actions. According to their assessment, the image of the initiative in Africa is still positive, but a trend of some decline is recorded[288].

A significant place in the discourse of European think tanks is occupied by the risks of collective security

It is considered both within Africa and beyond. Thus, experts discuss Africa's contribution to the fight against climate change and note the existence of an almost insoluble conflict between the goal of transition to renewable energy and achieving universal electricity access. According to them, since African countries are primarily concerned with ensuring energy security at any cost, it would be too bold to place hopes on them to limit the use of fossil fuels in the short run[289]. In addition, much attention is paid to conflicts and tensions in countries such as Ethiopia, Sudan, Libya, Mali and Nigeria, which threaten both regional stability and can lead to an increase in the influx of refugees into the countries of the Global North. The transfer of power under military control in the Sahel countries is also perceived as an unambiguous threat.

Among all the global poles examined, Europe most often discusses Africa in the context of humanitarian issues. Think tanks analyse human trafficking on the

284 Clingendael. Stabilisation and the Central Sahel. URL: https://www.clingendael.org/publication/stabilisation-and-central-sahel

285 ELCANO. Europe and the Global South. How to gain influence and credibility in a complex world. URL: https://www.realinstitutoelcano.org/en/analyses/europe-and-the-global-south-how-to-gain-influence-and-credibility-in-a-complex-world/

286 ELCANO. Spearhead?: Spain, Europe and the battle for the global South. URL: https://www.realinstitutoelcano.org/en/policy-paper/spearhead-spain-europe-and-the-battle-for-the-global-south/

287 Bruegel. While Africa's economic relations with China are hyped, its relationship with the EU is more favourable. URL: https://www.bruegel.org/newsletter/while-africas-economic-relations-china-are-hyped-its-relationship-eu-more-favourable

288 Bruegel. Global trends in countries' perceptions of the Belt and Road Initiative. URL: https://www.bruegel.org/working-paper/global-trends-countries-perceptions-belt-and-road-initiative

289 ELCANO. The geopolitics of the global energy demand shift. URL: https://www.realinstitutoelcano.org/en/analyses/the-geopolitics-of-the-global-energy-demand-shift/

continent, smuggling[290], drug addiction[291], food and water security and gender equality[292]. Consideration is being given to which resources the EU already offers to the continent and can provide in the future to resolve these difficulties. Local government institutions also attract the attention of think tanks.

As expected, formal democratic institutions such as transparent and fair elections as well as independent judiciary have a high importance for European intellectuals. Perhaps, compared to the other poles, Europe pays the most attention to monitoring the continent's election campaigns.

To sum up, European think tanks are concerned about reshaping the African policies of European countries and insist on the need to acknowledge the mistakes of the past. Much attention is paid to humanitarian issues, and the continent is often being considered as a source of risks for itself and the surrounding world. It is assumed that the work on eliminating these risks is the responsibility of mankind in general. China appears to be the main competitor in the issue of economic policy, but the standard assumption among think tanks is the threat it poses to European interests may be exaggerated.

India: cooperation matters

India is perhaps the only case in which intellectuals are ready to admit that Africa not only needs foreign assistance and experience, but is also capable of bringing useful insights to external players

Indian think tanks are the most ardent supporters of non-aligned values and call for a balanced international policy for Africa. Analysts consider this a true sign of sovereignty of the continent: "it is time for African leaders to show their agency and avoid taking sides"[293]. Moreover, India is perhaps the only case in which intellectuals are ready to admit that Africa not only needs foreign assistance and experience, but is also capable of bringing useful insights to external players: "partnership between India and Africa should be a two-way street"[294]. For think tanks, African experience in addressing the issue of slum growth[295] and ensuring the rule of law (in the case of South Africa) is important[296]. India places a strong emphasis on cooperation rather than confrontation. Experts say their country aims to move towards a multipolar but peaceful world order, calling for **BRICS**, for example, to be a platform for balanced dialogue rather than an anti-Western bloc[297]. There are also many analysts who advocate fruitful cooperation between the West and the Global South[298].

Despite the generally peaceful discourse, **China**'s policy in Africa has left some authors openly irritated. One analyst recalls **Xi Jinping** bragging about Beijing's "non-interference" in African affairs, and then shows that this statement is far from the truth[299]. However, other publications that mention China generally provide a balanced and neutral analysis of economic developments on the continent, primarily the **Belt and Road Initiative**[300]. The largely neutral tone does not prevent Indian experts from analysing current conflicts that affect the continent.

290 Clingendael. Niger's Repeal of the 2015/36 Anti-Smuggling Law. URL: https://www.clingendael.org/publication/nigers-repeal-201536-anti-smuggling-law
291 Clingendael. Deadly drug Kush haunts West Africa. URL: https://www.clingendael.org/news/deadly-drug-kush-haunts-west-africa
292 Clingendael. Young South Sudanese Women as Community Change Agents. URL: https://www.clingendael.org/news/young-south-sudanese-women-community-change-agents
293 ORF. G7's African pivot: Energy, migration, and beyond. URL: https://www.orfonline.org/expert-speak/g7-s-african-pivot-energy-migration-and-beyond
294 ORF. India-Africa education partnership holds the key to a prosperous future. URL: https://www.orfonline.org/expert-speak/india-africa-education-partnership-holds-the-key-to-a-prosperous-future
295 CPR India. The Politics of Slums in the Global South: Urban Informality in Brazil, India, South Africa and Peru. URL: https://cprindia.org/books/the-politics-of-slums-in-the-global-south-urban-informality-in-brazil-india-south-africa-and-peru/
296 Hindy Centre. Citizens and the State: Policing, Impunity, and the Rule of Law in India. URL: https://www.thehinducentre.com/incoming/citizens-and-the-state-policing-impunity-and-the-rule-of-law-in-india/article67887312.ece
297 ORF. How does an expanded BRICS benefit India? URL: https://www.orfonline.org/expert-speak/how-does-an-expanded-brics-benefit-india
298 Gateway House. West must listen to emerging middle powers. URL: https://www.gatewayhouse.in/west-must-listen-to-emerging-middle-powers/
299 ORF. China's conflict resolution mechanism in Africa: Mediation with Chinese characteristics. URL: https://www.orfonline.org/expert-speak/china-s-conflict-resolution-mechanism-in-africa-mediation-with-chinese-characteristics
300 ORF. Shrinking Chinese demand, loan volumes weaken Africa's growth prospects. URL: https://www.orfonline.org/expert-speak/shrinking-chinese-demand-loan-volumes-weaken-africa-s-growth-prospects

Thus, the ORF research center predicts an inevitable clash of interests between the **UAE** and **Saudi Arabia** in Africa[301], and the **Delhi Policy Group** analyses the consequences of the **Ukrainian crisis** and problems with grain supplies for Russia's image among African countries[302]. Moreover, Indian think tanks are joining the chorus of voices noting the failures of French and US policies in Sahel, and the withdrawal of some states from ECOWAS is being called the **"West African Brexit"**[303].

Indian think tanks are broadcasting one of the more balanced views of Africa of the present and future

Unlike China, which clearly claims to be the leader of the Global South, India rather positions itself as a lobbyist for the countries of the Global South. For example, Indian analysts credit their country with establishing the position of the **African Union** as permanent member of the **G20**[304]. The country is said to be committed to the ideas of pluralism and advocacy of the interests of the South at international level, ready to defend peace, prosperity and sustainability.

One of India's key competitive advantages on the continent appears to be its ability to supply cheap medicines and share health expertise with African countries. According to experts at the Delhi Policy Group, the supply of millions of vaccine doses during the pandemic has allowed India to confirm its status as a global power[305]. Another point of pride is the systems for measuring the competency of healthcare providers that are now being used in 20 countries in Sub-Saharan Africa[306]. However, humanitarian projects remain much less important for India than the prospects for trade with African countries, which are discussed much more often.

Indian think tanks rarely talk about the domestic politics of African countries, but a notable exception to this rule is **South Africa**, whose recent elections have attracted much attention[307]. Among external players that do not claim the status of a 'global power centre', the actions of **Italy** and **Japan** in Africa are mentioned.

From their point of view, the continent, whose importance for international politics has grown dramatically in recent years, should become a platform for cooperation of all interested forces. African countries themselves are being pushed towards non-alignment and balancing between various centres of power. These efforts can be supported by India as a lobbyist for the interests of the Global South and a link between them and the West.

US: minerals, national security and humanitarian aid

In the context of the upcoming presidential elections, it is noteworthy how Africa is viewed by **Republican-leaning** and **Democratic-leaning** US think tanks. Experts from the conservative **Heritage Foundation** are convinced that the US should reconsider its policy towards the continent: it is argued that despite large-scale financial aid to African countries, most of them remain poor and demonstrate low rates of economic growth. The authors of the Republican think tank suggest focusing on trade and investment rather than direct aid[308]. In addition, in their view, the United States should refuse to cooperate with countries that do not support its foreign policy.

301 ORF. UAE and Saudi Arabia's agricultural diplomacy in Africa: Competition, cooperation and its strategic implications. URL: https://www.orfonline.org/expert-speak/uae-and-saudi-arabia-s-agricultural-diplomacy-in-africa-competition-cooperation-and-its-strategic-implications

302 Delhi Policy Group. Global Horizons. URL: https://www.delhipolicygroup.org/publication/global-horizons/global-horizons-4945.html

303 ORF. The Alliance of Sahel States: A regional crisis in troubled West Africa. URL: https://www.orfonline.org/expert-speak/the-alliance-of-sahel-states-a-regional-crisis-in-troubled-west-africa

304 Gateway House. India's G20 Presidency: Furthering India-Africa Ties. URL: https://www.gatewayhouse.in/events/indias-g20-presidency-furthering-india-africa-ties/

305 Delhi Policy Group. East Asia Explorer. URL: https://www.delhipolicygroup.org/publication/east-asia-explorer/east-asia-explorer-4932.html

306 CPR India. Policy in Action- Health. URL: https://cprindia.org/policy-in-action-health/

307 Gateway House. South Africa goes to the polls. URL: https://www.gatewayhouse.in/south-africa-goes-polls/

308 Heritage. Africa in Focus: Shifting the Paradigm Together. URL: https://www.heritage.org/global-politics/report/africa-focus-shifting-the-paradigm-together

First of all, this concerns **South Africa**: "Pretoria supported Gaddafi, Castro and Mugabe; sold weapons to al-Assad and Putin; is now forming alliances with China, Iran, and Russia; and supports Hamas"[309]. Responsibility for the failure of US policy in Sahel is placed on the administration of Joseph Biden[310]. Thus, if Donald Trump wins the election, the likelihood of the United States reducing direct financial and humanitarian aid to Africa, as well as reconsidering long-term alliances on the continent, increases.

Electoral democracy is still unambiguously linked by the US think tanks to economic growth. African countries are supposed to prosper only by holding regular, transparent elections, although the experts very rarely try to substantively explain this connection or simply neglect the necessity of doing so[313]

Democratic think tanks, citing increased activity in Africa by China and Russia, are discussing the possibilities of strengthening the position of **NATO** there. Although the importance of the continent for the future of the alliance is not in question, some experts urge caution in this regard: it is acknowledged that for young Africans NATO is associated with outdated colonial and post-colonial systems. In general, US think tanks share the sentiments of their European colleagues regarding the fact that residents of many African countries are disappointed in 'democracy' and cooperation with the West. It is noted that the real winners of formal democratisation have often been the ruling elites, and many citizens have not seen any of the widely advertised benefits of democracy[311].

It is predicted that in the near future, the US government will be faced with difficult trade-offs: to adhere to its obligations to protect democracy, which means refusing to cooperate with regimes that have gained power non-electorally, or to accommodate these regimes to a certain extent, maintaining strategic and economic access to the continent, but violating the declared principles of foreign policy[312]. However, the same authors predict that military governments or political leaders who violate constitutional restrictions on holding office will most likely also be unable to solve the structural problems of their countries, which will open a new window of opportunity for democratisation.

The US discourse clearly expresses a narrative about Africa as an arena of competition between the United States and **China**[314] and, to a much lesser extent, **Russia**. China is positioned as a potential economic hegemon of the continent. The United States do not differ from the think tanks of other poles of power in recognising the subjectivity of the Global South, as well as the fact that the new multipolar geopolitical reality requires the formation of a new approach to this group of countries.

There is a call for a more restrained attitude towards the fact that many developing countries refuse to openly condemn Russia's foreign policy. For example, discussing nuclear weapons, experts agree that the leaders of the Global South may be frightened by nuclear weapons as such, and not by the countries that possess them and could potentially use them. In addition to Russia and China, considerable attention is also being paid to other players, such as **Türkiye** and **Japan**. Several publications focus on the presence of the **Gulf states**, the **UAE**, **Qatar** and **Saudi Arabia** on the continent. Experts claim that Washington sees these countries as a natural counterweight to Russia and China, but increased

309 Heritage. Time to Cut U.S. Foreign Aid to South Africa. URL: https://www.heritage.org/global-politics/report/time-cut-us-foreign-aid-south-africa
310 Heritage. Niger Coup Raises Questions About U.S. Sahel Strategy. URL: https://www.heritage.org/defense/report/niger-coup-raises-questions-about-us-sahel-strategy
311 Brookings. How African governments can regain the trust of their citizens. URL: https://www.brookings.edu/articles/how-african-governments-can-regain-the-trust-of-their-citizens/
312 Brookings. Addressing and preventing coups in Africa: What the United States can do. URL: https://www.brookings.edu/articles/addressing-and-preventing-coups-in-africa-what-the-united-states-can-do/
313 Brookings. Africa's prosperity tied to investing in democracy. URL: https://www.brookings.edu/articles/africas-prosperity-tied-to-investing-in-democracy/
314 China Global South. Africa is at the Center of U.S.-China Competition for Critical Resources. URL: https://chinaglobalsouth.com/podcasts/africa-is-at-the-center-of-u-s-china-competition-for-critical-resources Peterson Institute for International Economics (PIIE).
Who Are China's Fellow Travelers in the International System? URL: https://www.piie.com/blogs/realtime-economics/2024/who-are-chinas-fellow-travelers-international-system

tolerance for their activity could also weaken the continent's drive for democracy[315].

Beyond geopolitics and trade, analysts view US national interests in Africa as mitigating security risks, maintaining supply chains for minerals and supporting the continent in resolving humanitarian issues. It is telling that the issue of US exports to Africa is virtually absent from public analyses.

In the context of security threats, analysts may mention the activity of non-state actors[316], including terrorists, piracy[317] and the transfer of power to non-legitimate politicians.

Compared to other global poles the US are most concerned about the extraction of critical minerals in Africa[318]

This is justified by the shortage of critical minerals for the production of semiconductors and renewable energy. For example, one text analyses the prospects for cooperation with **Madagascar**, **Mozambique** and **Tanzania** in the area of graphite extraction. At the moment, China appears to be far ahead in the global race to build supply chains for cobalt, rare earth metals, lithium and a number of other important metals and minerals, although mining companies from Europe and US have a large presence in precious metals and gemstones in many African countries. As for the humanitarian dimension of US national interests in Africa, it should be noted that issues of food security[319] and the development of local education systems[320] occupy an important place in it.

Another distinctive feature of the intellectual debate about Africa in the United States is the increased attention to energy security and climate change. Experts point out that African countries are the most vulnerable to extreme weather conditions and climate change, although they are relatively little responsible for these problems. Much attention is drawn to the lack of stable access to energy in most African countries. These difficulties are proposed to be addressed through the development of hydropower, the exploitation of alternative energy sources[321] and a more equitable distribution of financial assistance from the United States.

Because of the high level of competition for attention and resources between think tanks in the US, the perception of Africa in this case is distinguished by the greatest diversity of topics covered and views on the future of Africa, which are difficult to distill into coherent semantic blocks. Think tanks pay attention even to such issues that are not directly related to US interests as the use of digital currencies by African banks[322], local self-governance[323], cybersecurity[324] and gender equality[325].

Although the US, like **Europe**, acknowledges the imperfection of many of its decisions regarding the continent and the significant change in the balance of power in the world, experts express hope that their country will continue to work actively in Africa.

315 Time. Gulf Investment Boom in Africa. URL: https://time.com/6975593/gulf-investment-boom-afric
316 Brookings Institution. Nonstate Armed Actors in 2024: The Middle East and Africa. URL: https://www.brookings.edu/articles/nonstate-armed-actors-in-2024-the-middle-east-and-africa
317 Peterson Institute for International Economics (PIIE). Beware Pirates: Challenges to Shipping Today. URL: https://www.piie.com/events/2024/beware-pirates-challenges-shipping-today
318 Peterson Institute for International Economics (PIIE). Political Unrest in Africa Threatens Global Critical Mineral Supplies. URL: https://www.piie.com/research/piie-charts/2023/political-unrest-africa-threatens-global-critical-mineral-supplies-and
319 Peterson Institute for International Economics (PIIE). Food Insecurity: What Can the World Trading System Do About It? URL: https://www.piie.com/publications/policy-briefs/food-insecurity-what-can-world-trading-system-do-about-it
320 Brookings Institution. New Trends in Africa-Asia Economic Relations. URL: https://www.brookings.edu/articles/new-trends-in-africa-asia-economic-relations
321 Brookings Institution. Championing Green Energy in Africa: A Strategy for Quick Wins. URL: https://www.brookings.edu/articles/championing-green-energy-in-africa-a-strategy-for-quick-wins
322 Brookings Institution. Should African Central Banks Pursue Digital Currencies? URL: https://www.brookings.edu/articles/should-african-central-banks-pursue-digital-currencies
323 Brookings Institution. Subnational Democracy and Local Governance in Africa. URL: https://www.brookings.edu/articles/subnational-democracy-and-local-governance-in-africa
324 Brookings Institution. Subnational Democracy and Local Governance in Africa. URL: https://www.brookings.edu/articles/subnational-democracy-and-local-governance-in-africa
325 Brookings Institution. Promoting Gender Equality in Africa Through Gender-Responsive Procurement. URL: https://www.brookings.edu/articles/promoting-gender-equality-in-africa-through-gender-responsive-procurement

From their point of view, the continental security system, humanitarian projects, trade, infrastructure, investment and energy of the continent are too dependent on support from the US and indivisible from this country, and Africa, in turn, is a source of critical minerals and one of the future drivers of global economic growth, which makes cooperation with the West inevitable.

Russia: we are so back

According to Russian experts, many African states have made important steps towards real sovereignty and liberation from neo-colonial practices in recent years[326]. Russia appears to be an exporter of sovereignty[327], supporting governments pursuing independent policies. In addition to sovereignty, Russia is willing to offer assistance in the fight against terrorism[328] on the continent. Because Russian military presence has increased most in Sahel in recent years, this region of Africa is the most frequently mentioned in articles.

Russia's advantage over other players on this issue is justified by the fact that it does not make political demands in exchange for aid, as is often the case with Western countries[329]

Being able to rely on the thesis "Russia is the only white power that has never colonised anyone in Africa"[330], which is almost omnipresent in Africa (at least in the 35+ years old generations), makes this position seem winnable. Russian intellectuals agree that cooperation with Africa should not be limited to security issues: "Given the growing interest of African countries in full-scale co-operation, Russia needs to focus on strengthening not only its military-political but also its financial-industrial positions"[331]. This process is still at an early stage: it is noted that only a very limited number of joint projects have been implemented between the 2019 and 2023 Russia-Africa summits[332]. Nevertheless, the presence of the "Made in Russia" brand on the continent, as claimed by the experts, is slowly but surely growing[333].

From a geopolitical point of view, think tanks are trying to overcome some ambiguity arising from numerous social, economic and cultural differences between Russia and African countries. Russia, on the one hand, is attributed to the 'global majority' and the Global South, on the other, it is the bearer of the 'real' (traditional in terms of last couple of centuries) European values, which are no longer characteristic of modern Europe[334]. **China** in this new geopolitical reality is seen as a natural counterweight used by African countries to gain more autonomy from **Europe** and the **US**[335]. Western countries themselves, in turn, are portrayed as desperately clinging to their status as the continent's dominant powers. Some experts regard terrorist activity or protests as Western-inspired actions to maintain influence[336]. As for Africa itself, the average point of view is that

326 Valdai Club. В Африку бегом. URL: https://ru.valdaiclub.com/a/chairman-speech/v-afriku-begom/?sphrase_id=752363

327 Российский совет по международным делам (РСМД). Круглый стол РСМД и Института Африки РАН: информационно-культурный суверенитет стран Сахеля в условиях глобализации. URL: https://russiancouncil.ru/news/kruglyy-stol-rsmd-i-instituta-afriki-ran-informatsionno-kulturnyy-suverenitet-stran-sakhelya-v-uslov/?sphrase_id=153513930

328 Российский совет по международным делам (РСМД). Блог И. Захарова: Информационная политика в Африке. URL: https://russiancouncil.ru/blogs/i-zakharov/36491/?sphrase_id=153513930

329 Valdai Club. Благонадёжные партнёры. URL: https://ru.valdaiclub.com/events/posts/articles/blagonadyezhnye-partnyery/?sphrase_id=752363

330 Российский совет по международным делам (РСМД). Главная задача — вернуть народам Сахеля суверенитет. URL: https://russiancouncil.ru/analytics-and-comments/columns/africa/glavnaya-zadacha-vernut-narodam-sakhelya-suverenitet/?sphrase_id=153513930

331 Российский совет по международным делам (РСМД). России необходимо укреплять финансовые и производственные позиции в Африке. URL: https://russiancouncil.ru/analytics-and-comments/columns/africa/rossii-neobkhodimo-ukreplyat-finansovye-i-proizvodstvennye-pozitsii-v-afrike/?sphrase_id=153513930

332 Российский совет по международным делам (РСМД). Африка сейчас уже совсем другая, и мы многому можем у неё поучиться. URL: https://russiancouncil.ru/analytics-and-comments/comments/afrika-seychas-uzhe-sovsem-drugaya-i-my-mnogomu-mozhem-u-neye-pouchitsya/?sphrase_id=153513930

333 Российский совет по международным делам (РСМД). Африканская экспансия бренда «Made in Russia» и роль РЭЦ. URL: https://russiancouncil.ru/analytics-and-comments/columns/sandbox/afrikanskaya-ekspansiya-brenda-made-in-russia-i-rol-rets/?sphrase_id=153513930

334 Российский совет по международным делам (РСМД). Картина нарождающегося мира: глобальный юг. URL: https://russiancouncil.ru/analytics-and-comments/comments/kartina-narozhdayushchegosya-mira-globalnyy-yug/?sphrase_id=153513930

335 Российский совет по международным делам (РСМД). Основные направления сотрудничества КНР со странами Северной Африки. URL: https://russiancouncil.ru/analytics-and-comments/analytics/osnovnye-napravleniya-sotrudnichestva-knr-so-stranami-severnoy-afriki/?sphrase_id=153513930

336 Valdai Club. Африканская турбулентность. URL: https://ru.valdaiclub.com/events/posts/articles/afrikanskaya-turbulentnost/?sphrase_id=752363
Российский совет по международным делам (РСМД). Главная задача — вернуть народам Сахеля суверенитет. URL: https://russiancouncil.ru/analytics-and-comments/columns/africa/glavnaya-zadacha-vernut-narodam-sakhelya-suverenitet/?sphrase_id=153513930

African countries can become powerful players on the international stage by coordinating their policies and profess values close to **neo-Pan-Africanism**[337].

In general, the Russian intellectual discussion about Africa can be divided into two large fields. The authors belonging to the first one are emphasising global political factors shaping African affairs. Africa, like the whole world, seems to them to be a large arena of confrontation between **great powers**. On the continent itself, they discover **zones of influence** and determine the most influential regional powers[338]. Thanks to them, Russian think tanks write almost more often about the actions of Western countries in Africa than the European or US think tanks themselves. Most publications of this kind are devoted to **France**: experts note the failure of the **Françafrique** policy[339], the replacement of France by Russia in Sahel in security matters, and the personal mistakes of Emmanuel Macron[340]. Another topic of experts from this field is neocolonialism politics by the EU and the USA. It is noteworthy that even this category of experts does not imply that China and Russia act as a single coordinated force. If these countries are mentioned together, this happens almost exclusively in the context of cooperation on African issues in BRICS. At the same time, Western think tanks often list China and Russia with a comma, as if they have common goals and a single policy on the continent.

Representatives of the second field focus not on the grand chessboard, but on specific areas of cooperation between Russia and Africa. Their texts are quite technocratic and often lack any geopolitical pathos. Like the US, Russian think tanks pay attention to rare earth elements mined in Africa, also noting **China**'s dominance in this area[341].

Experts consider energy cooperation to be a much more promising idea. They emphasise Russia has unique competencies and is ready to offer almost any services, from personnel training to infrastructure construction

They can help solve the problem of energy deficit on the continent[342]. In addition, Russian think tanks write much more about cooperation in the field of education than representatives of other global poles, suggesting that the number of African students in Russian universities can be significantly increased[343]. Two other unique topics mentioned almost exclusively by Russian experts are **digital cooperation**[344] and development of the **space industry**[345]. Digitalisation of public administration and everyday life in Africa is seen as one of the ways to overcome inequality[346] and ensure sovereignty by reducing dependence on Western companies and countries[347]. The Center for African Studies at the Higher School of Economics is doing a strategic project to share experience between Russia and Africa in this area[348].

While US think tanks are characterised by the greatest diversity of topics discussed in the con-

337 Valdai Club. Уроки второго саммита Россия-Африка. URL: https://ru.valdaiclub.com/a/highlights/uroki-vtorogo-sammita-rossiya-afrika/?sphrase_id=752363

338 ИМЭМО РАН. Regional Powers on the African Continent: Trends and Prospects. URL: https://www.imemo.ru/publications/periodical/meimo/archive/2024/4-t-68/africa-today-and-tomorrow/regional-powers-on-the-african-continent-trends-and-prospects

339 Российский совет по международным делам (РСМД). Блог И. Захарова: Информационная политика в Африке. URL: https://russiancouncil.ru/blogs/i-zakharov/36491/?sphrase_id=153513930

340 ИМЭМО РАН. Francophonie: New Approaches of Emmanuel Macron. URL: https://www.imemo.ru/publications/periodical/meimo/archive/2024/5-t-68/europe-new-realities/francophonie-new-approaches-of-emmanuel-macron
ИМЭМО РАН. France: From Macron's Revolution to Stagnation. URL: https://www.imemo.ru/news/events/text/france-from-macrons-revolution-to-stagnation

341 Российский совет по международным делам (РСМД). Африка на распутье: мировой рынок редкоземельных металлов переживает тектонические сдвиги. URL: https://russiancouncil.ru/analytics-and-comments/analytics/afrika-na-raspute-mirovoy-rynok-redkozemelnykh-metallov-perezhivaet-tektonicheskie-sdvigi/?sphrase_id=153513930

342 Valdai Club. Россия-Африка: энергетическое сотрудничество. URL: https://ru.valdaiclub.com/a/highlights/rossiya-afrika-energeticheskoe-sotrudnichestvo/?sphrase_id=752363

343 Valdai Club. К вопросу подготовки кадров высшей квалификации. URL: https://ru.valdaiclub.com/a/highlights/k-voprosu-podgotovki-kadrov-vysshey-kvalifikatsii/?sphrase_id=752363

344 Global Affairs. ИТ-экспансия в Африку. URL: https://globalaffairs.ru/articles/it-ekspansiya-v-afriku

345 Российский совет по международным делам (РСМД). Снится ли им рокот космодрома: заметки о перспективах стран Африки в космосе. URL: https://russiancouncil.ru/analytics-and-comments/analytics/snitsya-li-im-rokot-kosmodroma-zametki-o-perspektivakh-stran-afriki-v-kosmose/?sphrase_id=153513930

346 Valdai Club. Как Африке преодолеть зависимость. URL: https://ru.valdaiclub.com/a/highlights/kak-afrike-preodolet-zavisimost/?sphrase_id=752363

347 Global Affairs. Цифровизация в Африке. URL: https://globalaffairs.ru/articles/czifrovizacziya-v-afrike

348 E-Governance Hub. URL: https://e-governancehub.ru

text of Africa, Russian think tanks are distinguished by the depth of their analysis of domestic political issues on the continent, especially in the area of security[349]. When discussing the conflict in **Libya**[350] or near the **African Great Lakes**[351] analysts demonstrate a very high level of awareness of the actors operating in the region and their interests.

Russia is ready to use the rich legacy of ties with the continent left over from the Soviet Union[352], as well as to expand cooperation in new areas. Although the awareness of the need to expand cooperation has only recently emerged, think tanks are confident that it will bring abundant benefits to both sides.

Overall, experts agree that Africa has become one of the top priorities for Russian foreign policy in recent years

Unlike all other think tanks discussed in this text, the HSE University Center for African Studies focuses only on Africa, which allows for a special depth of analysis. In 2023, Center for African Studies published a handbook Africa 2023: Opportunities and Challenges in Russian, dedicated to modern-day Africa, its economy, infrastructure, natural resources, security and much more. The book emphasises that Africa is a unique civilisation, which is based on network-centric unity, as well as diverse and flexible social structures. In addition, it is noted that the support for multipolarity in international relations inherent to Russian perception of the world has much in common with the African desire for apolarity as a principle of the fair world order[353].

In addition, the Center pays special attention to the dynamics of Russia-Africa relations[354], noting the breakthroughs that have occurred in recent years in the field of humanitarian cooperation, educational projects, and trade and economic ties. The Russia-Africa summits played an important role in these processes. The experts of the Center for African Studies speak positively about the ability of the overwhelming majority of African countries to maintain neutrality in the Ukrainian crisis despite pressure from the West[355].

The Center attaches great importance to the knowledge sharing between Russia and Africa. In particular, the Center published a whitepaper report on natural gas industry in Nigeria, where measures to develop the domestic gas market were proposed[356]. In 2023, the Center within the E-Governance Knowledge Sharing Platform launched a handbook E-Governance in Africa 2024: Opportunities and Challenges[357], which became world first comprehensive study of e-governance in Africa.

349 ИМЭМО РАН. Islamist Terrorism in Africa in the 2010-2020s: Main Trends and Prospects. URL: https://www.imemo.ru/publications/periodical/meimo/archive/2024/4-t-68/africa-today-and-tomorrow/islamist-terrorism-in-africa-in-the-20102020s-main-trends-and-prospects

350 Российский совет по международным делам (РСМД). Игра в бирюльки на ливийском поле (Часть 3). URL: https://russiancouncil.ru/analytics-and-comments/analytics/igra-v-biryulki-na-liviyskom-pole-3/?sphrase_id=153513930

351 Российский совет по международным делам (РСМД). Ситуационный анализ РСМД и ИМИ МГИМО: Конфликт в районе Великих Африканских озёр — РВО и позиция России. URL: https://russiancouncil.ru/news/situatsionnyy-analiz-rsmd-i-imi-mgimo-konflikt-v-rayone-velikikh-afrikanskikh-ozer-rvo-i-pozitsiya-r/?sphrase_id=153513930

352 Valdai Club. Россия из Африки никуда не уходила. URL: https://ru.valdaiclub.com/a/highlights/rossiya-iz-afriki-nikuda-ne-ukhodila/?sphrase_id=752363

353 Центр изучения Африки НИУ ВШЭ. Африка 2023: Возможности и риски. URL: https://we.hse.ru/irs/cas/africa2023

354 НИУ ВШЭ. Африка: перспективы развития и рекомендации для политики России. URL: https://globalaffairs.ru/wp-content/uploads/2021/11/doklad_afrika_perspektivy-razvitiya.pdf

355 Valdai Club. Russia-Africa Cooperation: Outlook and Objectives. URL: https://valdaiclub.com/a/reports/russia-africa-cooperation-outlook-and-objectives/

356 HSE University Center for African Studies. NLNG T7: a Way to Euthanize Nigerian Power Sector. URL: https://drive.google.com/file/d/199kKtlnOpwD7AGLVkKF6LQlrtu94FmX0/preview

357 HSE University Center for African Studies. E-Governance in Africa 2024: Opportunities and Challenges. URL: https://e-governancehub.ru/read-book-e-governance-in-africa-2024-challenges-and-opportunities/

African think tanks

While this chapter focuses primarily on international think tanks views on Africa that are located outside, it would be a shame to ignore the tremendous work being done to understand the continent's future by think tanks based in Africa itself. To do this, we selected all African expert centres from the list of **Top 150 Think Tanks Around the Globe** (non-US) in the **Global Go To Think Tank Index Report 2020** of the University of Pennsylvania[358]. The initial sample included 16 think tanks, but three of them were then excluded due to the lack of a publicly accessible website, one is exclusively engaged in public opinion polls (Afrobarometer), and another five either do not publish online at all or last did it many months ago. The final list of African think tanks included in the sample consists of seven think tanks. Analytical materials selected were published on the websites of these think tanks mostly in August-September 2024, then a qualitative analysis was conducted..

African think tanks sample

South Africa

African Centre for the Constructive Resolution of Disputes (ACCORD)

South African Institute of International Affairs (SAIIA)

Institute for Security Studies (ISS)

Kenya

African Economic Research Consortium (AERC)

African Centre for Technology Studies (ACTS)

Ghana

IMANI Center for Policy and Education

African Center for Economic Transformation (ACET)

Source: prepared by the HSE Center for African Studies.

Perhaps the most noticeable feature of African think tanks is their depoliticisation and degeopoliticisation

The vast majority of publications are devoted to issues of economics, poverty alleviation, trade and regional cooperation, and not to the actions of external players on the continent or the interstate relations of African countries. Surprisingly little attention is paid to electoral institutions or intra-elite relations as well. Even if the allowance is made for the fact that African intellectuals may outsource such reasoning to foreign experts in order to save resources and focus on more pressing problems for themselves, they can still be united by a succinct thesis: not politics, but policy.

When the conversation turns to 'big politics', the experts manage to adhere to the principle of multilateralism. The **South African Institute of International Affairs (SAIIA)**, which was recognised as the second-best African think tank in 2020, is a good example of this feature. In less than two months, the centre managed to have a closed-to-public dialogue between **Russian** and South African experts on the future of relations between the two countries, to discuss in detail the negotiations on climate with China within the framework of FOCAC, to discuss cooperation with **Japan** and the **G20**[359]. In the case of the roundtable with Russian experts, it is noted that South Africa's non-joining of Western sanctions against Russia has caused international criticism, but allowed the country to "maintain autonomy in its foreign relations". At the same time, the experts call on Russia to "articulate how its engagement supports African-led development initiatives rather than pursuing narrow interests". An analytical paper on relations with the G20 notes that after 2022, the organisation has become a much more tense space for consensus-building on many global issues between developed and developing economies[360].

358 Bruegel. 2020 Global Go To Think Tank Index Report. URL: https://www.bruegel.org/sites/default/files/wp-content/uploads/2021/03/2020-Global-Go-To-Think-Tank-Index-Report-Bruegel.pdf

359 South African Institute of International Affairs (SAIIA). Local Opportunities and Global Disputes: Tracking Japan's Engagement with Africa Amid Geopolitical Tensions. URL: https://saiia.org.za/research/local-opportunities-and-global-disputes-tracking-japans-engagement-with-africa-amid-geopolitical-tensions
South African Institute of International Affairs (SAIIA). China-Africa Energy and Climate Cooperation: Prospects for FOCAC 2024. URL: https://saiia.org.za/research/china-africa-energy-and-climate-cooperation-prospects-for-focac-2024

360 South African Institute of International Affairs (SAIIA). The G7, South Africa, and the Sustainable Climate Agenda for Africa. URL: https://saiia.org.za/research/the-g7-south-africa-and-the-sustainable-climate-agenda-for-africa

Like other global poles, African experts agree that the nature of international relations has changed significantly in recent decades. They note that after 1945, Africa remained passive and accepted the geopolitical realities of the international system without an assertive, unified regional policy, while after the end of the Cold War, foreign powers paid insufficient attention to the continent[361].

There is a growing demand for more representative and equitable global institutions that can manage the risks and opportunities of interdependence among states[362]

Africa must be able to integrate into these realities and take its rightful place there.

Considerable attention is paid to security issues. Think tanks study the prospects for reconciliation of the conflicting parties in Sudan; discuss the depletion of support for ISWAP[363], which opens a window of opportunity to solve the problem in cooperation with local communities; note the negative impact of the conflict in Western Cameroon on the national education system; emphasise the successes of the Democratic Republic of Congo on the path to the difficult, but increasingly achievable goal of national unity[364]. In general, the recipe for peace in Africa proposed by experts can be summarised as the formula 'complementarity of the local and continental'. Think tanks often offer sophisticated strategies for interaction with local communities, but at the same time do not forget about security cooperation – e.g. they write about the **AU Agenda 2063: Goal of Silencing the Guns**[365].

Compared to all others, African think tanks are distinguished by their increased interest in two problems: the integration of African youth into the labour market and environmental issues. Thus, experts write about the lack of competent instructors in technical specialties in **Ethiopia**; note the acute problem of unemployment facing **Ghanaian youth** and propose solving it by creating digital jobs; explain youth **protests in Kenya** by the government's insufficient sensitivity to the needs of this age group[366]. Environmental issues are mainly not abstract, but rather are tied to specific economic problems: the authors of think tanks discuss the impact of climate change on social stability in **South Africa**; the continent's participation in the **High Seas Treaty**; and river management by local communities in **East Africa**[367].

Continent's countries should achieve greater autonomy in the matter of economic and financial institutional structure

361 African Centre for the Constructive Resolution of Disputes (ACCORD). The African Union's 2063 Goal of Silencing the Guns in the New World Order. URL: https://www.accord.org.za/conflict-trends/the-african-unions-2063-goal-of-silencing-the-guns-in-the-new-world-order

362 South African Institute of International Affairs (SAIIA). Reimagining Global Economic Governance: African and Global Perspectives. URL: https://saiia.org.za/research/reimagining-global-economic-governance-african-and-global-perspectives

363 The organisation is recognised as terrorist, its activities are prohibited on the territory of the Russian Federation.

364 African Centre for the Constructive Resolution of Disputes (ACCORD). Impact of the Ongoing Crisis on the Education of the North-West Region of Cameroon. URL: https://www.accord.org.za/conflict-trends/impact-of-the-ongoing-crisis-on-the-education-of-the-north-west-region-of-cameroon
African Centre for the Constructive Resolution of Disputes (ACCORD). East Africa's Path to Unity: Community Growth and Regional Peace Initiatives in the Democratic Republic of the Congo. URL: https://www.accord.org.za/conflict-trends/east-africas-path-to-unity-community-growth-and-regional-peace-initiatives-in-the-democratic-republic-of-the-congo
ISS Africa. Is Peace Possible Between Sudan's Warring Parties? URL: https://issafrica.org/iss-today/is-peace-possible-between-sudan-s-warring-parties
ISS Africa. The End of ISWAP's Hearts and Minds Strategy. URL: https://issafrica.org/iss-today/the-end-of-iswap-s-hearts-and-minds-strategy

365 African Centre for the Constructive Resolution of Disputes (ACCORD). The African Union's 2063 Goal of Silencing the Guns in the New World Order. URL: https://www.accord.org.za/conflict-trends/the-african-unions-2063-goal-of-silencing-the-guns-in-the-new-world-order/#:~

366 African Centre for the Constructive Resolution of Disputes (ACCORD). Kenya's Historic Gen Z-Led Protests: The Issues. URL: https://www.accord.org.za/analysis/kenyas-historic-gen-z-led-protests-the-issues
African Center for Economic Transformation (ACET). Ethiopia TVET Teachers Professional Competency Challenges and Policy Recommendations. URL: https://acetforafrica.org/research-and-analysis/insights-ideas/policy-briefs/ethiopia-tvet-teachers-professional-competency-challenges-and-policy-recommendations
African Center for Economic Transformation (ACET). Bridging the Gap: A Renewed Employment Policy for a Generation of Ghanaian Youth. URL: https://acetforafrica.org/research-and-analysis/insights-ideas/policy-briefs/bridging-the-gap-a-renewed-employment-policy-for-a-generation-of-ghanaian-youth
African Center for Economic Transformation (ACET). Ghana Newsletter: Digital and Ecological Transition of Work for Youth Employment. URL: https://acetforafrica.org/research-and-analysis/insights-ideas/policy-briefs/ghana-newsletter-digital-and-ecological-transition-of-work-for-youth-employment

367 African Centre for Technology Studies (ACTS). STREM Policy Brief. URL: https://www.acts-net.org/images/Publications/Policy-Briefs/CRE/STREM_Policy_Brief.pdf
African Centre for the Constructive Resolution of Disputes (ACCORD). The Impacts of Climate Change on Social Cohesion and Stability in Southern Africa. URL: https://www.accord.org.za/analysis/the-impacts-of-climate-change-on-social-cohesion-and-stability-in-southern-africa
ISS Africa. Africa Must Help Steer the High Seas Treaty Out of Dire Straits. URL: https://issafrica.org/iss-today/africa-must-help-steer-the-high-seas-treaty-out-of-dire-straits

In macroeconomics, there is a notable thesis that, given the changed geopolitical landscape, the continent's countries should achieve greater autonomy in the matter of economic and financial institutional structure. For example, the need for an African credit agency is noted, and it is also noted that the industrial policy of the United States is becoming increasingly nationalistic and securitised, which has a strong impact on the continent's trade prospects[368].

In addition, there is room in the intellectual debate for reflection on the impact of **COVID** on the continent's economy and education systems[369]; the **Kush epidemic** (synthetic drug, with epidemic usage rise in Sierra Leone); **women's rights** and the role of supranational institutions in supporting them[370]; the costs of illegal gold mining[371]; corruption; technology transfer (including **AI**)[372]; the ineffectiveness of **electoral commissions** and policies towards small and medium-sized businesses[373].

An important common institutional feature of African think tanks is their sources of funding. Their donors can be divided into two large groups: international institutions (**the World Bank, the United Nations, OXFAM, UNICEF**) and Western-based non-profit foundations and/or governments directly. For example, the following are often mentioned among the donors of African think tanks: **the Norwegian Agency for Development Cooperation, the Bill and Melinda Gates foundation, the Foreign, Commonwealth and Development Office of the United Kingdom, The Swedish International Development Cooperation Agency** and others.

Based on the above analysis, it is quite obvious that no powers other than the Western ones support the development of think tanks and think tanks in Africa, which inevitably leads – as a minimum – to a shift of focus on topics peculiar to the agenda of Western countries.

Africa in the mirror of think tanks vs Africa in the media

The results presented above may be compared with the research The Image of Africa in the book **Africa 2023: Opportunities and Risks**, published by the **Higher School of Economics** in 2023[374]. At that time, the images of Africa in the media of **Brazil**, **India**, **Russia**, **China**, **the US**, **the UK**, **France**, **Germany**, **Türkiye** and **Israel** were surveyed and compared.

In general, the narratives of think tanks mostly duplicate the messages formed by the media, but some differences are still present. For example, regarding the frequency of mentions of foreign countries in Africa, it is striking that there is almost a complete absence of any intelligible analysis of the actions of **the UK** in Africa by experts, while the media (and not only British ones) write about the policy of this country on the continent quite often. Perhaps this is due to the fact that the UK no longer plays a significant role in Africa, but the media continue to view it as a serious player out of habit. However, this claim may be questioned and explained by the number of different hypotheses.

It is also noteworthy how differently the media and think tanks view the scale of Russia's presence in Africa.

368 ISS Africa. AGOA Agoner: Risks of U.S. Trade Policy for Africa. URL: https://issafrica.org/iss-today/agoa-agoing-agoner-risks-of-us-trade-policy-for-africa
African Center for Economic Transformation (ACET). Is an African Credit Rating Agency the Answer? Maybe, Maybe Not. URL: https://acetforafrica.org/research-and-analysis/insights-ideas/articles/is-an-african-credit-rating-agency-the-answer-maybe-maybe-not

369 African Economic Research Consortium (AERC). Impact of COVID-19 Pandemic on School Attendance in Kenya. URL: https://publication.aercafricalibrary.org/items/3c3826bb-b1fb-4731-84c2-e8da752dbe06

370 African Centre for the Constructive Resolution of Disputes (ACCORD). Bringing Women to the Table: The Evolution of FemWise-Africa. URL: https://www.accord.org.za/analysis/bringing-women-to-the-table-the-evolution-of-femwise-africa

371 IMANI Africa. An Extended Policy Brief: Gold Rush Chaos and Golden Curse. URL: https://imaniafrica.org/2024/09/an-extended-policy-brief-gold-rush-chaos-and-golden-curse-how-ghanas-political-elite-are-selling-out-the-nations-posterity-for-personal-gain

372 African Centre for Technology Studies (ACTS). Application of AI in Education in Africa. URL: https://ai4d.acts-net.org/wp-content/uploads/APPLICATION-OF-AI-IN-EDUCATION-IN-AFRICA.pdf

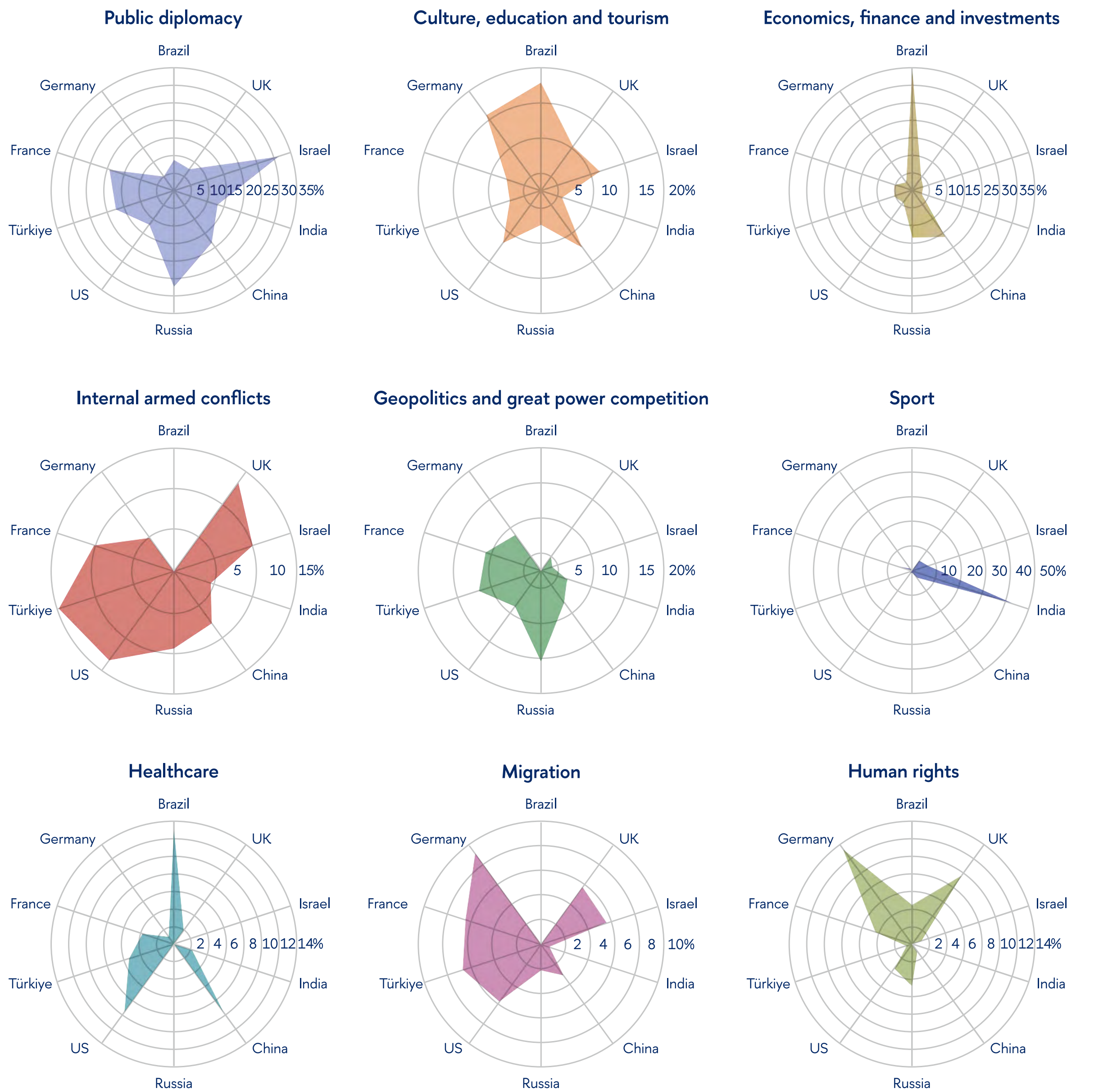
373 African Center for Economic Transformation (ACET). A Strategic Path to Investment and Growth for African SMEs. URL: https://acetforafrica.org/research-and-analysis/insights-ideas/articles/abt-a-strategic-path-to-investment-and-growth-for-african-smes

374 Центр изучения Африки НИУ ВШЭ. Africa 2023 Overview. URL: https://we.hse.ru/irs/cas/africa2023

If in 2023 the media mostly wrote about "Russia's return to Africa" or "increasing its presence on the continent", conceptualising Russia as an actor in the middle of the way towards the stable presence in Africa, then in 2024 think tanks already view it as one of the most influential players on the continent

However, in the majority of cases, the analysis of the media and think tanks' publications leads to similar results. For example, the Chinese press, like expert centres, is mainly concerned with the politics of its own country and also pays a lot of attention to the United States.

Key African topics in national media



Source: prepared by the HSE Center for African Studies.

Another interesting similarity in the variation of themes for think tanks and media is that Russian, Chinese and Indian actors tend to view Africa in the context of global economics and politics, while EU countries and the US are more inclined to view Africa 'as it is', detailing the internal politics of African countries and bilateral relations within the continent in isolation from the actions of external forces.

The Russian press is preoccupied with geopolitical issues. Even economic issues take on the features of an international confrontation: the economy and Africa are often mentioned together in the context of the expansion of **BRICS** or the continent's rejection of the dollar as a key exchange currency. On the contrary, Russian experts offer a more technocratic and down-to-earth view.

US journalists write about Africa in the context of security much more often than intellectuals from the same country, and much less often mention the prospects for economic cooperation with the continent. This can probably be explained by the fact that it is much easier for the US press to explain the need for a presence on the continent by appealing to national security rather than to vague prospects for economic growth. Chinese journalists also differ from their colleagues from think tanks. The topics of healthcare, cultural exchange and tourism, which occupy a significant part of the media space, are almost completely absent from expert publications. Instead, intellectuals of their Eastern superpower focus on the economy.

Probably, for both China and the United States, issues of security or humanitarian exchange are just a screen covering up purely economic interests

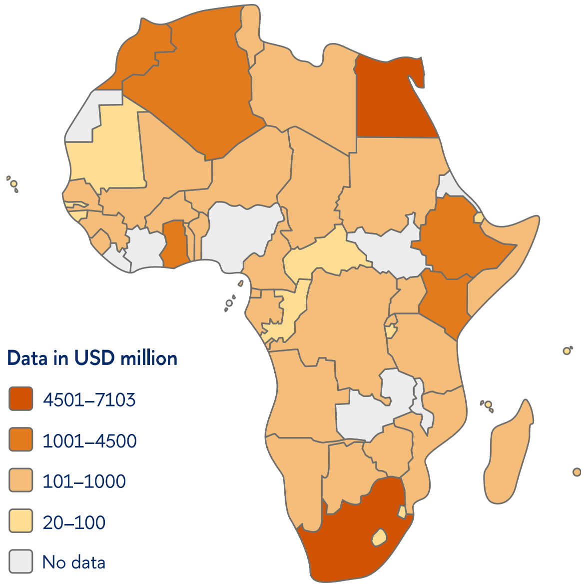
Identifying the DNA of African creativity

Ignored potential of the creative economy

While discussing African cultures, the first images that often come to mind are traditional dances, masks and rituals passed down through generations. While these elements are integral to the continent's rich heritage, less attention is given to the growing urban art scenes, such as the Afrobeat revolution or the thriving contemporary galleries in cities like Johannesburg. Even fewer consider the economic implications of Africa's creative industries or their potential for economic diversification and growth. Discussions about Africa's development frequently centre around industries and commodities; yet, the continent's post-industrial potential, particularly through creative industries, remains overlooked.

Digitalisation and creative industries in Africa do not just provide more than 2 million jobs[375] (5% of global cultural and creative industries jobs) but can also foster economic sovereignty by creating local wealth from African narratives, arts and ideas.

Estimation of cultural goods and services household consumption market size in Africa, 2022



The estimate of the market for cultural goods and services is based on household per capita expenditure data, assuming a 2% share of expenditure is dedicated to cultural goods and services.

Source: prepared by the HSE Center for African Studies based on UNESCO Institute for Statistics (UIS) and World Bank data.

Economic independence goes hand in hand with cultural sovereignty, enabling African nations to control how their stories are told and distributed globally

As African cities continue to evolve, this intersection of creativity, digital transformation and urbanisation has the potential to position the continent as a major player in the global post-industrial economy.

In most countries for which data is available, there has been a steady growth in the contribution of creative industries to GDP over the past 10 years. The development of technology, increased investment and growing international interest in African culture are driving this growth. South Africa, Nigeria, Kenya, and Morocco are the leaders in developing the creative economy on the continent, showing significant growth and influence in various sectors, including music, film and digital media.

Creative industries in Africa face many of the same challenges that plague other sectors of the economies. Issues such as a lack of infrastructure, funding, institutional capacities, and regulations all hinder growth. Moreover, the level of education in creative fields remains low, further limiting the

375 UNCTAD. Creative Industry 4.0: Towards a New Globalized Creative Economy. United Nations Conference on Trade and Development, Geneva, 2022.

ability of the African nations to compete on a global scale. However, one of the most pressing concerns that is important to highlight is the severe **data deficit.**

The absence of consistent data hinders governments and investors from making decisions that could boost the creative economy, the challenge not limited to the creative sector but affecting multiple industries across the continent.

Lack of reliable, comprehensive data makes it difficult to assess the true scale of Africa's creative industries and prevents the development of well-informed strategies for sustainable growth

Africa encompasses many of the most promising and rapidly growing markets globally, in terms of its both population and economic potential.

Assessing household demand for creative goods and services plays a critical role in understanding the broadest impact of the creative economy. Families and households, as key participants in this sector, not only consume cultural products and services but also influence their production and distribution. This demand spans a range of activities, including cultural consumption – such as attending performances, visiting museums and engaging in recreational activities – and the use of leisure services.

Households are active agents in the creative economy, contributing to both its financial sustainability and the cultural dynamism that drives growth. Their expenditures on creative goods and services fuel market demand, which in turn shapes the supply and diversity of these offerings. In many countries, the increasing consumer spending and the growing accessibility of digital platforms for cultural content have expanded the avenues for cultural engagement. For example, Uganda increased consumer spending to USD 32 billion equivalent in 2022 from USD 21 billion in 2012[376]. Moreover, households often indirectly support the creative economy by investing in related goods, such as technological devices for streaming or attending digital concerts, or by contributing to the informal sectors of creative production through craft and local art consumption.

The role of households in both the consumption and production of creative goods also brings attention to the way cultural activities are embedded in everyday life. Household spending patterns reflect broader societal trends, such as urbanisation, rising literacy rates and increasing awareness of the value of local traditions. Thus, the demand for creative goods and services does not just sustain the cultural sector but also fosters innovation, diversity, and community identity. In recent years, household spending on cultural events and services in BRICS countries has ranged between 2.7% and 6% of total household consumption[377]. In 2017, Brazil allocated about 2% of the total household expenditure to this category, while China spent 2.3%, and Russia allocated around 2.6%. South Africa spent approximately 1.95%, and India, with a lower figure, allocated 0.67%[378].

Many African nations lack detailed data on household spending in cultural sector. This is primarily due to underdeveloped statistical systems, limited infrastructure for collecting and processing such data, and economic conditions that prioritise essential needs over cultural consumption.

376 World Bank. Private Consumption in Uganda. URL: https://data.worldbank.org/indicator/NE.CON.PRVT.CD?locations=UG

377 Росстат. BRICS Joint Statistical Publication 2023. URL: https://rosstat.gov.ru/storage/mediabank/BRICS%20Joint%20Statistical%20Publication-2023.pdf

378 Mungase, Sachin, and Satyanarayan Kothe. Analysing Consumption Patterns and Food Demand in BRICS Countries: A Differential Approach to Demand Theory and Policy Analysis. MPRA Paper No. 121431, University of Munich, 12 July 2024. URL: https://mpra.ub.uni-muenchen.de/121431/

At the same time, the continent is a massive importer of cultural content. On platforms like Netflix, for example, despite the growing African audience, only one out of the top 10 films is African made, while the rest are dominated by Indian, Chinese, and French productions. The competition for the African markets is intensifying, as demonstrated by the growing investments from major global players. Netflix's entry into Africa, mirroring its earlier move in South Korea[379], is just one example. The presence of African films in prestigious events, such as Senegalese cinema at the Oscars[380] and a Tanzanian author receiving the Nobel Prize in Literature[381], signals a rising recognition of African talent. Even Disney has joined the wave with its animated cyberpunk series Iwaju[382], set in Lagos, while tech giants like Google are making significant investments in African markets.

Senegalese romantic drama film Banel e Adama by Senegalese screenwriter Ramata-Toulaye Sy, 2023

Animated science fiction miniseries Iwájú produced by Walt Disney Animation Studios, written by Olufikayo Adeola and Halima Hudson, 2024

These investments are shaping cultural narratives and influencing the values of Africa's youth. The question arises: what will the next generation African generation believe in? Will they see their own beauty and potential reflected in global media, or will they be drawn to the ideas developed outside of Africa? It is crucial for Africa to foster a sense of pride in local creativity, ensuring that young people see the value in staying and building within their own communities, rather than seeking opportunities abroad. Cultural sovereignty is essential in this context.

By investing in its creative industries, African states can control their cultural narrative, ensuring that African stories and values are told by Africans

This fosters a generation that not only consumes content but also creates it, driving local innovation and allowing Africa to rise as a global cultural leader.

The creative industries, which encompass music, film, fashion, art and design, are rapidly developing on the African continent, becoming an important driver of economic growth and social transformation. Today, as the global economy increasingly shifts toward innovation and creativity, Africa is showing significant potential in this area, gradually positioning itself among the global leaders in the creative economy.

The increasing value of African contemporary artists on the global market highlights the importance of creative education and investment in the continent's cultural institutions. Many leading African artists, such as Amoako Boafo and Ben Enwonwu, have benefitted from formal art education in institutions across Africa. In recent years, the market for African contemporary art has seen exponential growth. According to the Art Basel 2023 report, African contemporary artists achieved record sales in auction houses, with more than 2,700 works sold — almost double the number sold before COVID-19. The total value of these works reached USD 63 million in 2022, up from USD 47 million in 2021. The 2023 Contemporary Art Market Report includes nine African artists in the top 500 selling contemporary artists globally. This marks a significant achievement for African artists, whose presence in major auction houses has grown steadily, reflecting increasing market demand and global recognition.

379 Analyzing Digital Communication Trends. URL: https://ijoc.org/index.php/ijoc/article/download/20718/4392

380 Africanews. Senegalese Migrant's Journey Inspires Oscar-Nominated Film. URL: https://www.africanews.com/2024/02/18/senegalese-migrants-journey-inspires-oscar-nominated-film/

381 The New York Times. Nobel Prize in Literature Awarded to Abdulrazak Gurnah. URL: https://www.nytimes.com/2021/10/07/books/nobel-prize-literature-abdulrazak-gurnah.html

382 Disney+. *Iwaju Show on Disney+. URL: https://ondisneyplus.disney.com/show/iwaju

Nigerian historical drama film Lisabi: The Uprising directed by Niyi Akinmolayan, produced by Adebimpe Oyebade and Victoria Akujobi, and written by Yinka Olaoye and Niyi Akinmolayan, 2024

Africa stands out with its music industry where genres like Afrobeat and Urban Groove have gained worldwide recognition, thereby boosting cultural exports and promoting tourism. However, evaluating the real contribution of these industries to the economy presents several challenges. Traditional statistical methods often overlook the unique characteristics of creative sectors, such as intellectual property and cultural assets, which results in their role being underestimated.

The creative industries are often mistakenly associated only with the humanitarian sphere, ignoring their economic potential

The intertwining of culture and politics is a powerful phenomenon, especially in regions where art and expression shape public discourse. Across Africa, cultural actors have often used their platforms to address social and political issues. Opinion leaders like Nigerian musician Fela Kuti[383], whose Afrobeat criticised corruption and military rule, or South African playwright Athol Fugard[384], who highlighted the injustices of apartheid, illustrate how cultural production and political activism are closely connected. In these cases, the line between an artist and a political actor often blurs, as cultural figures mobilise a society and contribute to shaping national political debates.

A recent example of this is Bobi Wine, a Ugandan musician turned politician. Bobi Wine, born Robert Kyagulanyi, first gained popularity through his socially oriented narrative, which speculates with issues such as poverty, corruption and daily life of lower-income communities. His rise from a musician to an opposition leader and his 2021 presidential run against Yoweri Museveni[385] leveraged his fame for challenging Uganda's long-standing political system. His story has gained international attention, leading to the 2022 documentary Bobi Wine: The People's President, produced by Disney and Hulu[386]. The film earned USD 30,263 in the domestic box office and an additional USD 14,305 internationally, bringing its worldwide box office total to USD 44,568[387]. Despite such a moderate performance, the documentary won two awards. At the Cinema for Peace Awards on 19 February 2024, it was named Political Film of the Year[388], and at the IDA Documentary Awards on 12 December 2023, it won the title of Best Feature Documentary[389]. The involvement of Disney and Hulu in telling Bobi Wine's story reflects how major global media platforms contribute to shaping political discourse. By spotlighting an opposition figure through global media, the documentary becomes a part of the broader narrative about politics in Africa. This illustrates how the media can influence political conversations on both a local and global scale. The impact of these cultural products goes beyond entertainment contributing to the shaping of public perceptions and political awareness.

383 Labinjoh, Justin. Fela Anikulapo-Kuti: Protest Music and Social Processes in Nigeria. Journal of Black Studies, vol. 13, no. 1, 1982, pp. 119–134. JSTOR, URL: http://www.jstor.org/stable/2783979. Accessed 13 Oct. 2024.

384 Simango, John. The Paradox of Freedom and Fear in Athol Fugard's My Children! My Africa! Imbizo, vol. 14, no. 1, 2023, 16 pages. URL: https://doi.org/10.25159/2663-6565/12367

385 BBC. Nigerians React to Global Events in Pidgin. URL: https://www.bbc.com/pidgin/world-55656720

386 National Geographic. Bobi Wine: The People's President. URL: https://films.nationalgeographic.com/bobi-wine-the-people-s-president

387 Box Office Mojo. Bobi Wine: The People's President Box Office Performance. URL: https://www.boxofficemojo.com/title/tt21376900/

388 Deadline. Hillary Clinton, Sharon Stone Support "Navalny" at Cinema for Peace. URL: https://deadline.com/2024/02/hillary-clinton-sharon-stone-cinema-for-peace-navalny-october-7-1235831358/

389 Variety. IDA Documentary Awards 2023: "Bobi Wine: The People's President" Wins Big. URL: https://variety.com/2023/film/news/ida-documentary-awards-winners-bobi-wine-the-peoples-president-1235831567/

The case of Uganda shows that the dependence on foreign media platforms creates unacceptable risks of domestic political destabilisation. That is why any youth-oriented content should be hosted on regulated platforms free from foreign disruptive influences

Creative industries are closely tied to urban environments as cities have traditionally served as centres of innovation and cultural activity. These urban areas concentrate human capital, access to education, infrastructure, and technology, making them platforms for the growth of creative clusters. In cities like Lagos, Nairobi, and Johannesburg, powerful creative hubs have already emerged, influencing not only the local economy but also the international market.

Street art by Dbongz and Senzart911. Johannesburg, South Africa, 2019. Photo by Cale Waddacor

With global exports of creative industries of USD 524 billion in 2020[390] Africa is well positioned to capitalise on this expanding market. The creative services sector, including advertising, market research and digital design, is also experiencing rapid growth. As African governments and international investors continue to support digital infrastructure and creative innovation, the continent's creative industries can play transforming role.

Definition and measurement of creative economy in Africa

Creative industries are based on creative potential and the pursuit of unique cultural products. In international practice they include art, literature, music, cinema, theatre, television, design, advertising, video games, and digital media. The primary driving force of creative industries are intangible values – ideas, innovations, and cultural expression.

In international practice the measurement of creative industries is based on concepts developed by organisations like UNESCO, UNCTAD, and the World Bank. They design methodologies to assess the contribution of these industries to GDPs, employment, and exports. The assessments are based on the data related to employment, revenues from cultural products and their impact on adjacent sectors such as tourism and education.

A crucial aspect of evaluating creative industries is the legal framework that defines their status and establishes support measures at the state level. The UK, for instance, was one of the first in the 1990s to introduce legislative standards to support these sectors, as well as South Korea with its K-pop phenomenon and other creative industries that contribute significantly to the country's economy. Developing creative industries has proven to be highly beneficial for countries like South Korea[391], and this model deserves considering. Several African countries have already introduced government programmes to support creative industries and have enshrined them at the legislative level.

Botswana's recent focus on developing its creative industries comes as the country grapples with high unemployment and seeks to diversify its economy which has traditionally relied on mining.

390 UNCTAD. Creative Economy Outlook 2022. URL: https://unctad.org/publication/creative-economy-outlook-2022

391 South Korea's transformation from an exporter of cars and electronics to a global cultural powerhouse shows how creative industries can drive economic growth. In 2021, South Korea's cultural exports – led by K-pop bands like BTS and global hits like "Squid Game" – generated USD 12.4 billion in export revenue, more than double the USD 4.7 billion earned from consumer electronics. These industries are not resource-dependent; instead, they thrive on human talent and innovation, which are assets that all countries possess. The creative sectors in South Korea also employ over 600,000 people, contributing to sustainable job creation, particularly for younger generations. Furthermore, these industries have bolstered South Korea's global image, attracting tourism, foreign investment, and significantly enhancing the country's soft power. South Korea's success demonstrates how developing nations can leverage their creative industries to diversify their economies and foster both economic growth and cultural influence globally

Recognising the potential of the creative and cultural sectors, the government supported initiatives such as the **13th Annual National Arts Festival**[392], showcasing traditional arts while highlighting their economic potential. As noted by Tumiso Rakgare, Minister of Youth, Gender, Sport, and Culture, Botswana sees creative industries as a dynamic way to promote entrepreneurship, investment, and innovation. The festival, which attracted more than 14,000 artists this year, showcased traditional arts, such as Sebirwa dance, while emphasising the sector's potential to contribute to economic diversification.

13th Annual National Arts Festival in Botswana, 2024

Larger economies as South Africa, Nigeria, and Kenya are able to invest in the long-term development of their creative sectors. These nations have the financial capacity to think long-term and invest in building creative industries that contribute to national growth, whereas smaller economies are still focused on more immediate needs like healthcare and infrastructure. However, there is a divide in how African nations view the role of creative industries which is not determined by the scale of an economy. For many, the focus is on preserving pre-colonial identity and culture, reflecting the broader Afrocentric philosophy. This emphasis on the past ties into cultural reclamation efforts and the need to preserve heritage.

Countries like South Africa are recognising this need, allocating separate budgets for their heritage promotion and preservation and the arts and culture promotion and development. According to its 2024/25 budget[393], significant funds have been allocated to both sectors. For heritage promotion and preservation, the government allocated USD 142 million. In contrast, for arts and culture promotion and development, which is aimed at modern creative industries, the allocation is USD 84 million. These budget lines highlight the country's commitment to both safeguarding its cultural past and investing in the creative economy of the future. By 2026/27 the budget for heritage preservation is expected to rise to USD 153 million while the funding for arts and culture development is projected to increase to USD 74 million.

Through the government's Mzanzi Golden Economy subprogramme, which was launched in 2011[394] as a part of combatting unemployment[395], South African government places a special emphasis on the development of art, cinema, music, and crafts. The programme in 2024 funds 15 projects to enable market access, 9 provincial community arts development programmes, 25 national and provincial flagships, and 65 creative industry projects. In 2024 USD 63 million[396] is allocated to the subprogramme. The funds are used to create 60,390 job opportunities in the cultural and creative sector. Of this allocation, USD 3.65 million is earmarked for placing 1,020 artists in schools over the next three years. The amount awarded is capped at USD 26,316 per grant per beneficiary. By 2019, in a three-year period, the **Festivals and Events Grant Programme** under MGE had supported 153 events across the country creating averagely **1,423 permanent jobs**[397] per annum in the cultural sector.

Contemporary dance festival, funded by Mzanzi Golden Economy

392 Xinhua. China's Cultural Development in 2024. URL: https://english.news.cn/20240715/f136cd2a897d462ab9d1ab18f5959924/c.html

393 National Treasury (South Africa). National Budget 2024. URL: https://www.treasury.gov.za/documents/National%20Budget/2024/ene/FullENE.pdf

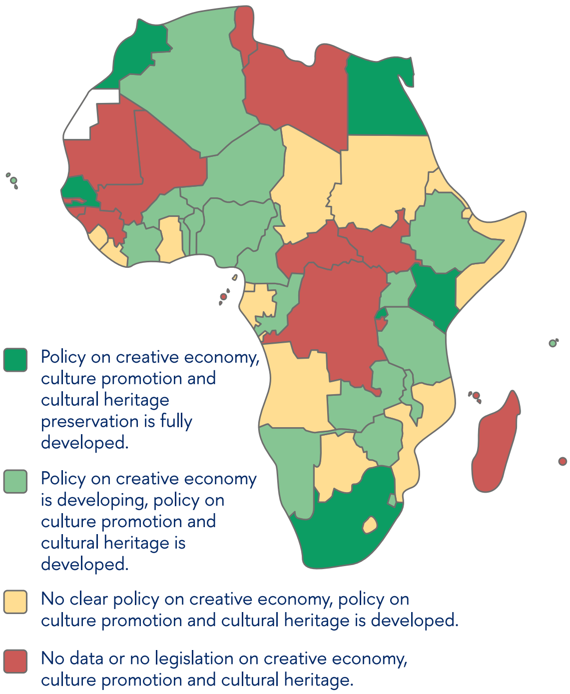
394 Swart, K., Bob, U., Nkambule, S., & Gumede, A. (2018). Economic Impacts of the Touring Ventures Sub-category of the Mzanzi Golden Economy Programme in South Africa. EuroEconomica, vol. 1(37), pp. 90–103. URL: https://ujcontent.uj.ac.za/esploro/outputs/journalArticle/Economic-impacts-of-the-touring-ventures/9910307607691#file-0

395 Department of Sport, Arts and Culture (South Africa). Mzansi Golden Economy Guidelines. URL: https://www.dsac.gov.za/Mzansi%20Golden%20Economy%20Guidelines

396 National Treasury (South Africa). South Africa National Budget 2024.

397 Bob, Urmilla, Kamilla Swart, Rivoni Gounden, Amanda Gumede, and Sizwe Nkambule. (2019). Socio-Economic Impacts of Festivals and Events: A Case Study of the Mzansi Golden Economy Programme in South Africa. GeoJournal of Tourism and Geosites, vol. 27, pp. 1236-1250. DOI: 10.30892/gtg.27410-429

Legislation and cultural policies in Africa, 2024



Source: prepared by the HSE Center for African Studies.

Many African nations either lack formal policies or have only begun to address the creative sector.

A common trend across the continent is the focus on cultural heritage preservation often overshadowing modern creative industries

While some countries prioritise traditional arts and cultures conservation their policies do not yet fully address the potential of emerging digital and contemporary creative sectors.

A key challenge facing the creative industries in developing economies is the sector's informality. For instance, in countries like Zimbabwe, a significant portion of creative industry activity takes place in the informal sector[398]. The ILO-UNESCO report notes that **93%** of creative professionals are freelancers with only **7%** being salaried employees in registered enterprises. Similarly, in the music and film industry, many artists and producers operate outside formal structures, rendering their contributions invisible.

Another issue is the lack of data collection. In most African countries, there are no agencies or programmes to monitor and analyse the creative economy on a country-wide or regional level. This results in fragmented and often inaccurate data regarding the sector's contribution to GDP. In South Africa, for example, one of the continent's most developed economies, official data on the creative industries' contribution to the economy only started being collected in 2015 by the Department of Arts and Culture (DAC), Statistics South Africa (Stats SA), and the South African Cultural Observatory (SACO).

This still does not encompass the full spectrum of cultural production. For example, sectors like informal craft industries, fashion and new media are often overlooked because they lack formal structures. The lack of comprehensive data also extends to rural and community-based cultural activities, which are vital to the creative ecosystem but remain difficult to quantify due to their informal nature.

Column of Rhythm II
by Tadesse Mesfin, 2022

South African Cultural Observatory[399] (SACO), which leads the effort in gathering this data, tracks contributions from sectors such as **television and film production, live performance, heritage institutions and visual and performing arts**. These areas are included because they have clearer economic outputs and more formalised structures, allowing for easier measurement through box office revenues, festival attendance and ticket sales. SACO is a national research and statistical

398 UNESCO and ILO. New ILO-UNESCO Report: Despite Its Potential, Zimbabwe's Creative Economy Remains Largely Informal. URL: https://www.unesco.org/en/articles/new-ilo-unesco-report-despite-its-potential-zimbabwes-creative-economy-remains-largely-informal-and

399 South African Cultural Observatory. South Africa's Cultural Economy. Accessed October 5, 2024. URL: https://www.southafricanculturalobservatory.org.za

initiative launched in 2015 under the auspices of the Department of Sport, Arts, and Culture, which costed USD 3.38 million in the first three years of work[400]. Its primary aim is to develop a comprehensive cultural information system that captures and analyses data related to South Africa's cultural and creative industries (CCIs).

others. Based in Mozambique, OCPA has a mission to monitor cultural trends and national cultural policies across Africa, with the goal of integrating them into broader human development strategies. It focuses on advocacy, information exchange and capacity-building initiatives to support cultural development in the region.

Cultural and creative industries contributed USD 12 billion to South Africa's GDP in 2020

According to the SACO 2022 study[401], the cultural and creative industries contributed USD 12 billion to South Africa's GDP in 2020, accounting for under 3% of the country's total economic output. The largest contributors were design and creative services, valued at USD 3.8 billion, and audiovisual and interactive media, contributing USD 3.7 billion. SACO supports policymaking by providing analysis and data on the economic and social impacts of arts, culture, and heritage sectors. It operates in partnership with Nelson Mandela University, Rhodes University, and the University of KwaZulu-Natal. One of the major outcomes of SACO's work is the establishment of a **cultural information system**, which helps policymakers and industry stakeholders make informed decisions. SACO's efforts have also improved the geographic and sectoral understanding of the creative industries in South Africa, highlighting the concentration of creative economic activity in regions such as Gauteng (46.5% of the sector's economic output) and the Western Cape and KwaZulu-Natal contributing 14% and 17%, respectively[402].

Another key observatory is the **Observatory of Cultural Policies in Africa (OCPA)**[403], which was established in 2002. It operates as an independent Pan-African organisation with support from bodies such as UNESCO, the African Union, and

Digitalisation of creativity

Digital transformation has become a cornerstone for the growth and evolution of Africa's creative industries providing opportunities for artists, musicians, and other content creators to reach international markets. The rise in connectivity has been instrumental in empowering African creators to leverage digital platforms to distribute their work, engage with global audiences, and diversify their revenue streams.

One of the most transformative aspects of digitalisation has been the ability for African musicians to bypass traditional industry bottlenecks by using streaming platforms such as Spotify, Apple Music or YouTube. Iconic African musicians like Burna Boy and Wizkid have utilised these platforms to connect with international audiences. Burna Boy's album Twice as Tall amassed over 100 million streams on Spotify within just a few months of its release[404], while Wizkid's track Essence became the first Nigerian song to chart on the Billboard Hot 100[405] gaining massive traction through digital platforms. Spotify has played a pivotal role in showcasing African musicians with Afrobeats rapidly gaining global traction. One of the standout examples is Rema, a Nigerian artist whose song Calm Down featuring Selena Gomez made history by becoming the first African artist-led track to surpass one billion streams on Spotify.

400 Parliamentary Monitoring Group (PMG). Meeting Overview: National Assembly Committee. URL: https://pmg.org.za/committee-meeting/25421/

401 South African Cultural Observatory. Snapshot of the Cultural and Creative Industries in South Africa. URL: https://www.southafricanculturalobservatory.org.za/article/snapshot-of-the-cultural-and-creative-industries-in-south-africa

402 South African Cultural Observatory. South African CCI Mapping Study: Review of Methods. URL: https://www.southafricanculturalobservatory.org.za/download/comments/1013/6b180037abbebea991d8b1232f8a8ca9/South+African+Cci+Mapping+Study+Review+Of+Methods

403 OCPA (Observatory of Cultural Policies in Africa). Official Website. URL: https://ocpa.irmo.hr/index-en.html

404 Africanews. Burna Boy: The First African Artist with 100 Million Streams from Three Albums. URL: https://www.africanews.com/2021/05/13/burna-boy-the-first-african-artist-with-100-million-streams-from-three-albums-chartdata

405 Essence. Wizkid's "Essence" Reaches Top Ten on Billboard. URL: https://www.essence.com/entertainment/wizkid-essence-top-ten-billboard/

According to Spotify data, Calm Down has garnered the most of its streams from the US, India, Mexico, Brazil, and the UK showcasing the song's global appeal[406]. The official music video has also achieved remarkable success with over 615 million views further demonstrating its ability to resonate with audiences across borders.

In addition, Spotify's 2023 Wrapped data showed that Nigerian music saw a 284%[407] increase in local music consumption. Rema, along with other Afrobeats stars like Asake, continues to dominate the global music charts positioning Afrobeats as one of the most exported genres from Africa. These platforms have not only expanded the reach of African musicians but have also allowed them to directly monetise their work without relying solely on local markets, where copyright systems and licensing structures are often underdeveloped.

Wizkid, photo by Nabil Elderkin

The film and digital media sectors in Africa have also seen a tremendous boost due to digital platforms. Streaming giants like Netflix and Showmax have recognised the untapped potential of African content and invested heavily in local production. This investment is part of a broader trend of digital platforms serving as key drivers of growth in Africa's creative economy by facilitating content distribution and expanding market access. According to PwC[408], Africa's entertainment and media industry is projected to grow by 12% annually, outpacing global averages.

A prime example is Boomplay, a Nigeria-based platform that has become a key player in the Africa's music market. With over 75 million active users[409], Boomplay provides African musicians with an opportunity to enter the global stage, generating streaming revenue and attracting attention of international producers. The case proves that creative industries thrive even in environments where access to resources is limited, and traditions dominate modern forms of expression.

Telecom partnerships provide better network coverage and improved bandwidth in remote areas. Audiomack, a music streaming and discovery platform signed a licensing agreement with Universal Music Group (UMG) in 2022, enabling access to UMG's catalogue for Audiomack users across 16 African countries, including Nigeria, South Africa, Kenya and Ghana[410].

Boomplay is a music streaming platform focusing on African artists. It has become a crucial tool for musicians across the continent. This streaming platform is owned by Transsion Holdings , a Chinese smartphone manufacturer (which also owns TECNO, Infinix and Itel) and NetEase, a major Chinese internet company. This app is pre-installed on millions of smartphones sold by Transsion across the continent. In 2020 African music on the platform grew by 60% underscoring the interest in African culture both on the continent and beyond. Boomplay continues to expand its presence across Africa by forming strategic partnerships with telecom companies, aimed at making its vast music catalogue more accessible to users. By collaborating with telecom providers such as AirtelTigo in Ghana, Boomplay has created affordable subscription models that allow users to access its vast music catalogue through their mobile accounts eliminating the need for credit cards which many people in rural areas lack.

406 Forbes. Rema's "Calm Down" Makes History as First Afrobeats Song to Surpass 1 Billion On-Demand US Streams. URL: https://www.forbes.com/sites/imeekpo/2024/06/21/remas-calm-down-makes-history-as-first-afrobeats-song-to-surpass-1-billion-on-demand-us-streams/

407 Spotify. 2024 Loud & Clear Report. URL: https://loudandclear.byspotify.com

408 PwC. Africa Entertainment and Media Outlook 2023. URL: https://www.pwc.com/ng/en/publications/entertainment-and-media-outlook.html

409 Boomplay Music. Official Website. URL: https://www.boomplay.com

410 Universal Music Group. Audiomack Signs Licensing Agreement with Universal Music Group to Expand Global Footprint in Africa. URL: https://www.universalmusic.com/audiomack-signs-licensing-agreement-with-universal-music-group-to-expand-global-footprint-in-africa/

This expansion aims to help African artists reach broader audiences and strengthen the streaming ecosystem on the continent. Audiomack has more than 20 million monthly users globally and has played a significant role in boosting the reach of rising African stars such as Omah Lay. MTN's partnership with Audiomack in Nigeria is another example of this model, allowing users in remote regions to stream music with minimal data costs, thereby making their entertainment affordable.

Digitalisation has enabled the growth of e-commerce platforms in the fashion and art sectors. African fashion designers, who once relied on physical shopfronts and local markets, can now display their work globally through platforms like Instagram, TikTok and Shopify. The ability to sell directly to consumers has significantly increased the visibility of African fashion on the global stage. For example, African designers have been featured at major fashion shows in Paris, London or New York, largely due to their digital presence.

Between 2013 and 2023, African designers have increasingly gained prominence at Paris Fashion Week showcasing their talents and diversifying the global fashion scene. MaXhosa Africa, David Tlale from South Africa and Christie Brown from Ghana have consistently appeared at these events marking a new era for African fashion. In 2022 nine African designers showcased their collections at the Ethical Fashion Initiative's[411] official presentation, highlighting the craft and creativity of the continent.

Kenyan artists, working with fashion brands, Ethical Fashion Initiative

Fashion brand Hamaji designer Louise Sommerlatte

African designers' participation in Paris Fashion Week

2023
- MaXhosa Africa
- Bloke Nigeria

2022
- 9 designers under Ethical Fashion Initiative

2020
- Jiamini
- Kente Gentlemen

2016
- MaXhosa Africa
- Christie Brown

2013
- David Tlale
- Laurenceairline

Source: prepared by the HSE Center for African Studies.

The impact of digital platforms goes far beyond financial returns providing African creative professionals with unprecedented opportunities to collaborate and reach international audiences. A notable example is the 2020 collaboration between Nigerian designer Kenneth Ize and French fashion house Karl Lagerfeld[412]. Although the collection was developed online due to pandemic restrictions with much of the work carried out remotely, Ize chose to present it through an in-person runway show. This decision emphasised the importance of physical fashion presentations highlighting the need for a balance between digital innovations and real-world experiences in the fashion industry.

The future of Africa's creative industries is closely tied to continuous digital transformation

The African Development Bank (AfDB) has projected[413] that USD 9 billion will be needed annu-

411 Ethical Fashion Initiative. African Fashion Shines at Paris Fashion Week. URL: https://ethicalfashioninitiative.org/stories/african-fashion-shines-at-paris-fashion-week
412 Karl Lagerfeld. Kenneth Ize x Karl Lagerfeld Collection. URL: https://www.karl.com/us-en/karlxkenneth.html
413 African Development Bank. Africa Investment Forum: Closing the Technology Gap Promises Significant Gains for Africa's Creative Industries. URL: https://www.afdb.org/en/news-and-events/africa-investment-forum-closing-technology-gap-promises-significant-gains-africas-creative-industries-55797

ally through 2030 to close the continent's digital infrastructure gap. This investment is needed the most for expanding broadband access, data centres and cloud services, all of which are critical for the growth of Africa's creative sectors.

Despite the rising success of Africa's creative industries African consumers themselves still remain highly loyal to non-African brands

Programmes such as the AfDB's and a Federal Government of Nigeria Investment in Digital and Creative Enterprises[414] (iDICE) launched in 2021 have already begun addressing some of these challenges. Additionally, the programme is projected to add USD 6.4 billion to Nigeria's economy by 2027. The funding breakdown includes USD 170 million from AfDB, USD 116 million from the French government through Agence Française de Développement and USD 70 million from the Islamic Development Bank. The Nigerian government will contribute USD 45 million, while other institutional and private investors are expected to provide the remaining funding through a DICE Fund[415].

Making creative economy work for Africa

The demand for African creative products has surged, with the primary buyers being the African diaspora and global streaming platforms. Intra-African trade in creative industries is growing, although it remains limited compared to global trade.

A report on brand preferences[416] highlights that only 14% of the top brands in Africa are of African origin with companies from the US, Europe and Asia dominating the market. This loyalty to foreign brands often overshadows the growth of local industries, including the creative sector.

The surge in demand for African creative content internationally contrasts with the fact that African narratives and cultural products are still largely influenced by external agendas. Western and Asian media, global brands and international platforms continue to shape the African story, a phenomenon that underscores the importance of creative sovereignty. By building and nurturing local brands and industries, Africa can better retain the economic and cultural benefits of its own creative outputs.

Strengthening creative sovereignty ensures that African cultural products not only reach global markets but also serve as a driving force for economic growth within the continent itself.

414 African Development Bank. Nigeria Digital and Creative Industries Project. URL: https://mapafrica.afdb.org/en/projects/46002-P-NG-K00-009

415 African Development Bank. African Development Bank and Partners Invest $618 Million in Nigeria's Digital and Creative Industries. URL: https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-and-partners-invest-618-million-nigerias-digital-and-creative-industries-59766

416 African Business. African Consumers Remain Loyal to Non-African Brands. URL: https://african.business/2024/06/dossier/african-consumers-remain-loyal-to-non-african-brands

African businesses – the emerging regional and global players

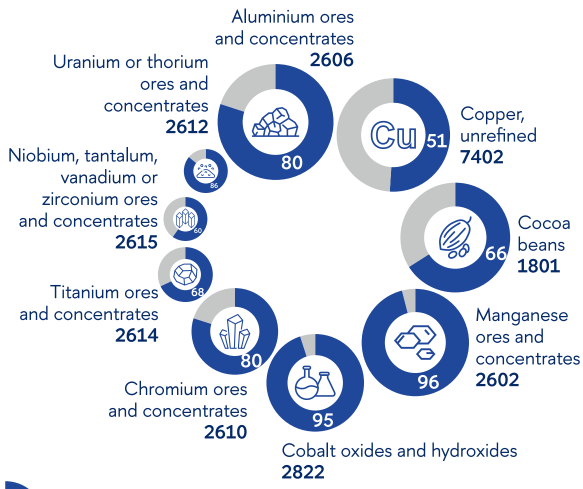
African business: prospects and challenges

Africa's future imprint in the global economy will largely be determined by its ability to localise, if partially, industrial production and place its resources in service to its own markets. As of today, there are only individual success stories, such as Botswana, a country that has localised the processing of De Beers diamonds to create an entirely new industry. However, scaling these successes across the vast geographies of the continent remains challenging, and this is not only because of the opposition from the dominant multinational corporations (MNCs) and foreign investors. At the same time, government policy measures, some of which were explored in previous chapters, will hardly be sufficient on their own.

African businesses have the potential to emerge as the key driver of localisation and sub-regionalisation in Africa

As well as the development of domestic markets, especially when they enjoy the support from African governments through regulatory measures. Integration in the global value chains, while still an important indicator, cannot be the primary measure of success for economies. Moreover, at the current model of globalisation, as demonstrated earlier with the cases of the energy and food sectors, contributes to the formation of isolated industries that are export-oriented and disconnected from the mechanics of the national economy.

Markets where the role of African exporters is most prominent, 2023

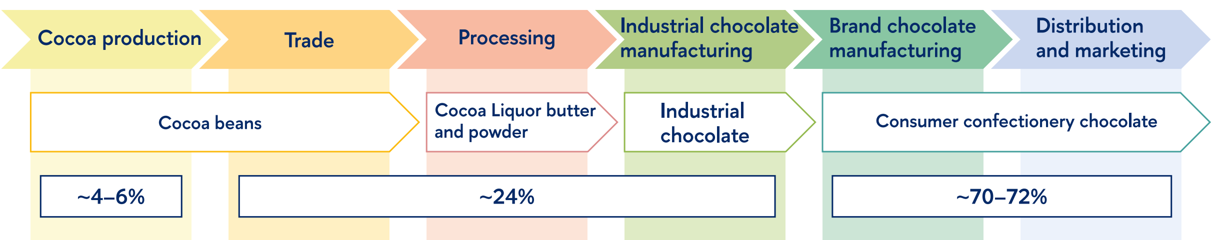


1001 HS code

Commodity categories with exports exceeding USD 1 bilion and representing more than 50% of the global market were considered.

Source: prepared by the HSE Center for African Studies based on ITC Trade Map data.

Distribution of value in cocoa-chocolate production chain



Source: prepared by the HSE Center for African Studies based on Abdulsamad A. et al. 2015. Pro-Poor Development and Power. Asymmetries in Global Value Chains Ajmal Abdulsamad. Technical Report.

African companies are gradually integrating into global value chains. The World Bank[417] suggests the most successful integration has been in the production of food products (e.g. cocoa and coffee), clothing (associated with the gradual relocation of the textile industry from Asia) and automotive components (associated with global car manufacturers setting up plants in Northern and Southern Africa). However, this integration has largely been marginal given Africa's relatively low level of participation in global value chains with an average of 8% of GDP. Besides, these 8% boil down most often to Africa being a source of raw materials (hydrocarbons and other minerals). By contrast, the continent's share in global trade of intermediate goods is only 3%. Additionally, production centres in Africa are highly specialised and excessively dependent on the fluctuations of external markets.

Africa's integration in the value chains mostly ends at the beginning of these chains, with the supplier role, a process essentially driven by the growing demand from advanced economies for the raw materials needed to power their technologies. The discourse of critical resources and their accessibility has placed quite a spotlight on Africa's role in 'fuelling' their development with its cobalt reserves (55% of the world's deposits), manganese (35%), graphite (24%), nickel (5.6%) or lithium (around 5%), PGMs (90%) and chromium (36%)[418]. Given that prospecting and exploration activities in Africa has seen a 38% increase in the past seven years and that the trend will likely continue, these proportions will shift even more in Africa's favour[419].

African business is set to play a greater role in tapping into the potential of this expanding market. In some countries, there has been a drive to reduce the reliance on foreign investors, replacing it with locally driven efforts to explore and develop the critical resources. For instance, South Africa's African Rainbow Minerals that operates in the country's Northern Cape with minimal foreign ownership and management has been able to produce some 116,000 tonnes of ferromanganese annually. A success story for the national economy and a top 10 producer on a global scale, the company expanded its footprint with its participation in a joint venture to develop manganese in Malaysia, where it is a major shareholder (with a 54% stake, while another 27% is owned by Japan's Sumitomo Corp., and 19% by China Steel Corp.)[420].

Another factor is the rising global demand for "daily" crops, such as coffee or cacao, which Africa can produce with its comparative advantages and economic efficiencies. Africa's unique climate as well as the continent's emerging (and therefore relatively cheap) labour markets add to the competitiveness of African produce. Among coffee connoisseurs, African varieties are well-known for a balance of acidity and a rich flavour palette, while cacao from the continent's top producers, Côte d'Ivoire, Ghana, Nigeria and Cameroon, has dominated the world's markets for years. In 2023, cacao exports from Africa stood at USD 10.9 billion, or 41% of the global figure. Back in 2002, this proportion was closer to 47%, but the market has grown 3.7 times since then, despite dollar inflation and the crises that affected the local producers[421].

417 World Bank. World Development Report 2020: Trading for Development in the Age of Global Value Chains. URL: https://www.worldbank.org/en/publication/wdr2020
418 U.S. Geological Survey. Mineral Commodity Summaries 2024. URL: https://doi.org/10.3133/mcs2024
419 African Mining. The future of mineral exploration – contributions from Africa. URL: https://www.africanmining.co.za/2024/08/26/the-future-of-mineral-exploration-contributions-from-africa/
420 ARM. ARM Ferrous. URL: https://arm.co.za/arm-ferrous/
421 UNCTAD. TradeMatrix. URL: https://unctadstat.unctad.org/datacentre/dataviewer/US.TradeMatrix.

The largest players on the national market remain foreign, though. America's SACO, France's CEMOI-CI and Switzerland's Barry Callebaut are the dominant forces in Côte d'Ivoire's cocoa market. While their procurement mostly comes from local farmers, Ivorian businesses are largely excluded from the field, and the farmers receive a mere 4-6% of the final product's value[422]. This has arguably exacerbated the harvest crisis of 2024 for most of the farmers, who now have less produce to sell at more volatile prices that fail to reflect the full value[423].

No local company, aside from the few local craft producers of chocolate, has been engaged in processing the beans or producing industrial chocolate for export (these activities account for 24% of the final product's value), nor has a potential to market its produce as a global brand (some 70% of the value!)[424]. Besides, no African nation tops the list of the world's largest producers of cocoa powder (these are the Netherlands, Malaysia, Germany, Indonesia and Spain), even though the raw base could often be of African origin[425].

Still, the share of non-African businesses in the GDP of African countries is somewhat declining, and African companies have acquired more visibility in recent years, especially on domestic consumer markets.

Banking and finance, telecom, construction, transport, food and beverages, oil products trading and retail markets are booming with local businesses leading the way

This achievement was made possible through a combination of government support measures for local producers and companies' consistent investment policy. In Nigeria, more than 60% of the cement market is now controlled by the Nigerian company **Dangote Cement**[426]. In Tanzania, more than 60% of the local LPG market is now taken over by local companies (**Taifa**, **Manjis**, **Oilcom**, **Lake Gas** and others)[427] investing in regional transport, storage and distribution infrastructure.

In Algeria, two state majority-owned companies (**Mobilis**[428] and **Djezzy**[429]) managed to consolidate more than 70% of the local telecom market. In the meantime, the share of African air carriers on intercontinental routes increased from 30%[430] in 2019 to 40%[431] in 2023.

Corporate landscape is evolving not only on the level of consumer markets but also among big players. Research[432] conducted by the authors indicates that there are – at least – 206 companies with main operations in Africa whose capitalisation exceeds USD 1 billion. They represent 31 countries. 36,4% of these companies are South African, 12,6% Egyptian, 7,8% Moroccan, 4,9% each operate in Nigeria and Algeria, 4,4% are Tunisian, 2,9% each are Ghanaian, and 2,4% each are Kenyan and Senegalian. The other 22 countries take up the remaining 21,4%.

422 ResearchGate. Pro-Poor Development and Power Asymmetries in Global Value Chains. URL: https://www.researchgate.net/publication/308606263_Pro-Poor_Development_and_Power_Asymmetries_in_Global_Value_Chains

423 Al Jazeera Media Network. Chocolate prices to keep rising as West Africa's cocoa crisis deepens. URL: https://www.aljazeera.com/gallery/2024/3/30/chocolate-prices-to-keep-rising-as-west-africas-cocoa-crisis-deepens

424 ResearchGate. Pro-Poor Development and Power Asymmetries in Global Value Chains. URL: https://www.researchgate.net/publication/308606263_Pro-Poor_Development_and_Power_Asymmetries_in_Global_Value_Chains

425 WITS. Cocoa paste, not defatted exports by country in 2022. URL: https://wits.worldbank.org/trade/comtrade/en/country/ALL/year/2022/tradeflow/Exports/partner/WLD/product/180310

426 Dangote Cement Plc. "The Dangote Way" Operational Pillar. URL: https://cement.dangote.com/wp-content/uploads/2021/04/Operational-Pillar.pdf

427 Energy and Water Utilities Regulatory Authority. The Mid and Downstream Petroleum Subsector Performance Review Report for the Year 2022/23. URL: https://www.ewura.go.tz/wp-content/uploads/2024/06/PetroleumReport.pdf

428 Energy and Water Utilities Regulatory Authority. The Mid and Downstream Petroleum Subsector Performance Review Report for the Year 2022/23. URL: https://www.ewura.go.tz/wp-content/uploads/2024/06/PetroleumReport.pdf

429 Ecofin Agency. Algeria's Djezzy Revenue Surges 9.4% in H1 2024 Amid Continued Growth. URL: https://www.ecofinagency.com/telecom/2308-45802-algeria-s-djezzy-revenue-surges-9-4-in-h1-2024-amid-continued-growth

430 CAPA. Africa Aviation Outlook 2020: Performance lags, pending integration. URL: https://centreforaviation.com/analysis/airline-leader/africa-aviation-outlook-2020-performance-lags-pending-integration-504774

431 African Airline Association. African airlines' performance updates by AFRAA for June 2024. URL: https://www.afraa.org/african-airlines-performance-updates-by-afraa-for-june-2024/

432 Compiled by the authors based on calculations from open sources, including Jeune Afrique's 500 champions africains.

Africa's share in the global aviation market is about 2% – a figure that has remained mostly static for the past 20 years. However, a reverse trend seems to be emerging. Three major national airlines operate on the continent: **Ethiopian Airlines**, **Kenya Airways** and **South African Airways**. These regional leaders have global ambitions as Ethiopian Airlines may well be on track to increase passenger numbers by 30% and revenue by 20% by 2024. Meanwhile, Kenya Airways posted a profit for the first time in seven years, reflecting positive momentum and increased demand for air travel on its routes. In March, the airline announced additional flights to New York and Paris, as well as new routes to Accra, Freetown and Lagos, which showcases the company's leadership aspirations both in Africa and beyond. South African Airways is recovering, as it has resumed some of its intercontinental routes, such as the direct air link from Johannesburg to Perth in Western Australia[433].

Smaller African airlines, such as Nigeria's **Air Peace**, are also expanding. In March 2023, Air Peace launched a connection between Lagos and London, one of the first new intercontinental routes operated by a Nigerian airline in decades. Increased demand for air travel to West Africa – destinations like Ghana, Senegal, Côte d'Ivoire and Nigeria – has local impact, too.

The trend for business expansion in the airline industry is not limited to South Africa, Ethiopia, Kenya and Nigeria. Other countries across the continent are following suit. **EgyptAir**, Libya's **Afriqiyah Airways** and **Air Mauritius** have all placed orders for Airbus A350 aircraft, suitable for competing on long intercontinental routes. In 2023, **Air Côte d'Ivoire** launched its first non-stop flight to the United States. The airline has also introduced several long-haul flights, including a ten-hour route to Johannesburg[434]. Meanwhile, Ghana's Civil Aviation Authority (GCAA) plans to issue an operator's license to **GhanaAirlines**, marking the start of a new airline in West Africa.

The trend towards the development of regional aviation hubs, which has so far been most noticeable in Eastern Africa, where the past decade was marked by investments in the expansion of airports in Addis Ababa, Dar es Salaam, Kampala, Kigali, etc. and significant support of flag carriers such as **Rwanda Air** and **Uganda Airlines**, is likely to spread to other regions (primarily Western Africa) in this decade. The development of regional airways is important not only as a driver of airline business development in Africa, but also for the formation of subregional markets (getting from Lagos to Dakar, for example, should be easier than getting from Lagos or Dakar to Paris).

Some 30% of these companies are subsidiaries of foreign (mostly, Western) transnationals or have major foreign shareholders. Most such companies are located in Southern Africa (28%) as well as in Western (25%) and Northern (24%) Africa.

Some 44% of all these companies are state-owned or operated with a strong government involvement.

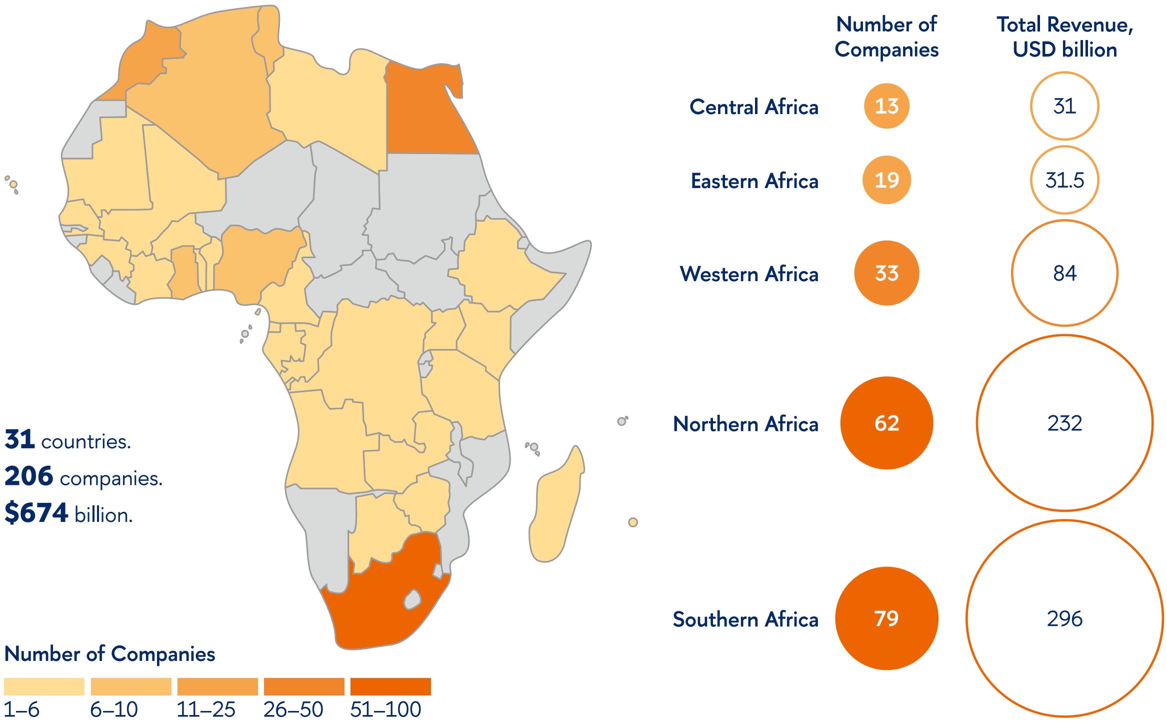
Most of these companies are in energy (38%) and mining (15%), as well as telecommunications, utilities and manufacturing (7,58% each).

38% of all these companies are located in the countries of Southern Africa, while 30,1% are from Northern Africa, 16% are from Western Africa, with Eastern and Central Africa taking up 9,2% and 6,3% respectively.

433 African Business. Takeoff! Africa's airlines show signs of revival but turbulence ahead. URL: https://african.business/2024/07/trade-investment/takeoff-africas-airlines-show-signs-of-revival-but-turbulence-ahead

434 The Business Year. West African Air Travel in 2024. URL: https://thebusinessyear.com/article/west-african-air-travel-in-2024/

African companies with annual revenue over USD 1 billion: sub-regions and countries



The compilation excludes companies in the banking sector as well as branches or subsidiaries of transnational corporations. Data for revenue is an aggregated estimation which does not represent any particular year.

Source: prepared by the HSE Center for African Studies based on open sources.

Most of the combined turnover of these companies comes from South African companies (42,6%), followed by Algerian companies (14%), Egyptian and Nigerian companies (10,4% and 7,1% respectively), Moroccan companies (4,9%).

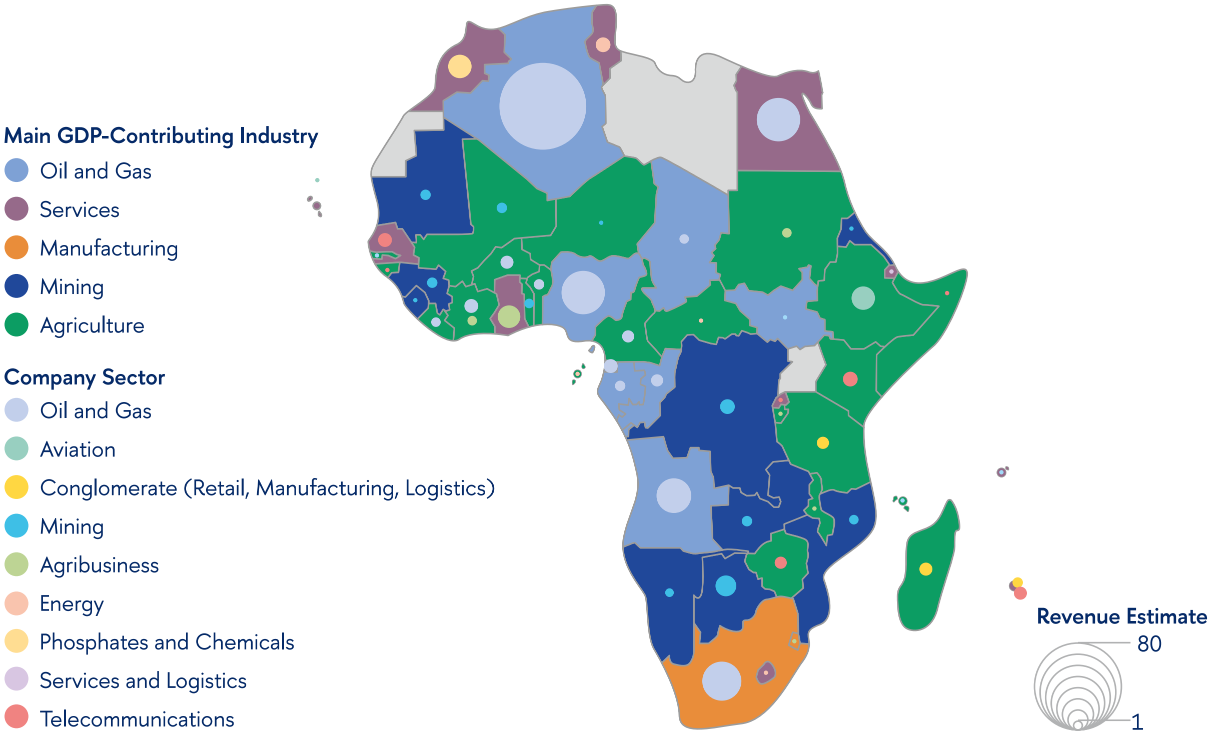
Average company revenue is highest in the countries of Southern and Northern Africa where it is estimated to be around USD 3.7 billion, followed by the countries of Western Africa (USD 2.55 billion) and Central Africa (USD 2.4 billion). The latter is due to the discrepancy between companies from Angola and companies from the other countries of the subregion. An average for Eastern African companies stands at USD 1.65 billion.

Traditional sectors dominate the list, comprising of the oil and gas sector (with an almost equal geographical distribution of companies across Northern, Central and Western Africa and only a marginal presence in Southern Africa), followed by mining houses (half of companies are based in Southern Africa) and telecommunications (most companies are located in the countries of Western and Southern Africa). Others are retailers and conglomerates. Conglomerates combine different sectors (e.g. agriculture and industry, automotive and real estate, food processing and retail, retail and logistics etc.).

A more robust role of African businesses and banking groups is complemented by gradual changes in Africa's corporate landscape. On one hand, the enactment of more stringent regulatory, tax and technical oversight is helping to reduce operating margins in certain subregions as it is becoming increasingly difficult for foreign companies to bypass these requirements. In practice, this could lead to instances such as the nationalisation of Orano's assets in Niger[435]

435 Orano. Update on the situation of the Imouraren mining project. URL: https://www.orano.group/en/news/news-group/2024/june/update-on-the-situation-of-the-imouraren-mining-project-in-niger

African companies with annual revenue over USD 1 billion by sector



The compilation excludes companies in the banking sector as well as branches or subsidiaries of transnational corporations. Data for revenue is an aggregated estimation which does not represent any particular year.

Source: prepared by the HSE Center for African Studies based on open sources.

or Shell's exit from onshore operations in Nigeria[436], to give a few examples from a Western Africa context. On the other hand, amidst global shifts, transnational corporations (TNCs) and foreign investors are likely to shift focus to their own jurisdictions. Consequently, African businesses will be there to "fill the void", and they are expected to play an increasingly systemic role in both the economies and politics of African countries.

One example is the withdrawal of the French Société Générale bank from African markets, which began in 2023 when Société Générale announced the sale of its subsidiaries in the Republic of Congo and Equatorial Guinea to the pan-African bank **Vista** (whose parent company, Lilium Capital is owned by Simon Tiemtoré, a Burkinabe entrepreneur), and the sale of its subsidiaries in Mauritania and Chad to the pan-African **Coris Bank** (fully owned by the family of its founder Idrissa Nassa ALSO from Burkina Faso)[437]. In 2024, the French bank went on to announce the sale of its Moroccan subsidiary, Société Générale Maroc, to the Moroccan company **Saham**, owned by local entrepreneur Moulay Hafid Elalamy, for USD 811 million[438].

436 Reuters. Nigeria rejects Shell's $1.3 billion oil asset sale. URL: https://www.reuters.com/markets/deals/nigeria-rejects-shells-13-billion-oil-asset-sale-thisday-reports-2024-10-16/#:~:text=Shell%20on%20Jan.%2016%20announced,more%20lucrative%20deep%20offshore%20fields.

437 Économie.Les banques françaises se replient du continent africain. URL: https://www.lefigaro.fr/flash-eco/societe-generale-annonce-ceder-ses-filiales-au-congo-guinee-equatoriale-mauritanie-et-tchad-20230608

438 Challenges. Pourquoi la Société générale se désengage du continent africain URL: https://www.challenges.fr/economie/pourquoi-la-societe-generale-se-desengage-du-continent-africain_892271

African business is changing, and the role it plays is evolving. Most commonly, literature[439] attributes this to "improved economic reforms and political governance" as the necessary precursor to this "major transformation". This narrative is quite popular in the Western line of thinking, and for good reason. However, this is a narrative that believes that European experience could just as well be relevant in a radically different social environment. When praising "the wave of economic liberalisation" in Africa, it typically underscores opportunities for international firms to grow, which also prompts the question: does this transformation provide more opportunities for local business to have greater impact on the national economy, or does it mostly favour non-African MNCs, offering them an easy framework to navigate in?

Another aspect is that this narrative leaves no room for the inherent competitive advantages of African businesses: namely, the ability to operate and thrive in uncertain environments, which MNCs tend to avoid unless they have a risk-sharing agreement with a local partner.

To illustrate the point, the evolution of the cashew processing industry in Mozambique is quite relevant. This has been a traditional sector in the country, and the government encouraged domestic processing by imposing export bans and high export taxes from 1987 to 1995. In the 1990s, the World Bank demanded the liberalisation of the cashew sector as a condition for loans, urging the end of industry protection and rather focusing on raw cashew exports. The World Bank argued that Mozambique's processing industry was unsustainable and that exporting raw cashews for processing elsewhere would be more efficient[440]. Before this intervention, Mozambique processed around 50,000 tonnes of cashews annually, but the figures dropped to a mere 8,000 tonnes and unable to compete internationally, major processing plants had to be closed. By 1999, Mozambique reintroduced protective measures, including an export tax on raw cashews. In 2023, a new law increased the tax from 18% to 22%[441]. By the 2020s processing capacities achieved 60,000 tonnes annually. **Condor Anacardium**[442] is just one of the local companies that benefited from a change in policy. Commencing cashew processing in 2004, the company sources raw material from 50,000 individual farmers. Annual exports of around 5,000 tonnes arguably make the company a Local African Exporter (LAE, see below).

In cases, such as with **South African Breweries (SAB)**, knowing how to leverage uncertainty could be a game-changer. The company was founded in 1895, but it achieved local success at the height of international sanctions pressure against the apartheid, although that naturally restricted the company's scope of operations. By the time the multinational AB InBev acquired SAB in 2016 for USD 107 billion, it was the world's second largest brewery by revenue with a truly global presence in some 80 markets. The company's expansion drive was mostly focused on country with a business environment resembling South Africa, where informal networking and uncertainty are two dominant factors. This was SAB's essential competitive edge in other parts of Africa, Eastern Europe, Southeast Asia and Latin America. Achieving success in these markets helped the company gain enough experience to establish its presence in the US in 2002 through an M&A with Miller Brewing Company, which led to a re-branding to SABMiller. Even after that, the company has retained its unique business model with a specific focus on developing markets.[443]

439 UCT Graduate School of Business. Political Economy of Doing Business in Africa. URL: https://globalnetwork.io/sites/default/files/2020-11/Cape%20Town_0.pdf
440 TechnoServe. The Mozambican cashew industry. URL: https://www.technoserve.org/mozambique/the-mozambican-cashew-industry/
441 AIM. New Cashew Law Reverses World Bank's Destructive Policies. URL: https://aimnews.org/2023/05/05/new-cashew-law-reverses-world-banks-destructive-policies/
442 Condor Anacardium. URL: https://condoranacardium.com/pt/
443 Wiley. Institutional Complementarity and Substitution as an Internationalization Strategy: The Emergence of an African Multinational Giant. URL: https://doi.org/10.1002/gsj.1143

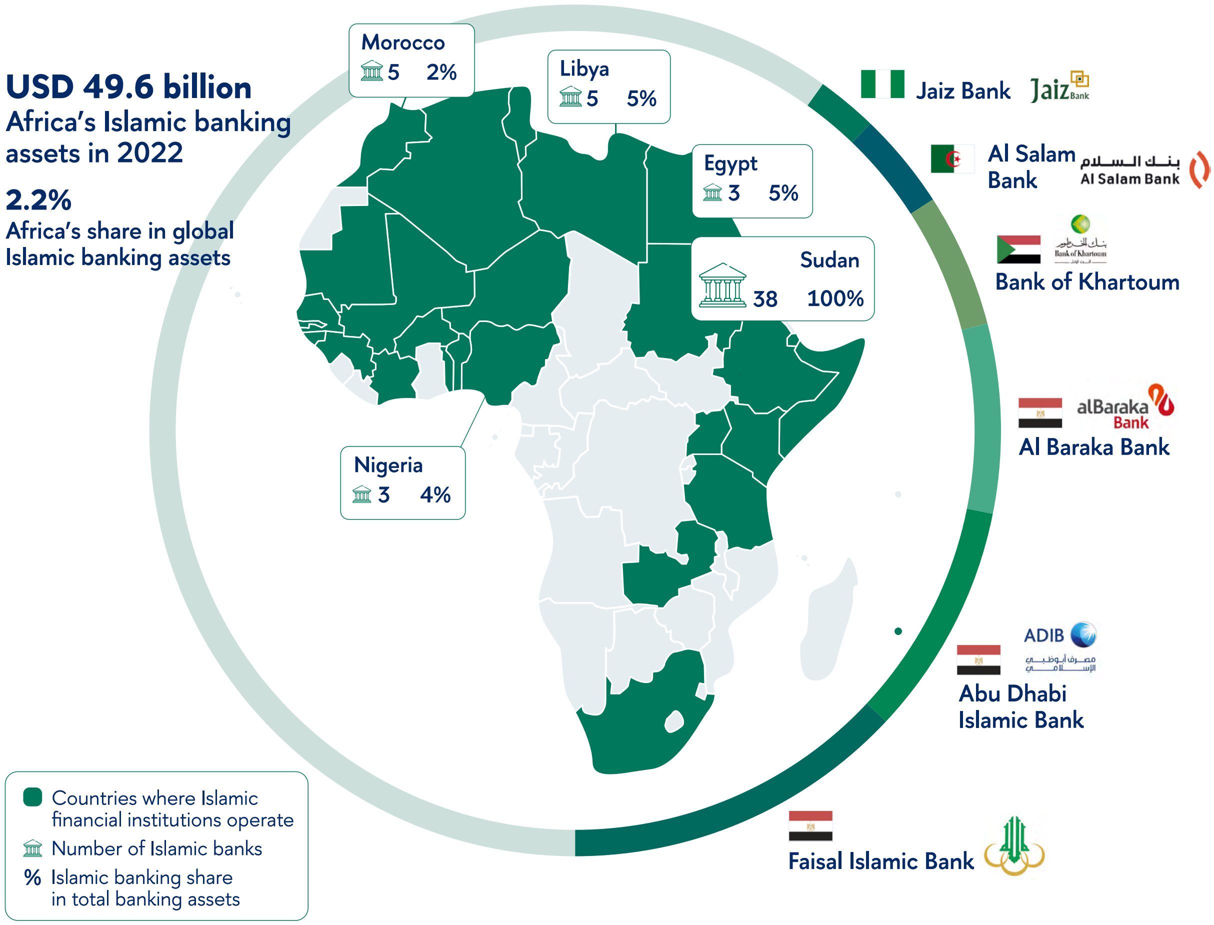
Moreover, local firms easily take advantage of opportunities in the informal sector, which remains an integral (and even growing) part of most African economies.

Where foreign business fails to find rationality, local businesses build on kinship and informal networks to deliver the result

These are all unique perspectives that may be relevant even beyond the African context, especially on other developing markets where business uncertainty is the norm[444].

Furthermore, the narrative discounts the fact that many African nations now have stronger and more integrated national economies with a focus on growing local capabilities and certain restrictions on FDI. Ghana could be a notable example, as the country both reinforced its national economy, providing more space for local businesses to grow, and retained a reputation as one of Africa's top investment destinations. Ghana's investment code prohibits foreign investors from such sectors as petty trading, taxi services with fewer than 25 vehicles, lotteries, beauty

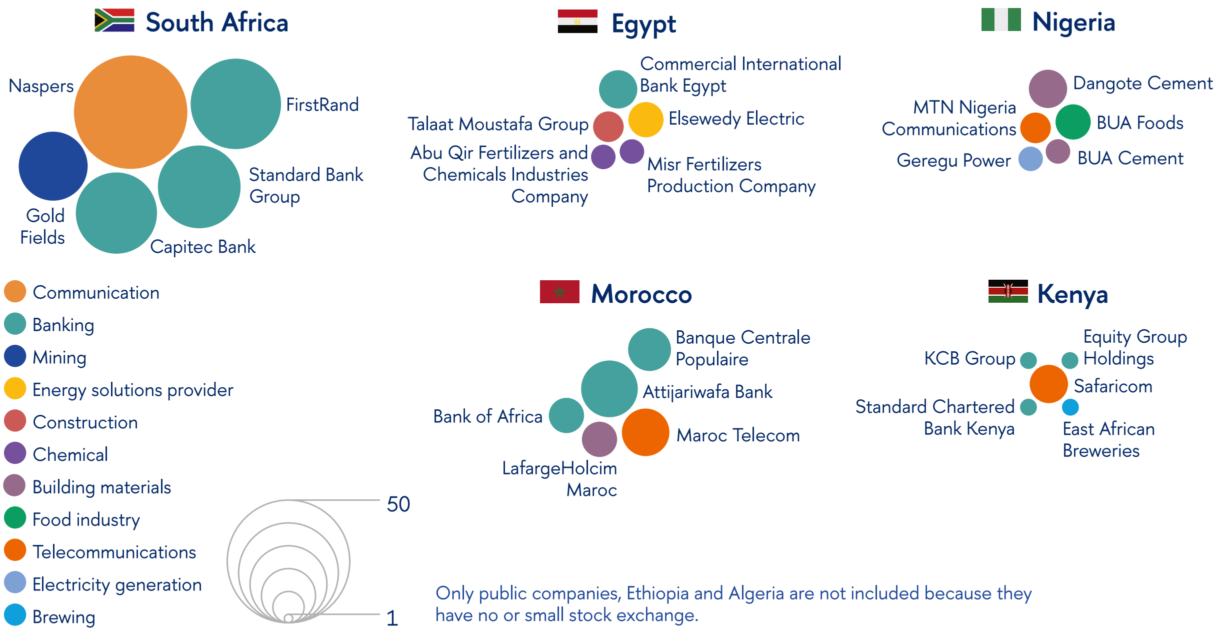
Islamic banking in Africa



Source: prepared by the HSE Center for African Studies based on SESRIC, IFSB and TABInsights data.

444 Thunderbird Int. Bus. Rev. The internationalization of African firms: Opportunities, challenges, and risks. URL: https://doi.org/10.1002/tie.21977

Top 5 companies by market capitalisation in top 5 countries by GDP



Source: prepared by the HSE Center for African Studies based on calculations from open sources, including Simply Wall Street.

salons, scratch card printing for telecommunications, office stationery (i.e. notebooks), retail of pharmaceutical products and the production and sale of bottled water in sealed packages. In addition, the code limits FDI in sectors like telecommunications, banking, fishing, mining, oil and real estate. For instance, the Ghanaian government receives a 10% equity stake in all extractive licenses in the mining industry through 'free carried interest', requiring no financial contribution from the state. The minister of mines can also demand the issuance of 'special shares' for the president, granting the right to attend and speak at shareholder meetings without voting or profit-sharing privileges[445]. These measures aim to maintain some control over foreign-driven business operations. Besides, the nation utilises its well-developed network of internal trade, supported by a relatively advanced infrastructure. The ports of Takoradi and Tema play a crucial role in facilitating trade with the neighbouring landlocked countries of Burkina Faso, Mali and Niger. Ghana's livestock trade, with the dominant presence of small- and medium-sized companies like Otuo Farms Ltd., fosters connectivity between the northern, eastern and southern regions, as well as with the country's immediate neighbours.

The role of African businesses, some of which demonstrate the ability to combine the best corporate practices with the more context-specific traditional informal practices, will have greater impact on African economies.

What is an African business?

African businesses (AB) are a diverse landscape. Companies with African roots could be arguably grouped into five categories depending on their ownership, market reach, operational scope and other criteria[446]:

1. Local African Businesses (LABs) are companies that operate locally, within a single African country or even within one of its regions. Their consumers are local, and such companies do not

445 UNCTAD. Act 865 Ghana Investment Promotion Centre Act. URL: https://investmentpolicy.unctad.org/investment-laws/laws/196/ghana-investment-promotion-act-
446 Methodology is based on Deloitte. Latin America Rising". URL: https://www2.deloitte.com/tw/en/pages/strategy/articles/latin-america-rising.html

really have any partners from abroad and do not export their goods and services to other markets. Such companies do not have a well-elaborated business strategy, and they rely heavily on the informal sector, taking advantage of the local 'rules of the game'. These are insignificant taxpayers for the government, although LABs represent the greatest number of businesses on the continent. **MTI Corp.**, a distributor operating in Egypt, is just one example. With no foreign ownership and public trading on the Egyptian Exchange, the company's business model allows it to cover 90% of the national territory through 40,000 retail outlets[447].

2. Local African Exporters (LAEs) are companies that derive most of their revenue from exports (either within or beyond Africa), although their production capacities and business thinking are still local. Quite often, such companies could be integrated into global markets through trading intermediaries or with a certain support from government structures, formally or informally. In most cases, such companies are especially present in industries that first became a country's traditional basis of export during the colonial era. This is why some of these companies could be quite significant taxpayers for the government and build on its support. **Condor Anacardium** is a Mozambican company with a processing capacity of 5,000 tonnes of cashew nuts annually, the majority of which are exported. The exact export routes are not well-documented, but the traditional routes will presumably include the United States, Portugal and South Africa[448].

3. Multi-African Businesses (MABs) are companies that could ramp up their operations beyond their home country, spanning trans-border or subregional markets. Such companies are more "visible" on the list of the country's companies, and their source of revenue is distributed between home country and other markets. However, these companies do not have any presence beyond Africa. The retailer **Prosuma Group**, which is based in Cote-d'Ivoire with no foreign ownership, has operations in a number of French-speaking countries of the subregion, including Benin, Burkina Faso, the Republic of Congo, Gabon, Guinea, Mali, the DRC, Cameroon, Niger, Senegal and Togo[449].

4. Multi-African Exporters (MAEs) are companies that combine the most important features of MABs and LAEs. While their consumer base could be mostly outside of Africa, the operational core (i.e. production, labour force) would be distributed between the home country and other African markets. Quite often, these markets will be countries that are part of the same subregional integration or have a similar structure of the economy. Some MAEs could be state-owned. One example is **Marine Biotechnology Products**, a private Mauritian company that produces fishmeal and fish oils from by-products. The company's production facilities are located in Mauritius and in Cote-d'Ivoire, while the products are exported to geographies as different as the United States, Russia, South Africa and the EU[450].

5. International African Businesses (IABs) are companies that have been the most successful in socialisation, transnationalisation and internationalisation (see below for definitions). Most of their revenue is generated outside of Africa, which is why such companies have a broad network of international partners, and they are also often systemic players for the national economy. Some IABs dominate the field in their subregion or even across the whole continent. IABs could be both state-owned and private. **OCP Group**, a Moroccan 95% state-controlled phosphate mining and fertiliser company, falls into this group. Operating in 16 geographies, primarily in Western and Eastern Africa, the company has also established a solid presence in the U.S., China, Brazil, India, Singapore and some European countries[451].

447 MTI. Who we are. URL: https://mti-mmgroup.com/who-we-are/#2

448 Condor Anacardium. URL: https://condoranacardium.com/pt/

449 Prosuma. URL: https://groupeprosuma.com/

450 Marine Biotechnology Products. Home. URL: https://mbp.mu/

451 OCP. OCP Integrated report 2023. URL: https://ocpsiteprodsa.blob.core.windows.net/media/2024-04/Rapport%20Financier%20Annuel%202023.pdf

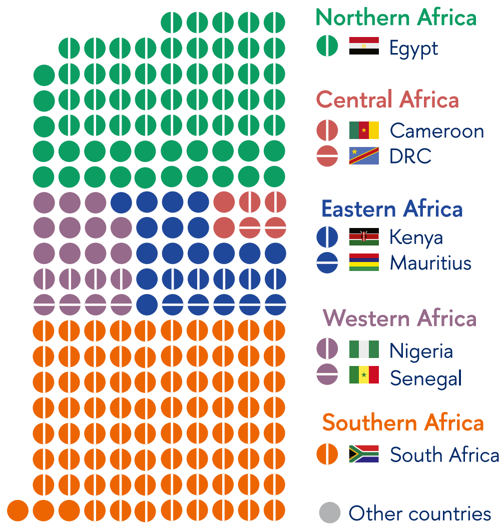
Another IAB is **Oceana Group**, a South African fishing company with only 10% of foreign ownership. Conducting operations in Southern Africa and the U.S., the company's strategy focuses on markets in Southern and Central Africa (52% of revenue) as well as in Europe (17%) and Northern America (15%)[452]. The state-owned **Ethiopian Airlines** is another example. The company operates secondary hubs in Togo and Malawi, offering flights (i.e. exporting services) to 90+ countries across all continents except for Australia and Antarctica[453].

Although businesses in Africa share many operational features with companies in other developing markets, they arguably have several characteristics that make them quite distinct.

African business operates on a model that maximises the advantages of the formal and informal sectors of the economy. The role of the informal sector cannot be disregarded when it comes to doing business in Africa as the sector accounts for 85% of all employment opportunities[454], contributing to an estimated average of 62% GDP in countries of Sub-Saharan Africa[455].

Seen from a traditional perspective, the informal sector has a number of drawbacks, such as no legal protection for workers formalised through labour laws in the form of minimum wage, paid leave, health insurance or pension contributions. For governments, there could be challenges with collecting tax in the informal sector as well as with reflecting the sector's role in the national GDP. Still, 85% of Africans highly depend on the informal sector since it is the most common entry point into the labour market for many. In most countries on the continent, the formal economy is not large or fast-growing enough to provide sufficient jobs. However, there is also a specific social dimension to the businesses in the informal sector of economies.

African companies with annual revenue around USD 1 billion by region



Source: prepared by the HSE Center for African Studies based on open sources.

Like in many other African countries, Kenya's informal sector is dominated by micro-enterprises working across various market segments (typically wholesale and/or retail trade in local markets). The average lifespan of such businesses is estimated around seven years, and they are commonly the sole source of income for both owners and employees. Some 55% of these micro-enterprises are owned by women, and another 54% are run by young people, which are the two social groups that face the greatest difficulty finding employment in the formal sector (to illustrate the point: an estimated 67% of people under the age of 35 are officially unemployed in Kenya, whereas the overall unemployment rate in the country stands at 12.7%)[456].

At the same time, not only private companies, but also large state players are increasingly working with the informal sector. For example, instruments to integrate the informal sector are being actively introduced in the mining sector: initiatives to buy

452 Oceana Group. Oceana Group Integrated report 2023. URL: https://www.oceana.co.za/_files/ugd/4b88cd_c3200311340743d4ae03438b1ea67190.pdf
453 Ethiopian Airlines. Ethiopian Airlines International Destinations URL: https://www.ethiopianairlines.com/ru/book/%D1%81%D0%B5%D1%82%D1%8C-%D0%BC%D0%B0%D1%80%D1%88%D1%80%D1%83%D1%82%D0%BE%D0%B2/international
454 ILO. More than 60 per cent of the world's employed population are in the informal economy. URL: https://www.ilo.org/resource/news/more-60-cent-worlds-employed-population-are-informal-economy
455 Princeton University. Formalizing Africa's Informal Sector Through the AfCFTA: An Opportunity for Economic Transformation. URL: https://jpia.princeton.edu/news/formalizing-africas-informal-sector-through-afcfta-opportunity-economic-transformation
456 BRINK. Early Insights about the Informal Economy in Kenya. URL: https://www.hellobrink.co/post/early-insights-about-the-informal-economy-in-kenya

gold from artisanal miners are in place in Senegal, DR Congo, Zimbabwe and other countries. There is a growing demand for solutions in the field of digital traceability systems of goods, anti-counterfeiting, and combatting the abuse of subsidy systems (when subsidised goods are illegally exported to neighbouring countries to be sold at market prices).

Business may become one of the drivers of informal sector 'recognition', consumer demand assessment and bridging information gaps,

which is the problem emphasised in almost every chapter of this handbook.

African business typically relies on a network of informal partnerships. Business is driven not only by the rational pursuit of profit but also by culturally defined 'obligations' that balance corporate gain with community expectations. Obviously, business models could hardly exist in isolation from societies, and they are shaped by socio-cultural contexts, which is essentially why different forms of capitalism have emerged around the world.

Despite the certain encouragement of individual entrepreneurship in African cultures, these are exactly the cultures where kinship, mutual support and collective responsibility are emphasised

As a result, doing business in Africa is inextricable from traditional communal and collective values, while entrepreneurship, defined as an individualistic and profit-driven activity, is secondary[457].

For example, the mission of **Afriland First Bank**, a Cameroonian bank founded in 1987 with branches in Equatorial Guinea, the DRC, South Sudan, Liberia, Côte d'Ivoire, Guinea and Zambia, is to promote African entrepreneurship and treat employees as family members. The company delivers on the promise through collective decision-making and practices, such as employees attending the funerals of their colleagues' relatives to show support. However, the most common form of mutual aid occurs in the informal sector, where relatives or friends could step in to replace sick employees[458]. As was mentioned, informal partnerships play an important role, too. In Egypt, strong personal relationships are crucial for business deals, and they could often bear more significance than written agreement. Egyptians tend to do business only with those they know and trust or those who did business with their friends and relations, which is why they would often view a particular person representing the company as the true partner rather than the company itself. In business cultures like that in Egypt, contracts are more of a formality and a reminder rather than a strict obligation[459].

This partly explains why companies built on Western and Chinese operational models may not align well with local norms and values, leading to challenges in motivating employees and a poor understanding of the context where the company operates. While such organisations may be profitable, this might not be sustained in a longer term as they fail to meet cultural expectations[460].

African business will often thrive in sectors with a limited presence of Western, Chinese and other multinational corporations. In sectors dominated by large foreign companies, such as mining and oil & gas, where French and British banks have held sway since colonial times, African companies struggle to compete and build their own reputational brands. Instead, African companies easily occupy market niches neglected by global competitors.

457 ScienceDirect. Untangling African indigenous management: Multiple influences on the success of SMEs in Kenya. URL: https://www.sciencedirect.com/science/article/pii/S1090951608000047?via%3Dihub#aep-section-id35

458 Ibid.

459 Lothar Kat. Negotiating International Business - The Negotiator's Reference Guide to 50 Countries Around the World. URL: https://www.leadershipcrossroads.com/mat/cou/Egypt.pdf

460 ScienceDirect. Untangling African indigenous management: Multiple influences on the success of SMEs in Kenya. URL: https://www.sciencedirect.com/science/article/pii/S1090951608000047?via%3Dihub#aep-section-id35=

The textile industry in Egypt is a traditional and highly competitive sector, with no dominant players in the field. Major companies are Egyptian, and **Oriental Weavers**, a carpet manufacturing company founded in 1979, is just one example. Most of the company's shares (some 54%) are owned by the family of its founder, Mohamed Farid Khamis. The largest foreign investor has been the Saudi Fitaihi Holding Group, which owns a 12% stake (other foreign shareholders collectively own 6.4% of the shares). In 2023, Oriental Weavers ranked first globally in the production of machine-made carpets and rugs, emerging as one of the largest exporters with the market reach of 130 countries. Notably, the main export destinations lie outside of the African continent (these are the U.S., Europe and the Gulf states), but this is also true for supplies of raw materials that originate both from local producers (incl. small-scale businesses) and from Saudi Arabia, New Zealand and the United Kingdom. The company has branches in Egypt and in the U.S., formally employing 18,700 people. Oriental Weavers, a true International African Business (IAB), invests in talented students who will then become the basis of its workforce. Through the Farid Khamis for Development Foundation, the company sponsored the Top 100 Students programme in collaboration with the national ministry of education. The company also collaborates with universities, such as Ain Shams University and Zagazig University, offering internships for students[461].

Oriental Weavers is also a company that generates a certain 'employment circle', a concept explored above. For instance, the local Arabya Company for Transportation and Domestic Flights signed a distribution agreement with Oriental Weavers in 2021[462]. In 2024, as part of its environmental initiatives, Oriental Weavers signed an agreement with the Innovative Renewable Solutions Company, a local green energy business, to design and install a PV power plant with a capacity of 2.5 MWP[463]. Other local companies benefitting from the circle are the various construction firms (that may well take advantage of the informal sector in their operations) and businesses that manage the company's local retail outlets (with potential links to the informal sector, too).

In some cases, such hyper-localisation can lead to the development of unique products and foster economic growth for the respective community. Besides, a company's small size does not necessarily mean that it is not innovative[464].

Moreover, in traditional sectors African businesses will most often be centres of the 'employment circle' generated by bigger companies through a reliance on local subcontractors for the outsourcing of certain services.

Going beyond local markets and thinking

African companies have grown enough to contribute much more to the local economies and explore regional and international markets. This leads to a **socialisation** and **internationalisation** of the African business. For the purposes of this chapter, 'socialisation of business' refers to a complex process whereby companies move beyond local thinking in their branding, marketing and communication strategies.

461 Oriental Weavers. Investor Relations. URL: https://orientalweavers.com/presentation-publication/

462 The Arabya Company for Transportation and Domestic Flights. Contracting with the largest group in the Middle East, Oriental Weavers Group. URL: https://alarabya-transport.com/en/contracting-with-the-largest-group-in-the-middle-east-oriental-weavers-group/

463 Daily News Egypt. IRSC Signs Contract with Oriental Weavers to Install 2.5 MWP Solar Power Plant at 10th of Ramadan Factories. URL: https://www.dailynewsegypt.com/2024/09/11/irsc-signs-contract-with-oriental-weavers-to-install-2-5-mwp-solar-power-plant-at-10th-of-ramadan-factories/

464 MIT Press Direct. Digital Entrepreneurship in Africa: How a Continent Is Escaping Silicon Valley's Long Shadow. URL: https://direct.mit.edu/books/oa-monograph/4850/Digital-Entrepreneurship-in-AfricaHow-a-Continent

Ethiopian Airlines, the largest African airline, is a good example. The state-owned company has a strong social media presence that encompasses Facebook, YouTube, X, Instagram, Telegram, LinkedIn and Weibo, with each platform having its own target audience. For instance, on China's Weibo[465], the company posts daily in Mandarin, offering relevant deals that help establish the airline as a convenient way to travel to Africa and many destinations beyond it with minimal travel time. On Instagram[466], the company mostly targets a pan-African audience, putting a premium on flights that connect the continent's main hubs.

Nigeria's **Paystack**, a fintech company, illustrates the point. It was founded in 2015 in Lagos, modelling its payment processing solution for the SMEs on the world's leader Stripe and aspiring for a global role. The company soon attracted investment from the U.S. and China (this balancing act is quite notable given the growing rift between Western and non-Western technology ecosystems), leaving some investment shares in the local hands, Nigeria's Singularity Investments[467]. The magnitude of success was such that Stripe and Tencent acquired investment shares worth USD 8 million in 2018[468], which was one of the factors that allowed for Paystack's expansion into Ghana that same year, South Africa in 2021 and Kenya in 2023 (all are the key financial hubs in their respective subregions). However, the last two expansions happened under Stripe's control of Paystack as it acquired the company for USD 200 million in 2020 in a bid to leverage its market development in Africa (rather than exploring 'unknown' markets on its own from scratch) and, most likely, arrest the rise of a strong competitor[469].

African companies are on a learning curve by copying or adapting business models and management solutions from foreign companies operating in Africa.

Overall, the African business has been diversifying the mix of its foreign partners, indicating a shift from the Europe-oriented thinking. While it may still be easier for Africans to negotiate with European investors and contractors because of a much longer history of interaction, both before, during and after colonialism, that brings more predictability to the deals, the operational paradigm of most European companies has undergone dramatic transformations in the last five to seven years. Considerations of 'eco-friendliness', 'sustainability' and 'inclusiveness' are some examples of what is high on their agenda that they bring to other markets where they do business. Applying these principles on African soil with somewhat of a disregard for core African interests has resulted in some contention and a certain alienation. To communicate successfully and drive impact, local African companies would often have to adapt to this conditionality of their agenda, adopting a more European-like model of communication and behaviour.

Besides, there are more European players on the markets. Former colonial powers are still very much present in Africa, seeking to smooth out the tensions and shift their strategies to be more collaborative.

However, businesses from Europe's smaller countries, like Austria, Estonia, Switzerland or Norway,

465 Weibo. Ethiopian Airlines. URL: https://weibo.com/ethiopianairlinesCN

466 Instagram. Ethiopian Airlines. URL: https://www.instagram.com/fly.ethiopian

467 Forbes. Nigerian Fintech Startup Paystack Raises $1.3 Million. URL: https://www.forbes.com/sites/mfonobongnsehe/2016/12/19/nigerian-fintech-startup-paystack-raises-1-3-million/

468 TechCrunch. Paystack, with ambitions to become the Stripe of Africa, raises $8M from Visa, Tencent... and Stripe itself. URL: https://techcrunch.com/2018/08/28/paystack-with-ambitions-to-become-the-stripe-of-africa-raises-8m-from-visa-tencent-and-stripe-itself/

469 TechCrunch. Stripe acquires Nigeria's Paystack for $200M+ to expand into the African continent. URL: https://techcrunch.com/2020/10/15/stripe-acquires-nigerias-paystack-for-200m-to-expand-into-the-african-continent/

are now more vocal than ever before about their interest in the African markets. For instance, Estonia's Bolt launched its transport and taxi services in South Africa in 2016. With its first African experience proving a success, the company expanded its offerings to Angola, Ghana, Egypt, Kenya and others, with a scope of over 47 million passengers and 900,000 drivers registered on the platform. These are largely new partners for African business, which requires some 'social adaptation' in terms of understanding their motives and interests and finding an optimal mode for mutual collaboration. The same applies to the increasing number of non-European partners, as their geography is truly global and ranges from Iran and Turkey in the Middle East, Brazil and Chile in Latin America, Indonesia and Malaysia in the Asia-Pacific[470].

Another development is the rising **transnationalisation** and **localisation** of the African business. While these two notions might appear mutually exclusive and contradictory, they are closely interconnected. **Local content** policy has been a game changer in this context. The Black Economic Empowerment (**BEE**) programme which once seemed to be a product of South Africa alone, has taken hold and spread throughout Africa in the form of local content policies. Most African countries have legislated local content policies, such as **Nigerian content** in Nigeria. In almost all countries, localisation is encouraged by local regulators through a developed system of investment incentives, including exemption from various types of taxes, etc.

For example, the expanding footprint of the world's major MNCs in developing mineral resources across the vast spaces of the African continent has also led to:

- an emergence of more African companies acting as sub-contractors for MNCs;
- an emergence of more local SMEs as a result of CSR projects that often provide infrastructure that stimulates demand and offers business opportunities;
- an adoption of local content legislation with policy-makers willing to consolidate strategic projects under state- or private-owned local companies.

Illustrative of these trends is the local impact created by the British Andrada Mining that owns a 95% share in the Uis lithium, tin, tantalum and rubidium mine in Namibia. While only 5% are owned by the national Sinco Investments Five, Andrada Mining relies on a network of local subcontractors, such as Metal Mill Engineering[471]. The company was founded when the Uis project started in 2017, creating jobs and contributing to the area's economic growth.

Another example is Diageo, a British company that specialises in alcoholic beverages. In Africa, Diageo operates 12 breweries and 3 blending and malting plants located in Kenya, Tanzania, Uganda, South Africa, Ghana, Nigeria, the Seychelles, Cameroon, Ethiopia and Angola. Employing 4,400 people, the company is the main partner for a wide range of suppliers, as 83% of raw materials are sourced from the local small-scale businesses[472].

While it may be premature to speak of the transnationalisation or internationalisation of the African business in the traditional sense (i.e. when African MNCs could have global ambitions or already exert some global influence or play an independent and discernible role on global markets), it is still evident that there are some African companies that are preparing for this step. Most of such companies have been building up their skill profiles and expanding into neighbouring markets.

The current phase of increasing internationalisation of the African business could be attributed to several factors. First, amid growing demand and supply fragmentations, Africa continues to be perceived globally as a resource-rich market, particularly in the realm of critical minerals. For example, the U.S. Strategy Toward Sub-Saharan Africa (2022) primarily views the continent as

470 Bolt. Our locations. URL: https://bolt.eu/en/cities/

471 New Era Namibia. 47 fired from Uis mine contractor. URL: https://neweralive.na/47-fired-from-uis-mine-contractor/

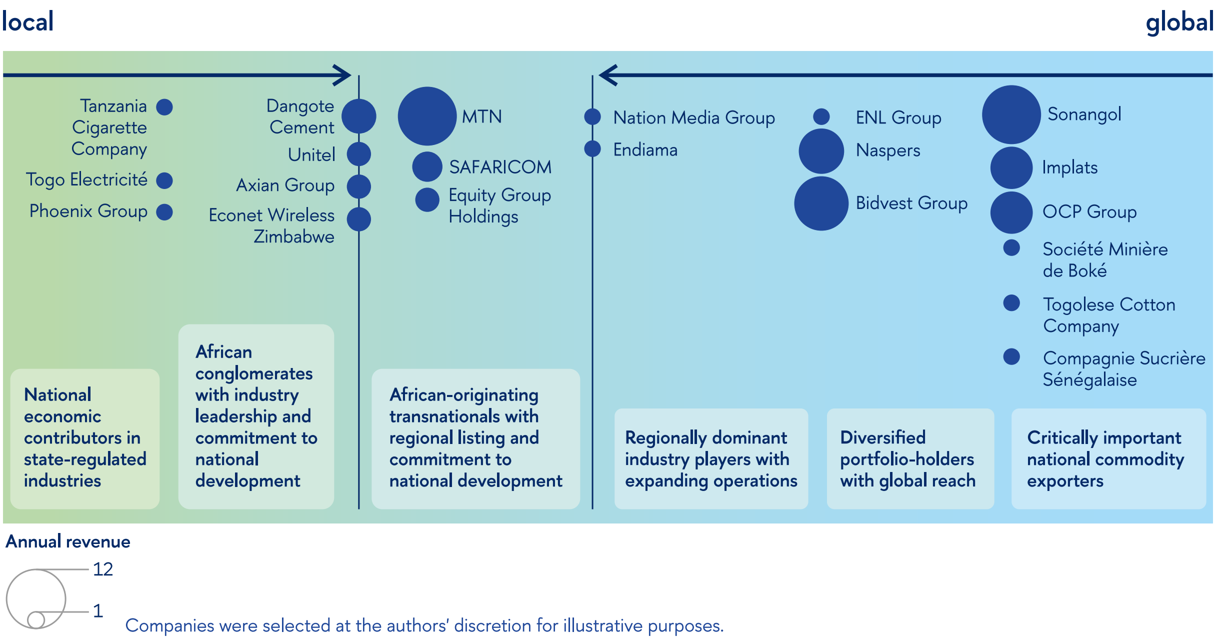
472 Diageo. Africa. URL: https://www.diageo.com/en/our-business/where-we-operate/africa

An example of increased regulatory attention to fostering local development and facilitating opportunities for African SMEs is the mining industry in the DRC. The 2018 DRC Mining Code stipulates that companies holding mining and/or exploration licenses must meet their social obligations to support local communities; otherwise, their licenses can be revoked. The minimum financial support for local communities through such agreements is 0.3% of the company's turnover[473]. Official figures show that company expenditures on local community support projects totalled USD 83.7 million in 2020-2021. In August 2023, the DRC Ministry of Mines revoked 29 licenses, citing non-compliance with these requirements[474]. In most cases, the licenses revoked were abandoned, and their redistribution could potentially improve the situation for local communities if acquired by companies that implement effective CSR policies. These are another instrument that facilitates the emergence of more local businesses. For example, the Chinese CMOC company sponsored tuition fees for 89 students in the DRC's provincial universities of Haut-Katanga and Lualaba without pledging their commitment to work for CMOC when they complete the education[475]. That said, students also have the option of starting their own business or joining another local company.

a host of vast natural resources, specifically 30% of the world's critical minerals[476]. Similarly, UNCTAD's most recent Economic Development in Africa Report highlights Africa's resource potential[477].

This narrative seems to be pervasive in each discussion and policy document on and around Africa and the continent's development trajectory. For their part, African governments and contractor businesses tend

African businesses: between local and global



Source: prepared by the HSE Center for African Studies.

473 UNCTAD. Congo, Democratic Republic of the - Adoption of a mining code. URL: https://investmentpolicy.unctad.org/investment-policy-monitor/measures/3227/adoption-of-a-mining-code

474 The Africa Report. DRC: Cancelling operating rights of 29 mining companies stirs controversy. URL: https://www.theafricareport.com/321309/drc-cancelling-operating-rights-of-29-mining-companies-stirs-controversy/

475 CMOC. Wilson Makuya, a TFM Social Fund scholarship beneficiary, obtains his Master's degree with distinction. URL: https://en.cmoc.com/html/2023/Education_0730/49.html

476 The White House. U.S.Strategy Toward Sub-Saharan Africa. URL:https://www.whitehouse.gov/wp-content/uploads/2022/08/U.S.-Strategy-Toward-Sub-Saharan-Africa-FINAL.pdf

477 UNCTAD. Critical minerals: Africa holds key to sustainable energy future. URL: https://unctad.org/news/critical-minerals-africa-holds-key-sustainable-energy-future

to make use of this narrative by focusing on extractive sectors, as this allows for more foreign investment, faster profits and easier revenue. Shifting this paradigm would require considerable time, effort and financial resources because this ultimately boils down to a re-structuring of the economies with the emergence of impactful business in non-traditional fields – i.e. not oriented towards extraction, production of raw materials or export.

Second, the internationalisation of the African business still goes well with the interests of national development, aligning with governmental policies. A case in point is Sibanye-Stillwater, a mining company with operations in South Africa. Its major shareholders include the state-owned Public Investment Corporation Ltd. (South Africa, 16.1%), Allan Gray Ltd. (South Africa, 5.7%), Lingotto Investment Management LLP (UK, 7.5%) and JPMorgan Chase & Co. (US, 6.3%). Foreign shareholders are estimated to control about 40% of the company's stakes. Listed on the Johannesburg Stock Exchange, Sibanye-Stillwater offered employment for 60,800 people in South Africa in 2023, with an additional of 19,300 contractors (the concept of 'employment circle' applies here, too)[478]. The company is another example of an International African Business (IAB) that drives local impact. Partnering with African Infrastructure Investment Managers, Sibanye-Stillwater sponsors the construction of the Umsinde Emoyeni Wind Power Station (140 MW), which is scheduled to be completed by 2026[479]. A powerful player in South Africa's mining sector, Sibanye-Stillwater is also a company that has mines and processing facilities in the U.S., a nickel plant in France as well as stakes in PGM projects in Canada, lithium projects in the U.S., Argentina, and Finland, and a zinc project in Australia. The company has a broad network of partners, selling the PGM mined in South Africa to domestic companies and undisclosed buyers in the U.S., the EU and the UK, and Japan. The gold it extracts is sold to local and international banks, while Australian zinc is directed to smelters in Australia, Korea and China, and the nickel processed in France is sold to another commodity trading company[480]. However, here the risks of excessive capital outflow via such 'global' investments should be considered as well.

Third, demand for some of the products is just so low within the African continent, either due to market saturation or limited purchasing power, that African companies naturally have to turn to overseas markets. The aforementioned Egyptian carpet manufacturer Oriental Weavers derives a mere 1% of its revenue from African markets, if Egypt (35%) is not considered. The nearly exclusive focus on Northern America and Europe can be explained by the higher purchasing power in these regions and by the fact that the textile industry in Africa remains highly competitive, particularly in Northern Africa, where carpet production is well-established due to widespread cotton cultivation[481].

In African economies, there is little demand for critical minerals such as cobalt, lithium, manganese and others, due to the lack of necessary technologies and manufacturing capabilities. Consequently, companies operating in Africa, both foreign and local, typically extract and (minimally) process these metals to sell them outside the continent, primarily to China. A similar pattern exists in the coffee market, where Africa accounts for 11% of global production. Ethiopia and Uganda are the main producers, contributing approximately 70% of Africa's coffee output. However, the culture of coffee consumption is not very developed in African countries (except for Ethiopia), as people generally prefer tea. In 2023, coffee consumption in African countries accounted for only about 7% of global consumption, with Ethiopia alone representing 29% of Africa's coffee consumption[482].

478 Sibanye-Stillwater. Integrated report 2023: Empowering our workforce. URL: https://reports.sibanyestillwater.com/2023/downloads/ssw-IR23-performance-workforce.pdf
479 Sibanye-Stillwater. Integrated report 2023: Socioeconomic development. URL: https://reports.sibanyestillwater.com/2023/downloads/ssw-IR23-performance-socioeconomic-development.pdf
480 Sibanye-Stillwater. Integrated report 2023. URL: https://reports.sibanyestillwater.com/2023/downloads/ssw-IR23.pdf
481 Oriental Weavers. Investor Relations. URL: https://orientalweavers.com/presentation-publication/
482 International Coffee Organization. Coffee Report and Outlook 2023. URL: https://icocoffee.org/documents/cy2023-24/Coffee_Report_and_Outlook_December_2023_ICO.pdf

Nigerian Dangote Group founded in 1977, initially specialised in importing and trading wholesale consumer goods and cement. In the 1990s, the company expanded into textile production and consumer goods like sugar and flour. In 2000, Dangote acquired Benue Cement Company from the federal government, subsequently increasing the cement plant's annual capacity from 0.9 million tonnes to 2.8 million tonnes. Switching gears, Dangote entered Nigeria's cement market, which soon became its core focus. In 2002, the company purchased the government-owned Obajana Cement Plc., which began operations in 2007 with a capacity of 5 million tonnes annually, making it the largest cement plant in Sub-Saharan Africa. In 2010, Benue Cement and Obajana Cement merged into Dangote Cement Plc., a step that testified to the company's new role in the national economy and that allowed it to go public on the Nigerian Stock Exchange. By 2011, Dangote Cement Plc. established a presence on the subregional market, with first exports of cement to Ghana and another capacity expansion in the Obajana and Ibese plants[483].

As one of the world's top CEOs[484], the company's founder Aliko Dangote is a proponent of pan-African economic development, often expressing his vision of utilising Africa's raw materials for processing and sale within the continent[485].

By making strategic choices, the company managed to secure a dominant position in Nigeria's cement market. Achieving strategic importance for the economy allowed the company to receive certain support from the government[486] and expand even more. With that, Dangote Cement Plc. has established itself as one of Africa's largest producers with cost-effective and high-quality production and embarked on a broader African expansion, moving from a subregional presence to a pan-African footprint. In 2014, the company opened two cement plants in South Africa, a plant in Senegal, and continued its expansion drive with investments in Cameroon, Ethiopia, Zambia, Tanzania, Sierra Leone and the Republic of Congo[487].

Fourth, traditional business drivers may not play as important a role in Africa as in the West or even in other regions of the developing world. This arguably refers to companies seeking new markets to expand their operations, turning to other geographic regions in a bid to cut production costs via cheaper labour or raw materials or attain a higher profile and international visibility to attract investment or access markets of cheaper capital.

The transition from a local to an international business depends on 1) market development, 2) company revenue growth, 3) certain government support and 4) favourable conditions in global markets, all provided that the company has the necessary talent and sufficient capital.

Outlook for the future

In the coming years, the trend for a broader socialisation and internalisation of African businesses will likely continue. Coupled with government policies to stimulate local production and development of local communities, this will arguably create more space for the emergence of more Multi-African Businesses (MABs) and International African Businesses (IABs). In turn, their operations will boost opportunities for small-scale local enterprises, as part of their 'employment circle'. Such companies will drive their growth with a reliance on the informal sector, occupying niches that bigger companies tend to overlook due to the high entry cost or inherent

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485 Jeune Afrique.Aliko Dangote: « Mon rêve, c'est d'utiliser les matières premières d'Afrique, de les raffiner et de les vendre sur notre propre marché ». URL: https://www.jeuneafrique.com/1570808/economie-entreprises/aliko-dangote-mon-reve-cest-dutiliser-les-matieres-premieres-dafrique-de-les-raffiner-et-de-les-vendre-sur-notre-propre-marche/
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487 Dangote Cement Plc. Our History. URL: https://cement.dangote.com/our-history/

risks with a rather low strategic return. This may well broaden the scope of opportunities for local entrepreneurs who can leverage their knowledge, experience and understanding of the local context to develop solutions unique to Africa.

However, with local problems and local solutions come limitations to company growth. The size of national markets essentially restricts the scalability of companies, particularly in smaller countries. Since many of the solutions offered and developed by African businesses cater to markets that are relatively small, with limited purchasing power and underdeveloped infrastructure, the prospect of more companies getting to the level of an MAB or an IAB will likely be limited to the continent's biggest economies.

This prospect does not imply the failure of African businesses, who may be strong in their diversity. Whether innovative or not, small- and medium-scale but consistently profitable companies are a certain mark of success. One potential pathway for scaling companies to a (sub)regional level may be addressing the problems and leveraging the opportunities that are common across the continent but remain relatively unfamiliar to foreign multinationals.

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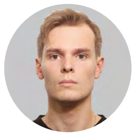
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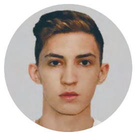
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About HSE University Center for African Studies

Center for African Studies
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HSE University Center for African Studies (HSE CAS) was established in 2020 in response to the increasing significance of Africa as a focal point for foreign policy and economic engagement for the Russian Federation. The Center specialises in expert and analytical research, focusing on the African markets and the assessment of associated financial, legal and political risks. The primary objective of HSE CAS is to conduct a comprehensive analysis of projects that are either currently being implemented or proposed for implementation in Africa by Russian entities, with an emphasis on risk analysis and the identification of strategic opportunities.

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By 2024, HSE CAS aims to emerge as the preeminent center in Russia for applied expertise concerning the risks and opportunities inherent in conducting business in Africa

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The core research domains of HSE CAS encompass an array of topics, including but not limited to: energy and food markets, education, ICT, transport and logistics, financial infrastructure, decision-making systems and the overall business environment. Additionally, the Center conducts thorough risk assessments – spanning financial, legal and political dimensions.

A significant focus of the Center's scientific and analytical work includes the training of personnel through collaborations with universities, research institutions and governmental bodies across African nations. This initiative also extends to the implementation of professional development programmes aimed at mid- and senior-level officials from both African countries and Russia, alongside training tailored for Russian enterprises with interests in Africa.

In 2023, HSE CAS prepared and launched a handbook entitled **Africa 2023: Opportunities and Risks**, which addresses pertinent inquiries regarding the current landscape of African nations, potential avenues for collaborative development and associated threats warranting consideration. The principal sections of this publication examine various facets of human capital in Africa – including demographics, education and cultural dynamics – alongside analyses of natural resources (such as minerals, water supply and ecosystems), food markets, macroeconomics (covering trade, debt, sanctions, and currency fluctuations), infrastructure (including transport, energy, urbanisation and digitalisation), political systems, security issues, integration processes, and the evolving nature of Russian-African relations.

In 2023, during the Second Russia-Africa Economic and Humanitarian Forum, HSE CAS, unveiled **Russia-Africa E-Governance Knowledge Sharing Programme**. Subsequently, in December of the same year, officials from authorities departments participated in Winter E-Governance Knowledge Sharing Week for African officials.

HSE CAS staff and external experts have prepared and launched several publications. These include the aforementioned Africa 2023: Opportunities and Risks (in Russian)[488], E-Governance in Africa: Opportunities and Challenges[489], the report Russia-Egypt: Trajectory of Cooperation (in Russian and Arabic)[490], Africa: Development Prospects and Recommendations for Russian Policy[491], as well as the report for Valdai Discussion Club entitled Prospects and Tasks of Russian-African Cooperation[492].

Furthermore, the online platform for the Knowledge Sharing Programme – **E-Governance Knowledge Hub** – has been established to aggregate information regarding e-government development in Africa, ongoing projects, challenges and potential solutions. Apart from that, corporate information systems and geographic information systems are being developed to support decision-making.

E-Governance Knowledge Hub

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About Uralchem Group

Uralchem Group is one of the world's leading producers of mineral fertilisers and chemical products, with combined production capacity of about 25 mln tonnes.

URALCHEM GROUP | Because everyone in the world needs food

Uralchem Group official website

Key assets of Uralchem Group are:

- **Uralchem JSC**, one of the world's largest producers and exporters of nitrogen and complex fertilisers. Its production assets are located in Russia's Kaliningrad Region, Kirov Region, Moscow Region, and Perm Region.
- **Uralkali PJSC**, one of the world's largest producers and exporters of potash. Its production assets consists of 5 mines and 7 ore treatment plants in Berezniki and Solikamsk (Perm Region, Russia).
- **Togliattiazot JSC** (TOAZ), one of the world's largest producers of urea, ammonia, and urea formaldehyde concentrate. Its production assets include seven ammonia units and three urea units in Togliatti (Samara Region, Russia).

Uralchem Group has its own railway fleet, which is one of the largest fleets of specialized mineral wagons and ammonia tank wagons in Russia; own and partner product storage facilities in key sales regions around the world, more than 100+ distribution sites, as well as fertiliser transshipment terminals and export shipment facilities.

Uralchem Group's product range includes over 100 comprehensive solutions created on the basis of extensive experience in agriculture and industrial technologies.

Its range of agricultural products includes **nitrogen**, **phosphate**, **potassium**, **NPK/NPKS fertilisers**, **water-soluble fertilisers**, and **feed additives**. Uralchem Group's portfolio of industrial chemicals includes **ammonia**, **urea**, **ammonium** and **potassium nitrate, acids, specialty products, urea formaldehyde concentrate**, **carnallite**, **halite**, **AdBlue**.

For notes

For notes

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For notes

Handbook

Africa 2025: Prospects and Challenges

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Africa 2025: Prospects and Challenges
is to serve as a handbook on Africa's development, challenges and opportunities. Its target audience is government officials, businessmen, scholars and experts. The handbook aims to provide alternative positive vision on some issues that Africa faces, among them being fight for food and energy sovereignty, debt crisis, digital transformation, rapid urbanisation and population growth.

The book was prepared by the team of experts and scholars coordinated by the HSE University Center for African Studies (Moscow, Russia).

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