

AFRICA
Through Multiple Lenses

A New Perspective

DHL

Gordon Institute of Business Science
Centre for African Management and Markets

The Centre for African Management and Markets (CAMM)
CAMM at the Gordon Institute of Business Science (GIBS) conducts academic and practitioner research and provides strategic insight on African markets. Our purpose is captured in our mission of "Build. Connect. Do." We are proud to be one of the centres at the heart of GIBS, ranked as the African continent's leading business school. This embeddedness provides a credible and respected base, and a powerful network of researchers, practitioners, academics, and policy makers throughout the continent. Our footprint is driven by our conviction that Africa's innovation and competitiveness are intimately connected to traversing borders with Africa-wide trade, cross-border investment activity, and pan-African business initiatives.

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FOREWORD

Maps are never neutral. The Mercator projection, familiar from classroom walls, makes Africa appear far smaller than it is relative to other continents.

We welcome the United Nations resolution adopted in September 2026 encouraging the use of Equal Earth and other equal-area maps in place of Mercator. But this distortion, striking as it is, is not the only way Africa has been misrepresented on maps.

Africa is a vast and diverse continent. Yet, as in many parts of the world, its borders have too often been drawn without sufficient regard for history, people and trade routes.

DHL Africa Through Multiple Lenses looks to build on the momentum of the UN's efforts. It presents the continent not through a single, perfect or complete picture, but through a series of distinctive and useful perspectives.

Some maps are thought-provoking. They show the risk premiums investors demand, the limited reach of the rail network and how little of the cobalt, platinum and manganese the continent mines is processed at home.

Others offer real reasons for optimism. Africa's youthful, working-age population will keep growing long after Europe's and Asia's have begun to shrink. The continent holds a large share of the minerals needed for the energy transition and some of the best solar resources on earth. A growing number of countries already generate much of their electricity from renewable sources.

Together, these maps make one point clear: geography shapes outcomes, but it does not determine them. Landlocked countries can connect to wider markets. Productive capacity can be developed. African leaders can come together to reach agreements.

Africa does not need to be redrawn. It needs to be seen accurately and better connected. We are proud to play our part in both.

We hope these maps offer answers and inspire new questions among executives, policymakers, investors and students alike.

HENNIE HEYMANS

CEO, DHL Express Sub-Saharan Africa





PROLOGUE:

ELEPHANTS FOR WANT OF TOWNS

Prof. Adrian Saville

Director, GIBS Centre for African Management and Markets (CAMM)

So geographers, in Africa-maps,
With savage pictures fill their gaps;
And o'er unhabitable downs
Place elephants for want of towns.

– JONATHAN SWIFT,
ON POETRY: A RAPSODY, 1733

In 1733 Jonathan Swift, the Dublin-born satirist who had published Gulliver's Travels seven years earlier, wrote a long poem on the state of English verse, and buried in it were four lines about geographers.[1] The lines have since become among the most widely cited in the history of cartography, quoted as Swift's verdict on how Europe mapped Africa: where knowledge ran out, the mapmaker drew an elephant. In fact, Swift was not writing about maps, or Africa, or cartographers. He was writing about hack poets who embellish thin verse with ornaments, and the elephant was his image for the ornament; geographers were simply a handy example.[2] The misreading is instructive.
For nearly 300 years, a good line about Africa has travelled further than the truth about Africa, and it has gone on travelling even after the truth was revealed. Yet if we take Swift's lines at face value, Africa is mis-measured, misunderstood and mis-mapped. It is these gaps that gave rise to *DHL Africa Through Multiple Lenses*.

A MAP OF AFRICA

The project began in a conversation with Hennie Heymans, chief executive of DHL Express Sub-Saharan Africa, which ended with a request that sounded modest: could we produce a map of Africa?[3] Ian Macleod, the writer and editor who runs this project with me, has a stock reply for such moments: challenge accepted. As we squared up to the task, it became clear that the hard part was neither the map nor Africa.

The hard part was the word "a". One map means one picture, and one picture means one story: Africa as poor, or Africa as rising, or Africa as 54 countries, or Africa as a single market of 1.5 billion people. Each of those is true somewhere and false somewhere else, and a single map must choose. We went back to DHL with an idea: a series of maps, each one standing on its own, each one adding something the last one left out. Those maps, stitched together, became *DHL Africa Through Multiple Lenses*, lifting veils, closing gaps, and replacing elephants with towns.

A parody of the television show *Who Wants to Be a Millionaire?* has the host introduce his contestant: "I'm here with Lilly, who's all the way from Europe and she's one question away from winning the grand prize, a chance to Save Africa." The host puts the final question: "How many countries are there in Africa? Is it one, two, five, or fifty-four?" Lilly uses her last lifeline, "Call an African child", and the host sets up the call. A young boy named Michael appears on screen, the line freezes, and Lilly is on her own. Her final answer? "One." The host pauses. "Well, Lilly, it looks like you're going to have to pack your bags, but you're not going home. You're going to go and Save Africa! That was the correct answer!" Confetti, dancers, mirror ball. As the hopelessly misguided view has it: Africa is a place.

However, there might be an ironic twist inside the joke. The serious version of the question is more difficult than it looks. Ask the United Nations (UN) about the number of countries that make up Africa, and the answer is 54. Ask the African Union (AU) and it is 55, because the AU adds the Sahrawi Arab Democratic Republic in Western Sahara to the count. Add Somaliland, which has governed itself since 1991 and which a single UN member, Israel, recognised in December 2025, and you are at 56.[4] The number depends on who is counting, and that is before we have examined even a single country in detail.

We can extend the game. How many Guineas are there in Africa? Three. What are their official languages? French, Portuguese, and Spanish, in that order, for Guinea, Guinea-Bissau and Equatorial Guinea. Which of them does the World Bank rank as upper-middle income? The last one, on the strength of oil.[5] Who colonised Madagascar? What does Madagascar sell to the world? Swift's lines gave us two veils, the map, and the narrative. This series of questions gives us another veil, and it is the veil we choose for ourselves: we imagine we know, until we put ourselves to the test.

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1 Swift, J. (1733). *On poetry: A rapsody.*
2 Edney, M. (2018, December 15). *A misunderstood quatrain* [Blog post]. Mapping as Process.
3 DHL Express. (n.d.). *Go Trade Summit speaker: Hennie Heymans*. DHL Express.
4 United Nations. (n.d.). *Member states*. United Nations; African Union. (n.d.). *Member states*. African Union.
5 World Bank. (2025b). *World Bank country and lending groups*. World Bank.

AFRICA IS NOT A PLACE

Closing gaps and lifting veils serve many purposes, but the motivation behind Hennie's request supplies the context. In 1970, China's output came to about US$113 per person, which placed it among the poorest countries on earth, in the company of Bangladesh, Chad, and Haiti.[6] Deng Xiaoping, the Sichuanese revolutionary who became China's paramount leader in 1978, had already set out the philosophy that would change this. In a July 1962 article on reviving farm output, he quoted a proverb from his home province: it does not matter whether the cat is yellow or black, so long as it catches mice.[7] The reform era that followed lifted per-person income to more than US$6,400 by 2012, and in October 2014, the IMF's purchasing-power estimates put China's economy ahead of the United States as the largest in the world.[8] That kind of understanding gave DHL the confidence to arrive early in the story. It has operated in China since 1980, two years after Deng's reforms began, and formed the DHL-Sinotrans joint venture in 1986.[9] What, then, of Africa? The World Bank's list of low-income economies is overwhelmingly African, and that fact feeds a narrative – the "dark continent" – which is easy to repeat and quick to fail.[10] It fails, because Africa is not a place. It is 54, 55, or perhaps 56 countries, home to about 1.5 billion people and more than 2,000 languages, holding something close to 30% of the world's known mineral reserves, with urban populations the OECD expects to double from 700 million to 1.4 billion by 2050.[11] Two of the fastest-growing economies anywhere over the past quarter century are Ethiopia and Rwanda, neither of which sells oil.[12] A continent that contains both the Central African Republic, with the youngest population on earth, and Mauritius, with the demography of southern Europe a generation ago, cannot be summarised; it must be mapped, and mapped many times. And so we agreed with Hennie that we would not build a single map but many maps, each one adding a layer of insight, affording a new perspective, deepening understanding, and developing industrial intelligence.

THE MOUNTAINS THAT WERE NOT THERE

There is a precedent for what happens when a map of Africa is drawn to satisfy a demand for completeness rather than as a supply of knowledge. On 9 June 1788, a dozen wealthy Londoners led by Sir Joseph Banks, the botanist who had sailed with Captain James Cook and now presided over the Royal Society, founded the African Association to find the course of the Niger – the world's 14th-longest river – and the city of Timbuktu.[13] Their best map, by the French cartographer d'Anville, had an accurate coastline and an interior that was mostly blank. The explorers they sent died with dismal regularity until Mungo Park, a Scottish surgeon, returned in 1797, having seen the Niger and noted, from a hilltop near Marraboo, "some very distant mountains" in a kingdom the locals called Kong.[14]

James Rennell, the former Surveyor General of Bengal and the African Association's cartographer, could not abide blank space. So he turned Park's distant hills into a range stretching halfway across West Africa and labelled it the Mountains of Kong on a map of 1798. The historians Thomas Bassett and Philip Porter later counted 40 published maps, between 1798 and 1892, that reproduced the mountains. For most of a century, European traders and planners treated the range as an impassable barrier between the coast and the interior. Then Louis-Gustave Binger walked the ground between 1887 and 1889 and found no mountains at all. Bartholomew's Oxford Advanced Atlas still printed them in 1928.[15] Mark Cooper-Jones and Jay Foreman, the pair behind the *Map Men* series, draw the lesson in their 2025 book *This Way Up*: the error betrays a disregard for the people who lived there, "as if the map of the place were the place itself".[16]

Kong is not a museum piece. In June 2015 Nestlé announced it was cutting 15% of its workforce across 21 African countries. Cornel Krummenacher, who ran the company's equatorial Africa region, told the Financial Times: "We thought this would be the next Asia, but we have realised the middle class here in the region is extremely small and it is not really growing."[17] A middle class of 330 million had been drawn on a map; the mountains, once again, were not there. The optimists had the continent right and the country wrong, and a single map could never have told them which.

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[6] World Bank. (2026). *GDP per capita (current US$): China*. Federal Reserve Bank of St. Louis, FRED.
[7] Deng, X. (1962, July 7). *Zenyang huifu nongye shengchan* [How to restore agricultural production]; reproduced in *People's Daily*, 12 December 2008.
[8] Federal Reserve Bank of St. Louis. (2026). *GDP per capita for China*. FRED; International Monetary Fund. (2014). *World economic outlook, October 2014*. IMF.
[9] Allen, K. (n.d.). We've been in China since 1980. *Business in Vancouver*.
[10] World Bank (2025b).
[11] United Nations Department of Economic and Social Affairs, Population Division (UN DESA). (2024a). *World population prospects 2024*. United Nations; Eberhard, D. M., Simons, G. F., & Fennig, C. D. (Eds.). (2025). *Ethnologue: Languages of the world* (28th ed.). SIL International; OECD/SWAC, African Development Bank, UCLG Africa, & Cities Alliance. (2025). *Africa's urbanisation dynamics 2025: Planning for Africa's urban expansion*. OECD Publishing.
[12] World Bank. (2026). *GDP growth (annual %)*. World Bank.
[13] Hallett, R. (Ed.). (1964). *Records of the African Association, 1788–1831*. Nelson; Cooper-Jones, M., & Foreman, J. (2025). *This way up: When maps go wrong (and why it matters)*. Mudlark.
[14] Park, M. (1799). *Travels in the interior districts of Africa*. W. Bulmer; Cooper-Jones & Foreman (2025), p. 75.
[15] Bassett, T. J., & Porter, P. W. (1991). 'From the best authorities': The Mountains of Kong in the cartography of West Africa. *The Journal of African History, 32*(3), 367–413.
[16] Cooper-Jones & Foreman (2025), p. 80.

WHAT WE BUILT, AND WHY

DHL Africa Through Multiple Lenses is the work of the Centre for African Management and Markets (CAMM) at the Gordon Institute of Business Science (GIBS), developed in partnership with DHL Express Sub-Saharan Africa.[18] Ian Macleod crafted a set of maps and oversaw the editing of the collection. François Fouché, the economist on our team, assembled and verified the data. Edward DeMarco, our American contributor, brought four maps of his own, and the GIBS Founding Dean Professor Nick Binedell inspired an honorary map, Trading places, which asks a simple question – did a country trade more with the United States or with China in 1990? – and then asks it again 35 years later.

My own maps cover borders drawn with rulers, a desert that nobody claims, a Great Green Wall, Mozambican railways, distance to the coast, Africa's under-population and its trading partners. Nerissa Pillay ran the project and its launch. Each map carries a headline and a question, an assessment of the argument and a set of callouts.

The maps fall into four movements. The first is misrepresentation. We open with Mercator, the 1569 projection that shrinks Africa to the apparent size of Greenland when the continent is roughly 14 times its size. On 4 September 2026, while this book was in design, the UN General Assembly voted 164 to 1 to endorse the equal-area Equal Earth projection, a campaign led by Togo on behalf of the UN African Group.[19] The second movement is people: how young Africans are, how many children they have and how many of them survive, why a continent this large has had so few people for so long, where they cluster, and whether their crowded cities can turn people into productivity – the arithmetic that fixes the shape of demand a decade before income statistics catch up. The third is money: what development has delivered and how fast economies can grow; what they produce, from farms and mines, and the sunshine they have barely begun to harvest, to the complexity of their exports; whom they trade with abroad and, one day, with one another; and the climate for capital, from risk premiums, economic freedom and resilience to the question every investor asks first, where to start. The fourth is lines: the straight borders drawn in Berlin and the patch of desert that two of them left to nobody, the Great Green Wall, where a shifting monsoon is redrawing the Sahel faster than the planners can plant, the rail corridors of Mozambique built to move minerals rather than people, and the cost of distance from the sea.

None of these maps is *the* map of Africa. Taken together, they do something a single picture cannot: they let the reader see where the elephants used to be. The maps that emerge help address problems in policy, development, and planning – and build business insight.

DHL Group's European revenue is equivalent to about 0.25% of the European Union's output; the same ratio applied to Africa's US$2.9 trillion economy implies a market of close to €7 billion, more than half as much again as the group books across the whole of the Middle East and Africa today.[20]

The continent is under-served by logistics and under-mapped, and the two conditions are related. Deng's cat has a modern descendant. It does not matter what a map looks like, so long as it catches something true.

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[17] Manson, K. (2015, June 17). Nestlé cuts African workforce as middle-class growth disappoints. *Financial Times*; African Development Bank. (2011). *The middle of the pyramid: Dynamics of the middle class in Africa*. AfDB.

[18] University of Pretoria. (2018, October 1). *GIBS launches Centre for African Management and Markets*. University of Pretoria.

[19] United Nations General Assembly. (2026, September 4). Draft resolution A/80/L.104. United Nations; United Nations. (2026b, September 4). General Assembly adopts text to 'Correct the Map', among others proclaiming Decade of Culture for Sustainable Development, Child Marriage Elimination Day (GA/12779). United Nations.

[20] DHL Group. (2026a). *2025 annual report*. DHL Group; Eurostat. (2026). *Gross domestic product and main components*. Eurostat; World Bank. (2026). *GDP (current US$)*. World Bank; European Central Bank. (2025). *Euro foreign exchange reference rates*. ECB. All three legs use 2024 figures; Africa is the sub-Saharan Africa aggregate plus Algeria, Egypt, Libya, Morocco and Tunisia.

1 MERCATOR MISREPRESENTATION

HOW DO YOU SHRINK A CONTINENT?

No phenomenon better captures the misrepresentation of a continent than the distortion that the Mercator projection imposes on Africa. The map that hangs in classrooms, frames the evening news and underpins almost every digital atlas was never built to tell the truth about size. It was devised in 1569 by the Flemish cartographer Gerardus Mercator to help sailors hold a steady compass bearing, turning a constant heading into a straight line on the page.[21] Flattening a sphere always demands a sacrifice, and Mercator chose to preserve shape and direction at the expense of area. As the cartographer Mark Monmonier observes, there is "no escape from the cartographic paradox": to be useful, a map must in some measure lie.[22]

Mercator's particular lie lands hardest on the Global South. Because his grid stretches ever more violently toward the poles, landmasses far from the equator swell, while those that straddle it are squeezed. Greenland and Africa appear as near-equals, yet Africa is in reality some 14 times larger. Greenland's true extent is closer to that of a single African country, the Democratic Republic of Congo (DRC).[23] Africa is, in fact, vast enough to contain the United States, China, India and much of Europe within its borders.[24]

The geographer J. B. Harley argued that maps are never neutral instruments but representations of power, encoding the assumptions of those who commission them.[25] Mercator's rectangle, born of an age of European expansion, was duly accused of inflating Europe and North America for imperial purposes.[26]

The distortion is no antiquarian grievance; it quietly warps commercial judgement. Africa's 54 states together cover some 29.7 million square kilometres of land – roughly a fifth of the planet's land surface[27] – yet the wall-map instinct is to file the continent as a single mid-sized market. Misjudge the size and everything downstream is misjudged with it: flight times, freight legs, the wisdom of running 54 countries from one regional office. Shrink the map, and the budget shrinks with it.

> "Africa's 54 states together cover some 29.7 million square kilometres of land – roughly a fifth of the planet's land surface.

The African Union now backs the "Correct the Map" campaign, which urges a switch to the equal-area Equal Earth projection.[28] In September 2026 the United Nations General Assembly followed suit, voting 164 to 1, with six abstentions, for a non-binding resolution that encourages governments, schools, international organisations and technology companies to use Equal Earth and other equal-area maps. Only the United States voted against.[29] Moky Makura, executive director of the advocacy group Africa No Filter, puts the case more bluntly: "The current size of the map of Africa is wrong. It's the world's longest misinformation and disinformation campaign, and it just simply has to stop."[30]

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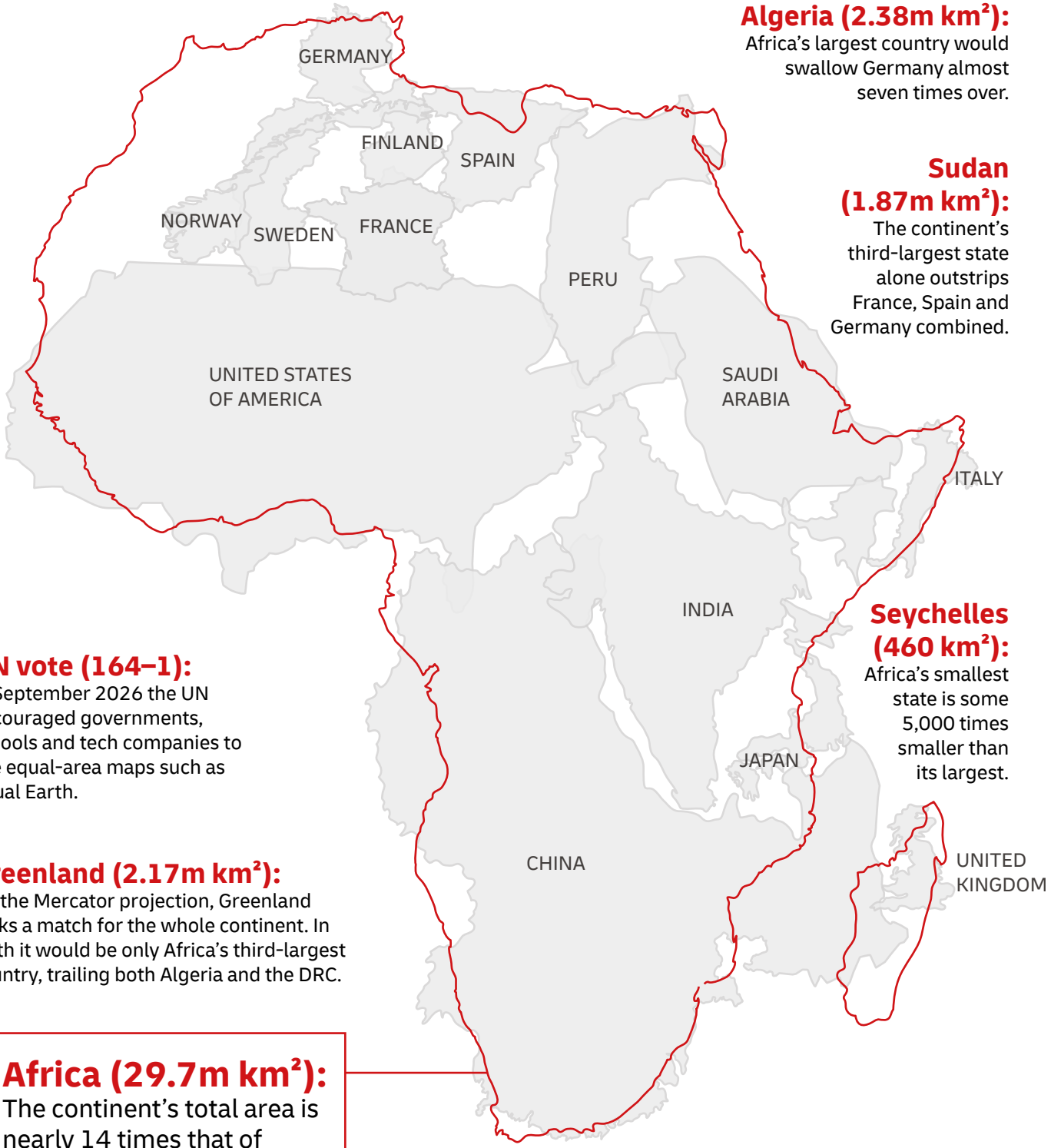
[21] Snyder, J. P. (1987). *Map projections: A working manual* (U.S. Geological Survey Professional Paper 1395). U.S. Government Printing Office.
[22] Monmonier, M. (2018). *How to lie with maps* (3rd ed.). University of Chicago Press.
[23] Statistics Greenland. (2025). *Greenland in figures 2025*. Statistics Greenland; World Bank. (2025c). *World development indicators: Land area*. World Bank.
[24] Krause, K. (2010). *The true size of Africa*. Kai Krause.
[25] Harley, J. B. (1989). Deconstructing the map. *Cartographica, 26*(2), 1–20.
[26] Monmonier, M. (2004). *Rhumb lines and map wars: A social history of the Mercator projection*. University of Chicago Press.
[27] World Bank (2025c), land area series.
[28] African Union. (2026, June 12). *AU leaders adopt historic initiative to correct the Map of Africa, advancing implementation and global repositioning of the continent*. African Union Commission.
[29] United Nations (2026b).
[30] Reuters. (2025a, August 14). African Union urges adoption of world map showing continent's true size. *Reuters*.



Algeria (2.38m km²):
Africa's largest country would swallow Germany almost seven times over.

Sudan (1.87m km²):
The continent's third-largest state alone outstrips France, Spain and Germany combined.

Seychelles (460 km²):
Africa's smallest state is some 5,000 times smaller than its largest.

UN vote (164–1):
In September 2026 the UN encouraged governments, schools and tech companies to use equal-area maps such as Equal Earth.

Greenland (2.17m km²):
On the Mercator projection, Greenland looks a match for the whole continent. In truth it would be only Africa's third-largest country, trailing both Algeria and the DRC.

Africa (29.7m km²):
The continent's total area is nearly 14 times that of Greenland, the landmass Mercator draws as its approximate equal.

Source: Zafra, M., & Kiyada, S. (2025, September 3). The true size of Africa. Reuters.

2 THE YOUTHFUL CONTINENT

YOUTH DIVIDEND OR DEMOGRAPHIC DISASTER?

The first map corrected the continent's size. The six that follow measure what fills it: people, beginning with how old they are. The median age across African nations averages approximately 20 years. Globally, the figure is just over 30. Europe's, at above 42, is more than double Africa's.[31]

The Central African Republic, with a median age of 14.3, is the youngest country on Earth, with Niger (15.3) next. At the other extreme, Mauritius (36.9) and Seychelles (33.7) already have the demography of southern Europe a generation ago.

Youth is potential energy. The economics of the "demographic dividend" are well established: when fertility falls and the bulge of young people flows into working age, the ratio of workers to dependants improves and growth can accelerate rapidly. By one influential estimate, such dynamics accounted for as much as a third of East Asia's growth miracle.[32]

Africa will supply the great majority of the net growth in the world's working-age population between now and mid-century. On current projections, roughly a quarter of all humanity will be African by 2050.[33]

However, the dividend is conditional, and not automatic. It pays out only where education systems and labour markets convert young people into productive workers. Where they do not, the same bulge becomes a liability – what World Bank economists have bluntly framed as the choice between "dividend or disaster".[34]

> “ On current projections, roughly a quarter of all humanity will be African by 2050.

The stakes are global: "By 2030," IMF economists calculate, "half of the increase in the global labour force will come from sub-Saharan Africa, requiring the creation of up to 15 million new jobs annually."[35]

> “ By 2030, half of the increase in the global labour force will come from sub-Saharan Africa, requiring the creation of up to 15 million new jobs annually.

The window is also temporary. It opens when fertility falls, shrinking the child-dependency burden, while the earlier baby boom is still working, and closes again as that generation retires. Tunisia, with a median age of 32.1, is already nearing the end of its dividend years; Egypt is only now entering them; much of the Sahel will wait decades for the window to open.[36] Timing, in demography, is everything.

The 23-year spread between the Central African Republic and Mauritius is the practical point. It implies markedly different planning horizons for schools, housing, savings products and consumer markets – and it is one more reason a single "African" strategy is a contradiction in terms.

For firms, median age is quietly one of the most useful numbers on any of these maps: it predicts the shape of demand – school fees or pensions, first phones or replacement cycles – a decade before income statistics catch up. A continent whose median citizen is barely out of their teens is not a smaller version of Europe's market; it is a structurally very different one.

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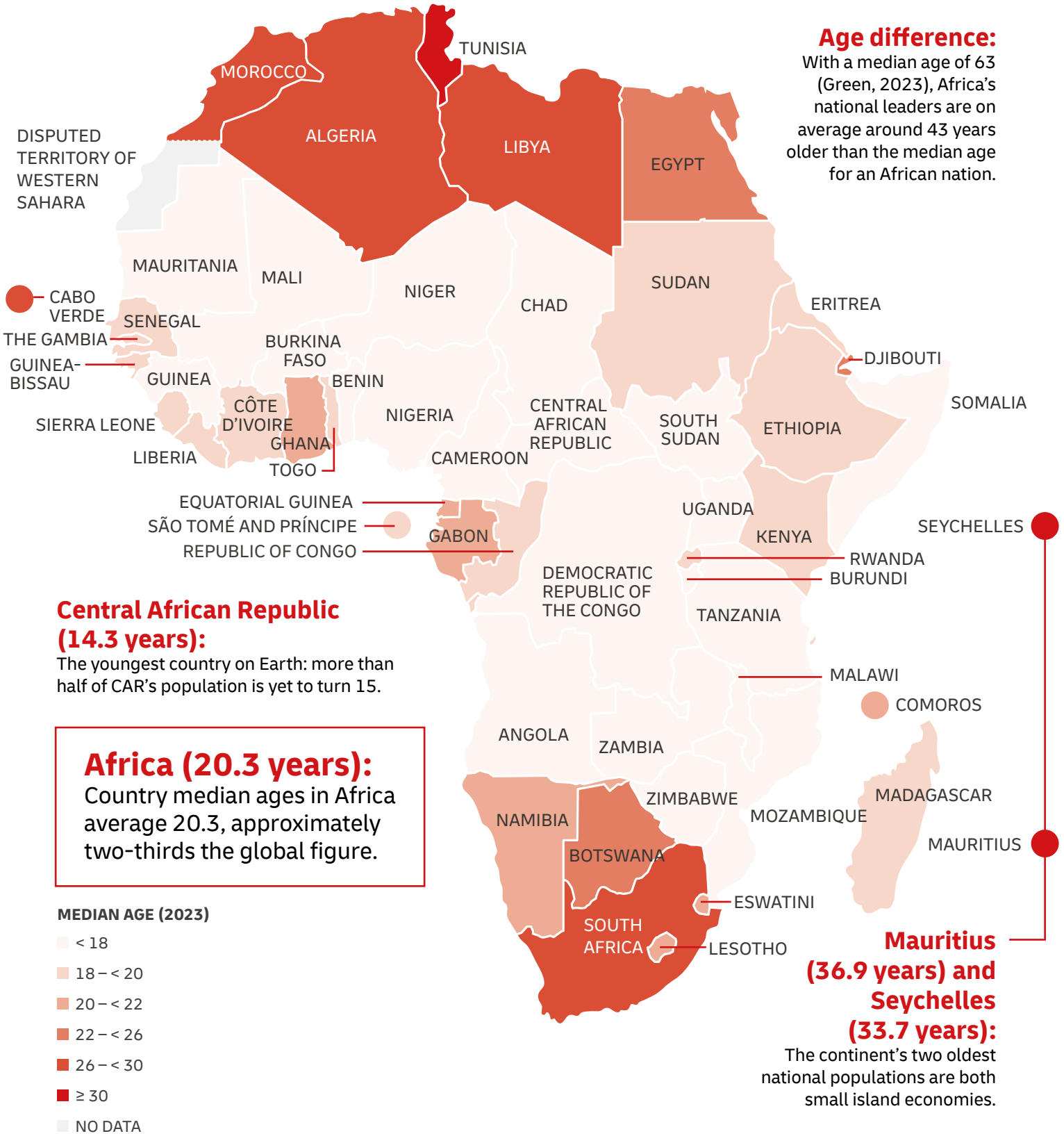
[31] UN DESA (2024a).
[32] Bloom, D. E., & Williamson, J. G. (1998). Demographic transitions and economic miracles in emerging Asia. *The World Bank Economic Review, 12*(3), 419–455.
[33] UN DESA (2024a).
[34] Canning, D., Raja, S., & Yazbeck, A. S. (2015). *Africa's demographic transition: Dividend or disaster?* World Bank.
[35] Chen, W., Khandelwal, K., Laws, A., Saliba, F., Sever, C., & Tucker, L. (2024). *The clock is ticking: Meeting sub-Saharan Africa's urgent job creation challenge* (Analytical note). International Monetary Fund.
[36] World Bank. (2025c). *World development indicators: Age dependency ratio*. World Bank.

Age difference:

With a median age of 63 (Green, 2023), Africa's national leaders are on average around 43 years older than the median age for an African nation.



Central African Republic (14.3 years):

The youngest country on Earth: more than half of CAR's population is yet to turn 15.

Africa (20.3 years):

Country median ages in Africa average 20.3, approximately two-thirds the global figure.

MEDIAN AGE (2023)

- < 18
- 18 – < 20
- 20 – < 22
- 22 – < 26
- 26 – < 30
- ≥ 30
- NO DATA

Mauritius (36.9 years) and Seychelles (33.7 years):

The continent's two oldest national populations are both small island economies.

Source: United Nations, Department of Economic and Social Affairs, Population Division. (2024). *World population prospects* 2024 (Online ed., File GEN/01/REV1: Demographic indicators). United Nations.

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

3 A TALE OF FEWER BIRTHS

HOW FAST WILL AFRICAN FAMILIES SHRINK?

A continent's median age is set by its birth rate, and Africa's is falling. In the mid-1960s, a typical woman in Kenya could expect eight live births in her child-bearing years. Today that number has dropped by more than half. Urbanisation, the spread of health knowledge and changing roles for women are all at work, and fertility foretells population growth.[37]

"The fertility decline started later, and the pace of fertility decline has been markedly slower in sub-Saharan Africa than in Asia, Latin America, and the Caribbean", according to United Nations population experts, and "both men and women in sub-Saharan Africa continue to express a preference for larger families".[38]

Fertility on the continent is a case of two Africas, or even three. Countries with large rural populations still see a robust tally of births, while others are approaching the replacement level of 2.1 births per woman, at which a population eventually stops growing. Morocco and South Africa, each at 2.2 births in 2024, are nearing this threshold.

The 'third Africa' is a social stratum that crosses borders: the global African living in a major city. Studies of women in Nigeria and Kenya show that educated urban professionals are delaying marriage and first births while they establish careers and financial foundations.

> "The fertility decline started later, and the pace of fertility decline has been markedly slower in sub-Saharan Africa than in Asia, Latin America, and the Caribbean

The highest fertility runs from the Horn of Africa through the Sahel, the semi-arid belt between North Africa and the savannas to the south. Chad had Africa's highest fertility rate in 2024 at 6.03 births, followed closely by Somalia (6.01) and Niger (5.94).[39]

> "...educated women also shift the fertility preferences and contraceptive awareness of their less educated neighbours, leading to fewer births across the community.

Nigeria is the most populous country in the world with a fertility rate of four births or more.[40]

Demographic and health surveys in Ghana show that the number of children women prefer – the "wanted fertility rate" – dropped to 3.4 in 2022 from 5.3 in 1988. In urban areas, 57% of women with four children said they wanted no more; most rural women reached that point only after five. About 60% of Ghanaian women with more than a secondary education said three children were enough.[41]

A 2024 study led by Saroja Adhikari suggests that educated women also shift the fertility preferences and contraceptive awareness of their less educated neighbours, leading to fewer births across the community.[42]

Moving from village to city changes the economics of children. In the countryside, children grow up helping on the family farm and add to what it produces; in a city flat, each child adds school fees, food, housing and transport to the household's costs. That transformation, playing out across Africa every day, reshapes fertility preferences.

Information, too, now travels faster than a generation ago, as mobile phones and the internet reshape what people know and how women and men see their roles.[43] Births are one side of the demographic ledger. The next map turns to the other: how many children survive.

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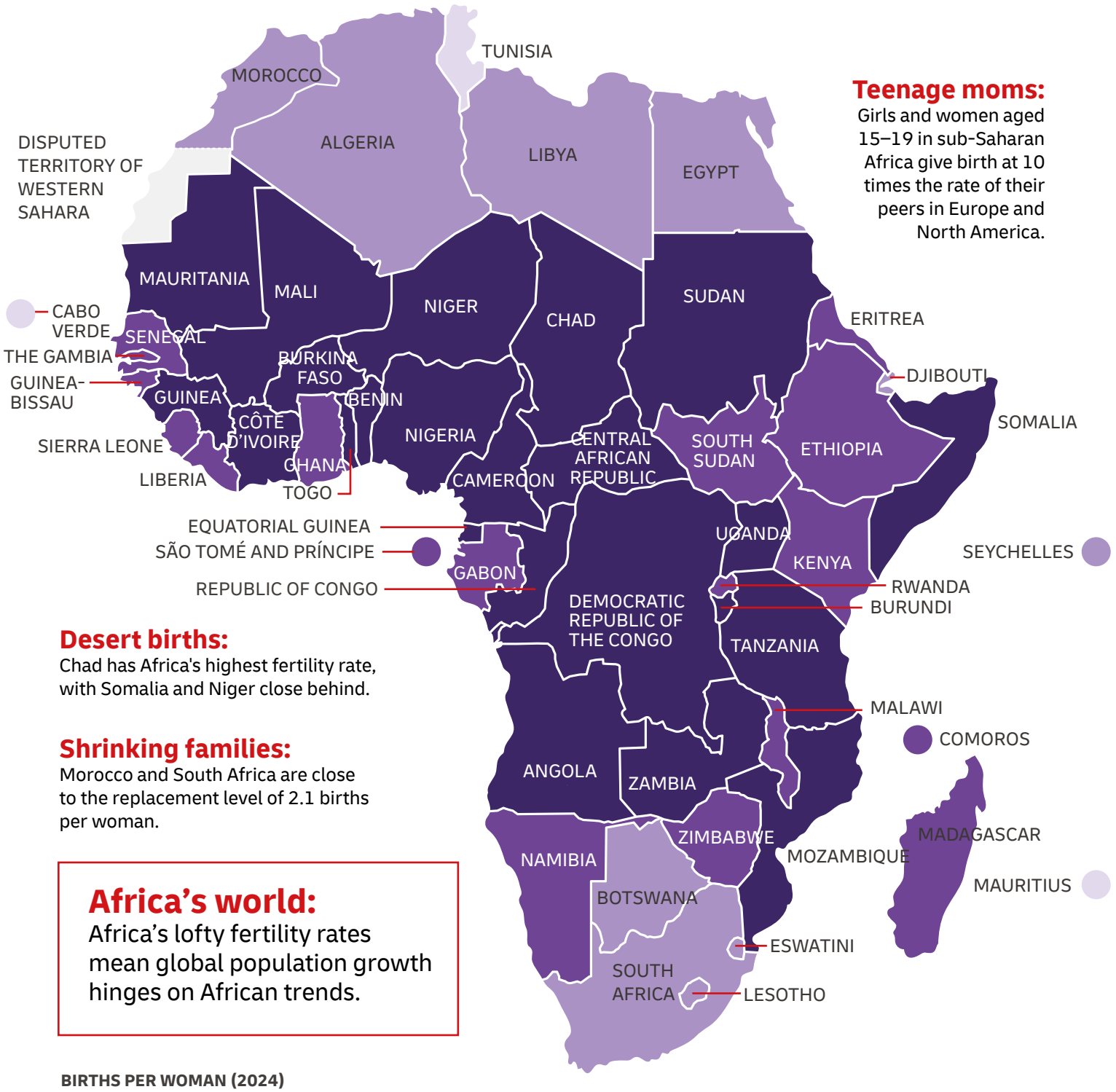
[37] UN DESA (2024a).
[38] UN DESA. (2025a). *World fertility 2024* (Box 4.1: Fertility transition: Is sub-Saharan Africa exceptional?). United Nations.
[39] UN DESA (2025a), Table A2: Total fertility and adolescent birth rates.
[40] UN DESA (2025a), Table A2.
[41] Ghana Statistical Service & ICF. (2024). *Ghana demographic and health survey 2022*. GSS and ICF.
[42] Adhikari, S., Lutz, W., & Kebede, E. (2024). Forecasting Africa's fertility decline by female education groups. *Proceedings of the National Academy of Sciences*, 4 November 2024.
[43] International Telecommunication Union. (2025). *Regional ICT data, 2005–2025*. ITU.



Teenage moms:

Girls and women aged 15–19 in sub-Saharan Africa give birth at 10 times the rate of their peers in Europe and North America.

Desert births:

Chad has Africa's highest fertility rate, with Somalia and Niger close behind.

Shrinking families:

Morocco and South Africa are close to the replacement level of 2.1 births per woman.

Africa's world:

Africa's lofty fertility rates mean global population growth hinges on African trends.

BIRTHS PER WOMAN (2024)

- ≥ 4
- 3 – < 4
- 2.1 – < 3 (2.1 = REPLACEMENT LEVEL)
- < 2.1 (BELOW REPLACEMENT)
- NO DATA

Source: United Nations, Department of Economic and Social Affairs, Population Division. (2024). World population prospects 2024: Online edition [Data set]. United Nations.

4 LONGER LIVES FOR CHILDREN

WHAT WILL IT TAKE TO CATCH UP WITH THE WORLD?

The end of the Cold War in the early 1990s expanded freedom and unleashed entrepreneurial energy, bringing the world a technology boom, soaring global trade and generational wealth. Children were winners, too.

Since 1990, the mortality rate of children under five has fallen across the globe, according to United Nations health experts, reflecting dramatic gains in basic healthcare. African children claimed a share of this windfall, with annual deaths declining 26% in sub-Saharan Africa from 1990 to 2024.[44]

This map plots deaths before age five per 1,000 live births in 2024. Under-five mortality serves as a proxy for the quality and availability of primary healthcare, because causes of death at this age are largely preventable, ranging from malaria to water-borne diseases. A country with an improving healthcare system, especially for pregnant women and newborns, is likely to see fewer child deaths.

Yet as more children survive their first five years around the world, Africa is still pushing to lengthen the lives of its youngest. In 1990, sub-Saharan Africa recorded less than one in three child deaths in the world; by 2024, its share had grown to almost three in five. The denominator shrank faster than Africa's numerator: in those years, South Asia, East Asia and Latin America made huge gains against child mortality, slashing the global tally of yearly deaths by more than 60%.[45]

> “Since 1990, the mortality rate of children under five has fallen across the globe, according to United Nations health experts, reflecting dramatic gains in basic healthcare.

Why does Africa lag? Researchers studying Ethiopia, the continent's most populous country after Nigeria, from 1970 to 2020 found that food price volatility was a significant determinant of child survival. To break this deadly link, argue Abule Mehare, Shemelis Kebede Hundie and Lamessa Abdisa, Ethiopia's large safety-net programme should shield vulnerable households when staple prices rise, and poor households need subsidised community health insurance to cut out-of-pocket medical costs.[46]

> “A malaria vaccine introduced in Ghana, Kenya, and Malawi between 2019 and 2023 prevented around one in eight deaths among young children, a research evaluation concluded.

Tackling the core problem might help most, they suggest: policies that curb food price inflation could lead directly to healthier, longer-living children.

Medical science may offer an assist. A malaria vaccine introduced in Ghana, Kenya, and Malawi between 2019 and 2023 prevented around one in eight deaths among young children, a research evaluation concluded. “This is very solid evidence of the potential for malaria vaccines to change the trajectory of child mortality in Africa,” said Dr Kate O'Brien, immunisation and vaccines director for the World Health Organization.[47] Survival is the other half of the demographic equation. Together with fertility, it sets how fast the continent fills – and the next map asks why, for most of its history, it did not.

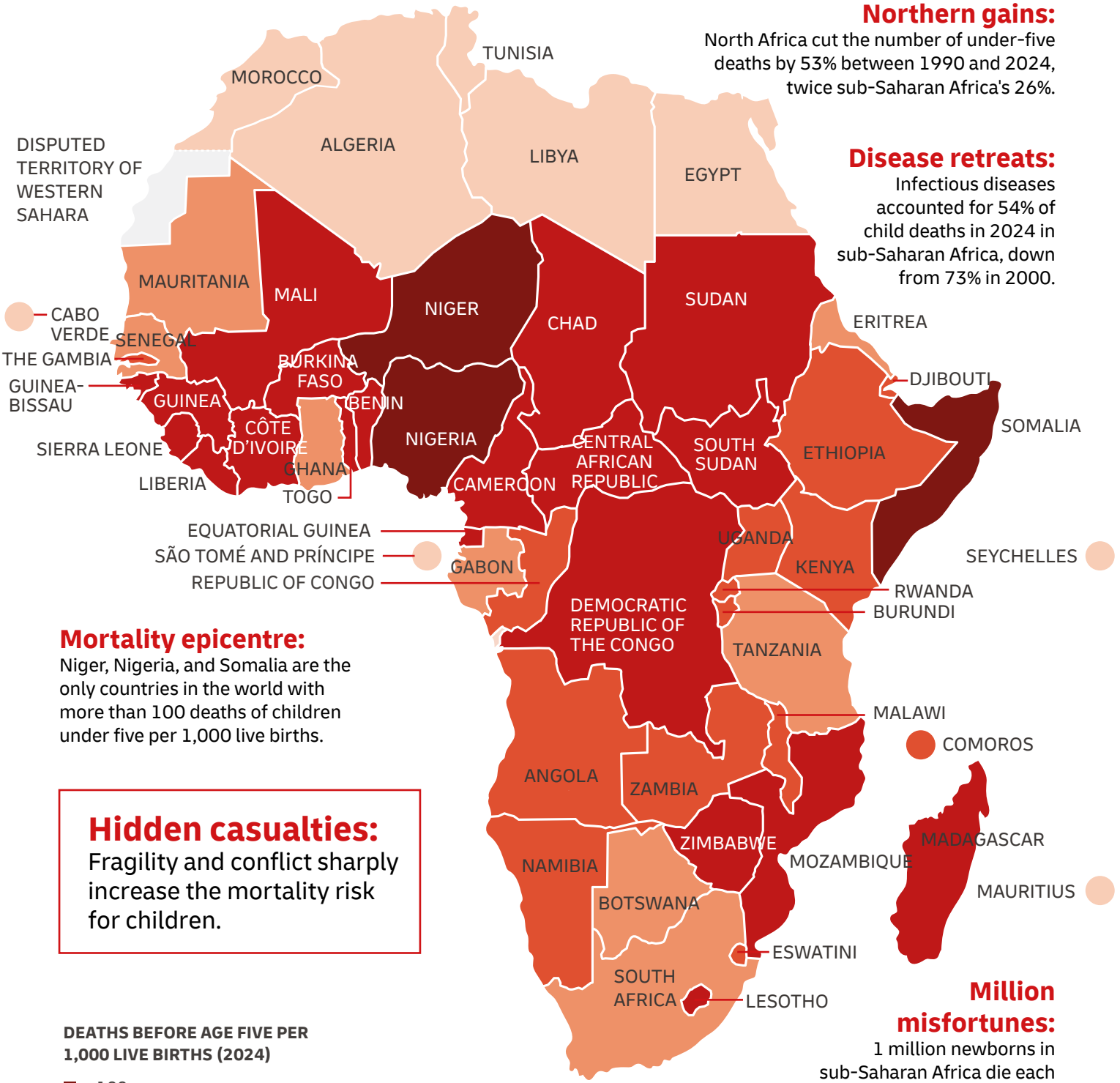
[44] United Nations Inter-agency Group for Child Mortality Estimation. (2026). *Levels & trends in child mortality: Report 2025*. United Nations Children's Fund.
[45] United Nations Inter-agency Group for Child Mortality Estimation (2026), Table 1: Levels and trends in the number of deaths of children under age 5, by Sustainable Development Goal region, 1990–2024.
[46] Mehare, A., Hundie, S. K., & Abdisa, L. T. (2026). The effect of food price volatility on under-5 child mortality in Ethiopia. *Agriculture & Food Security, 15*(36).
[47] World Health Organization. (2026, May 8). *New evidence confirms malaria vaccine saves child lives and will have high impact in wider rollout*. WHO.

Northern gains:

North Africa cut the number of under-five deaths by 53% between 1990 and 2024, twice sub-Saharan Africa's 26%.

Disease retreats:

Infectious diseases accounted for 54% of child deaths in 2024 in sub-Saharan Africa, down from 73% in 2000.



Mortality epicentre:

Niger, Nigeria, and Somalia are the only countries in the world with more than 100 deaths of children under five per 1,000 live births.

Hidden casualties:

Fragility and conflict sharply increase the mortality risk for children.

DEATHS BEFORE AGE FIVE PER 1,000 LIVE BIRTHS (2024)

- > 100
- 50 – 100
- 37.4 – < 50 (37.4 = GLOBAL AVERAGE)
- 25 – < 37.4 (BELOW GLOBAL AVERAGE)
- < 25 (SDG TARGET MET)
- NO DATA

Million misfortunes:

1 million newborns in sub-Saharan Africa die each year in their first 28 days of life – 38% of all deaths of children under five.

Source: United Nations Inter-agency Group for Child Mortality Estimation. (2026). Levels & trends in child mortality: Report 2025. United Nations Children's Fund.

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

5 ROOM TO GROW

WHY HAS AFRICA HAD SO FEW PEOPLE FOR SO LONG?

In 1968, Paul Ehrlich, a Stanford biologist, opened *The Population Bomb* with a warning: "The battle to feed all of humanity is over. In the 1970s, hundreds of millions of people will starve to death in spite of any crash programmes embarked upon now."[48] A decade earlier, the demographer Ansley Coale and the economist Edgar Hoover had argued that fast population growth held poor countries back.[49]

Africa's history points the other way. For most of its past, the continent had too few people. "Underpopulation dominated the history of Africa, including through the colonial era," writes Joe Studwell, the British author of How Africa Works. Between 1700 and 1850, the continent's population stayed at around 150 million. In the early 1960s, Africa had 9.6 people per square kilometre, against 55 in Asia.[50]

People living close together make almost everything cheaper. In Studwell's words, "unit costs of most activities are cut by having people more densely located": roads, power lines, schools and shops all serve more customers, and economists estimate that doubling a city's size raises productivity by roughly 3–8%.[51] Sparse populations are also harder to govern: in 1939, Studwell records, the average British district officer in Africa was responsible for an area the size of Wales.[52]

That is changing fast. Africa has about 50 people per square kilometre today, still below the world average of 62, and will pass 80 by 2050. The spread runs from 3.6 in Namibia to 625 in Mauritius.[53] Between 1960 and 2020, Nigeria grew from 45 million people to 213 million and Lagos from 700,000 to 14 million; Kigali, Rwanda's capital, grew from a town of 6,000 into a city of more than a million.[54]

However, more people do not automatically mean more prosperity. African cities are spread thin, housing 1,000 to 4,000 people per square kilometre against 20,000 to 40,000 in Mumbai or Shanghai, and 60% of their residents live in slums.[55] "African cities do not need to be this dense," Studwell writes, "but they need to be much denser than they are."

> "Africa has about 50 people per square kilometre today, still below the world average of 62, and will pass 80 by 2050.

The famous demographic dividend is also further off than many hope. Africa today has 1.3 people of working age for every dependant; demographers link a dividend with 1.7, which current forecasts put after 2050. A slow fall in population growth, Studwell warns, would make the dividend "later, lower, and shorter".[56]

Forecasts can change: countries that expanded family planning faster, such as Ethiopia, have seen population growth fall further.[57] Studwell's verdict is optimistic: "The demographic certainty is that Africa is finally in the developmental game." After centuries of too few people, the challenge now is to build cities that make the most of the people Africa has.[58] Where, exactly, those people are is the question the next map answers.

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[48] Ehrlich, P. R. (1968). *The population bomb*. Sierra Club/Ballantine Books, Prologue (first-edition wording).
[49] Coale, A. J., & Hoover, E. M. (1958). *Population growth and economic development in low-income countries: A case study of India's prospects*. Princeton University Press; as summarised in Das Gupta, M., Bongaarts, J., & Cleland, J. (2011). *Population, poverty, and sustainable development: A review of the evidence* (Policy Research Working Paper No. 5719). World Bank.
[50] Studwell, J. (2026). *How Africa works: Success and failure on the world's last developmental frontier*. Profile Books, pp. 37, 39.
[51] Studwell (2026), p. 41; Rosenthal, S. S., & Strange, W. C. (2004). Evidence on the nature and sources of agglomeration economies. In J. V. Henderson & J.-F. Thisse (Eds.), *Handbook of regional and urban economics* (Vol. 4, pp. 2119–2171). Elsevier, p. 2133.
[52] Studwell (2026), pp. 33–34.
[53] World Bank. (2026). *Population density* and *Population, total*. World Bank; UN DESA (2024a).
[54] Studwell (2026), p. 40.
[55] Lall, S. V., Henderson, J. V., & Venables, A. J. (2017). *Africa's cities: Opening doors to the world*. World Bank.
[56] Studwell (2026), pp. 43–44.
[57] Studwell (2026), p. 45.
[58] Studwell (2026), p. 46.

1.3 against 1.7:

Africa's ratio of working people to dependants today, against the level demographers associate with a demographic dividend.

Rwanda (566 people per km²):

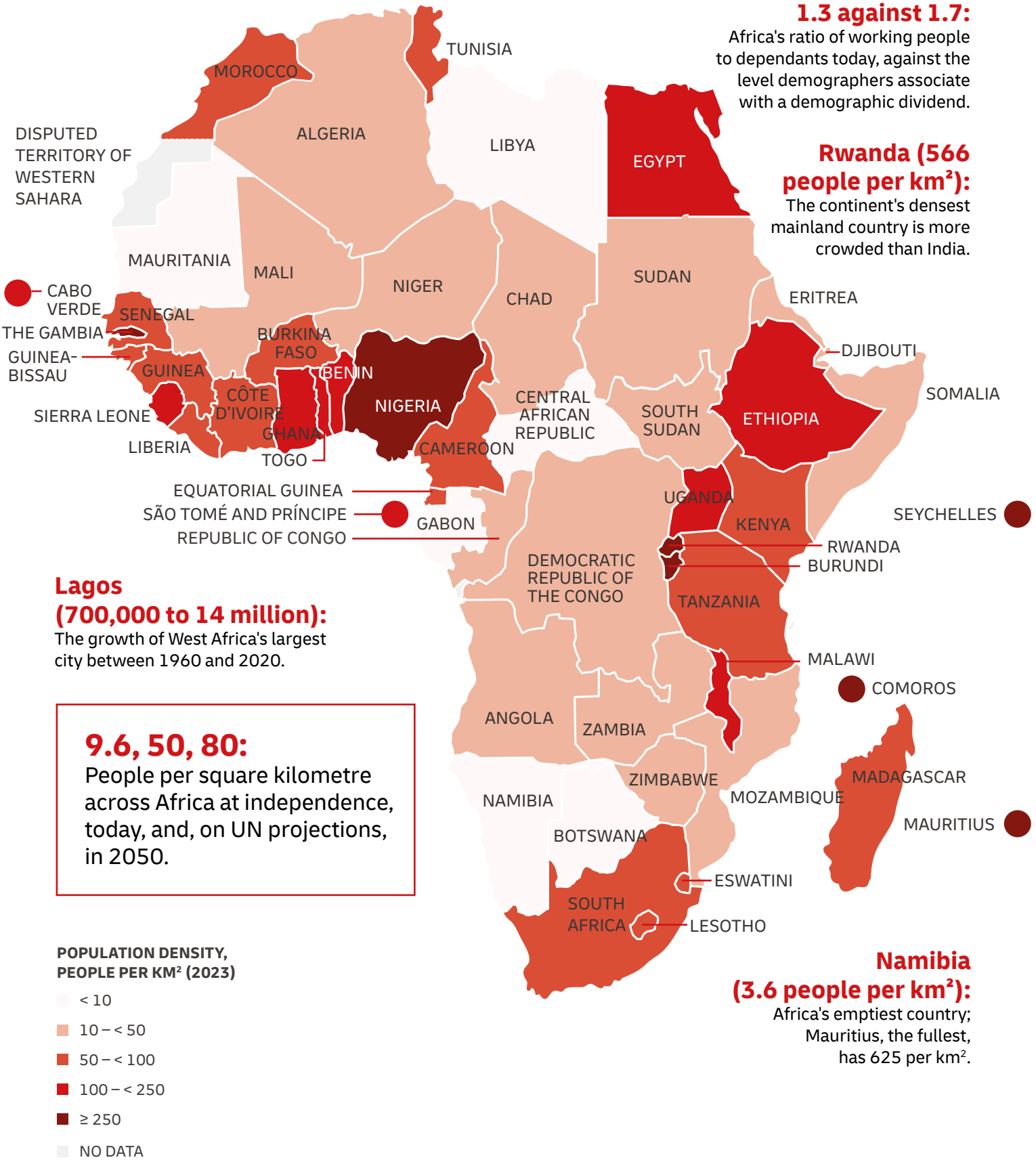
The continent's densest mainland country is more crowded than India.

Lagos (700,000 to 14 million):

The growth of West Africa's largest city between 1960 and 2020.

9.6, 50, 80:

People per square kilometre across Africa at independence, today, and, on UN projections, in 2050.



POPULATION DENSITY, PEOPLE PER KM² (2023)

- < 10
- 10 – < 50
- 50 – < 100
- 100 – < 250
- ≥ 250
- NO DATA

Namibia (3.6 people per km²):

Africa's emptiest country; Mauritius, the fullest, has 625 per km².

Source: World Bank. (2026). *Population density (people per sq. km of land area)* (EN.POP.DNST) [Data set]. *World Development Indicators.*

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

6 CLUSTERED CONTINENT

WHERE IS AFRICA?

The previous map measured density country by country. This one asks where, within those borders, people actually live. If Africa is where Africans are, then the continent resembles a sparse archipelago of densely populated islands, divided by almost empty expanses teeming with untapped potential.

The national figures already show a spread of more than a hundredfold, from Namibia's 3.6 people per square kilometre, Libya's 4.2 and Botswana's 4.4 to Burundi's 533, Rwanda's 566 and Mauritius's 625.[59] Nigeria, at roughly 250, combines both stories: vast, lightly peopled interiors and, around Lagos, one of the fastest-growing hubs on earth.

Density matters for prosperity. Agglomeration economics documents the returns that come when people live and work closer together: trade becomes quicker, ideas spread faster, and services from plumbing to transport achieve economies of scale.

Alfred Marshall noticed as early as 1890 that where firms and workers cluster, "the mysteries of the trade become no mysteries; but are as it were in the air".[60] Modern agglomeration economics identifies three mechanisms – sharing, matching, and learning – through which density raises output per person.[61] The effect is measurable and consistent. Ciccone and Hall, for instance, find that doubling a locality's employment density lifts labour productivity by around 6%, and the wider literature places the gain between roughly 3% and 8%.[62]

For Africa, the implication is double-edged, because few continents distribute their people so unevenly. The Nile Valley, the Gulf of Guinea's urban belt, the Lake Victoria basin, and the Ethiopian Highlands concentrate people at high density, while vast interiors remain nearly empty.

This is why country-level density, for all its uses, tells only part of the story. The current map, drawn by Duncan Smith of University College London, uses the European Commission's Global Human Settlement Layer, which distributes census counts across a satellite-mapped grid of built-up area, revealing where Africans actually live, rather than where borders happen to fall.[63,64]

Where the crowding exists, the raw material of agglomeration is already in place – but density pays only when it is connected. The World Bank has found African cities "crowded, disconnected and costly", with households paying up to 31% more for goods and services than in other developing countries at similar income levels, because people have piled up faster than the roads, power and housing that turn proximity into productivity.[65] And the crowds are still gathering: the OECD projects that "Africa's urban population will double, increasing from 700 million to 1.4 billion by 2050".[66]

> "Modern agglomeration economics identifies three mechanisms – sharing, matching, and learning – through which density raises output per person.

The task is not to spread Africa's people more evenly; it is to equip its natural concentrations to deliver on their potential. Increasingly, those concentrations are cities, the subject of the next map.

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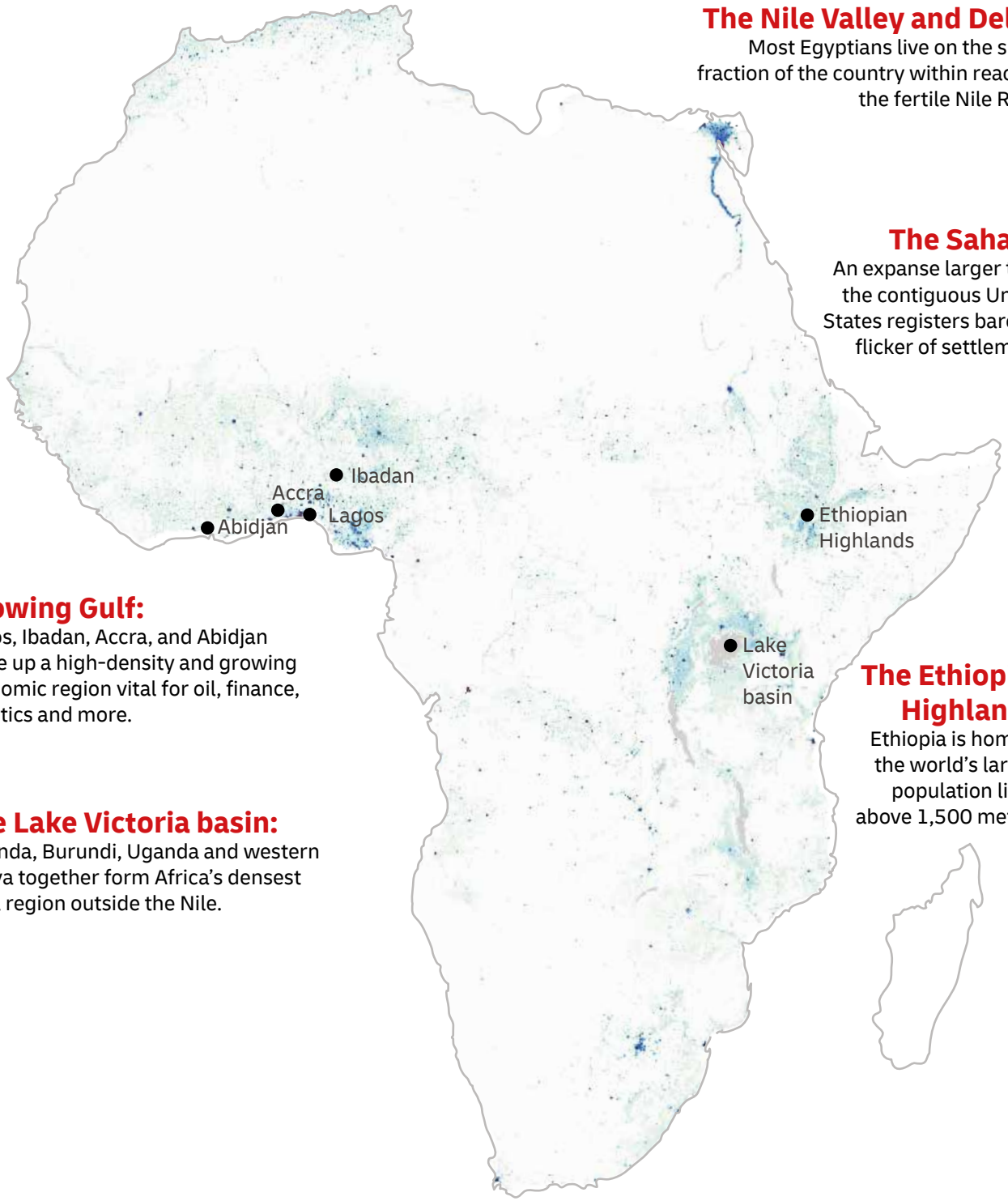
[59] World Bank. (2025c). *World development indicators: Population density*. World Bank.
[60] Marshall, A. (1890). *Principles of economics*. Macmillan.
[61] Duranton, G., & Puga, D. (2004). Micro-foundations of urban agglomeration economies. In J. V. Henderson & J.-F. Thisse (Eds.), *Handbook of regional and urban economics* (Vol. 4, pp. 2063–2117). Elsevier.
[62] Ciccone, A., & Hall, R. E. (1996). Productivity and the density of economic activity. *American Economic Review, 86*(1), 54–70; Rosenthal & Strange (2004).
[63] Schiavina, M., Freire, S., Carioli, A., & MacManus, K. (2023). *GHS-POP R2023A – GHS population grid multitemporal (1975–2030)*. European Commission, Joint Research Centre.
[64] Smith, D. (2023, May 21). *World population density map*. CityGeographics.
[65] Lall et al. (2017).
[66] OECD/SWAC et al. (2025).

The Nile Valley and Delta:

Most Egyptians live on the small fraction of the country within reach of the fertile Nile River.

The Sahara:

An expanse larger than the contiguous United States registers barely a flicker of settlement.



Growing Gulf:

Lagos, Ibadan, Accra, and Abidjan make up a high-density and growing economic region vital for oil, finance, logistics and more.

The Ethiopian Highlands:

Ethiopia is home to the world's largest population living above 1,500 metres.

The Lake Victoria basin:

Rwanda, Burundi, Uganda and western Kenya together form Africa's densest rural region outside the Nile.

PEOPLE PER KM² (2023)

< 20 NOT SHADED

20 – < 100	400 – < 1k	2k – < 3.5k	5.5k – < 7.5k	10k – < 12k	16k – < 22k	30k – < 50k	100k – < 200k
100 – < 400	1k – < 2k	3.5k – < 5.5k	7.5k – < 10k	12k – < 16k	22k – < 30k	50k – < 100k	≥ 200k

Source: Smith, D. (2023, May 21). World population density map [Interactive map]. CityGeographics. Data: European Commission, Joint Research Centre, Global Human Settlement Layer (2023).

7 YOUNG, CROWDED, AND CLIMBING

CAN AFRICA'S CROWDED CITIES TURN PEOPLE INTO PRODUCTIVITY?

Imagine a league of 1,000 clubs in which every match is played on five pitches at once. That, roughly, is Oxford Economics' Global Cities Index, which scores the world's largest urban economies on economics, human capital, quality of life, environment, and governance.[67]

Africa, home to almost a fifth of humanity,[68] fields 113 of the 1,000, and not one of them makes the top 250. Cairo leads the continent at 255th place; Accra (302nd), Port Louis (305th) and Nairobi (327th) follow. Only 15 African cities sit in the top half of the table and 19 are in the bottom 100. The world's last four places all belong to northern Nigeria: Zaria, Kano, Maiduguri, and Sokoto.[69]

Yet the direction of travel is up: 97 of the 113 rose this year, and the reason is people. Human capital is Africa's strongest category. Johannesburg and Nairobi rank 25th and 26th in the world, Kampala 41st, Cairo 42nd and Lagos 50th, on the strength of young workforces and deep education ecosystems.[70] Oxford Economics expects Africa's major cities to add 213 million residents over the next 25 years, with Cairo and Kinshasa becoming the fourth- and fifth-most-populous cities on Earth by 2050.[71]

The United Nations agrees: four of the seven countries that will supply most of the world's new city dwellers to 2050 are African – Nigeria, the Democratic Republic of Congo, Egypt and Ethiopia.[72]

The drag is everything that happens once people arrive. For quality of life, 62 African cities, more than half, rank in the world's bottom 100 and the median African city sits in 917th place; for governance the median is 846th. Johannesburg, 25th for human capital, is 964th for quality of life.[73]

The Economist Intelligence Unit concurs, placing Harare, Lagos, Algiers, and Tripoli among the ten least liveable of 173 cities in 2026.[74] Growth is also spreading faster than it is deepening: built-up urban land is expanding by 3.2% a year against 2.3% for urban population, and 98 of the continent's 100 fastest-growing agglomerations are inland.[75]

Economists call this urbanisation without industrialisation: resource exporters tend to grow "consumption cities" of non-tradable services rather than "production cities" of manufacturing, and the former fare worse on several welfare measures.[76]

> "Oxford Economics expects Africa's major cities to add 213 million residents over the next 25 years, with Cairo and Kinshasa becoming the fourth- and fifth-most-populous cities on Earth by 2050.

The outliers point the way. Port Louis pairs Africa's best governance score (121st) with a top-100 environment ranking; Windhoek and Praia make the global top 60 for environment; Cairo, Nairobi, and Johannesburg are the only African cities in the top 300 for economics.[77] Oxford Economics' five "Cities to Watch" – Accra, Cairo, Dakar, Luanda, and Nairobi – are expected to generate a third of the GDP growth of Africa's indexed cities over 25 years.[78]

By 2050 the continent is set to have 17 agglomerations of more than 10 million people.[79] Africa's cities have the people; what they need now is productivity.

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67 Oxford Economics. (2026). *Global Cities Index 2026*. Oxford Economics.
68 UN DESA. (2024b). *World population prospects 2024: Summary of results*. United Nations.
69 Oxford Economics (2026).
70 Becker, M. (2026, October 13). *The top African cities in 2026*. Oxford Economics.
71 Becker (2026).
72 UN DESA. (2025b). *World urbanization prospects 2025: Summary of results*. United Nations.
73 Oxford Economics (2026); calculated from the index data set.
74 Economist Intelligence Unit. (2026). *The global liveability index 2026*. The Economist Group.
75 OECD/SWAC et al. (2025).
76 Gollin, D., Jedwab, R., & Vollrath, D. (2016). Urbanization with and without industrialization. *Journal of Economic Growth, 21*(1), 35–70.
77 Oxford Economics (2026); calculated from the index data set.
78 Becker (2026).
79 OECD/SWAC et al. (2025).

Nowhere near the top:

No African city ranks in the global top 250; Cairo, at 255th, leads the continent.

Climbing:

Ninety-seven of Africa's 113 indexed cities moved up the rankings this year.

People power:

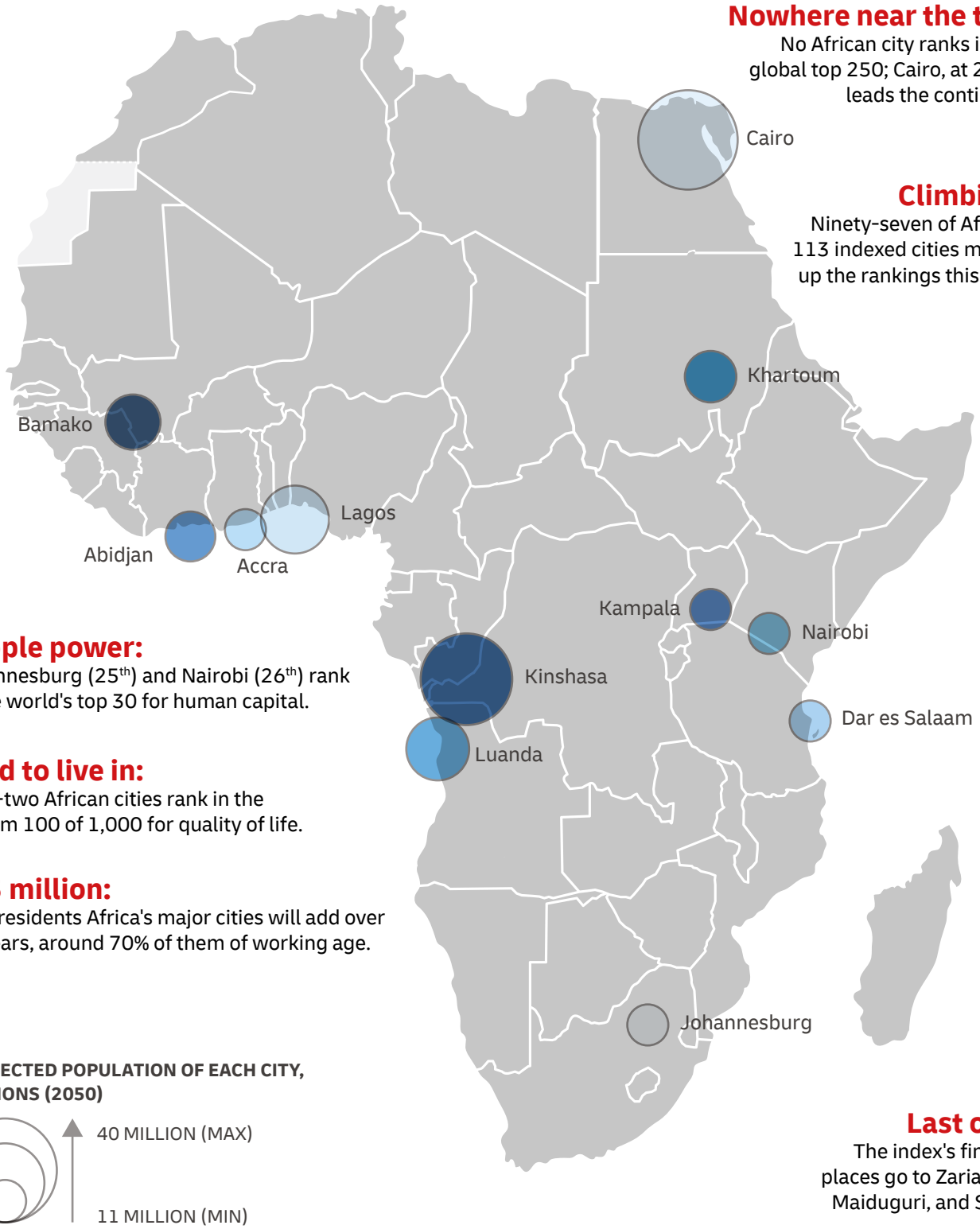
Johannesburg (25th) and Nairobi (26th) rank in the world's top 30 for human capital.

Hard to live in:

Sixty-two African cities rank in the bottom 100 of 1,000 for quality of life.

213 million:

New residents Africa's major cities will add over 25 years, around 70% of them of working age.



PROJECTED POPULATION OF EACH CITY, MILLIONS (2050)

Last of all:

The index's final four places go to Zaria, Kano, Maiduguri, and Sokoto.

PROJECTED AVERAGE ANNUAL POPULATION GROWTH OF EACH CITY, % (2025–2050)



Source: Oxford Economics. (2026). *Global Cities Index 2026.*

8 DEVELOPING DIFFERENTLY

WHERE WOULD YOU CHOOSE TO BE BORN?

The philosopher John Rawls famously asked what arrangements a person would choose for society, if they had to decide from an "original position", behind a "veil of ignorance" about the place they would come to occupy.[80] Adapt the experiment to geography and ask: on which continent would you choose to be born, not knowing who you would be born as? There are many reasons one might select Africa. On the development numbers alone, however, the odds still favour other continents.

The Human Development Index (HDI) compresses income, schooling and lifespan into a single score, on the argument – owed ultimately to Amartya Sen – that development is the expansion of what people are able to be and do, not merely of what they earn.[81] On the most recent scores (2023), Africa spans nearly the whole scale: Seychelles (0.85) sits in the UNDP's "very high" tier, level with European Union members such as Bulgaria and Romania, with Mauritius (0.81) just behind, while South Sudan (0.39), Somalia (0.40) and the Central African Republic (0.41) anchor the bottom of the world table.[82]

Africa's uncomfortable distinction is that the great majority of the world's "low human development" countries are on this continent. The unweighted average African country score, 0.58, sits in the lower reaches of the "medium" tier, against a world average of 0.76.[83]

Directionality provides some good news. Nearly every African country now scores higher than it did in 1990, and the tier boundaries – marked directly on this map – are being crossed upward, not downward. The sobering global backdrop of the 2025 report, the slowest worldwide progress in decades, makes that upward drift more notable, and not less.[84]

Launching the report, the UNDP's then administrator, Achim Steiner, put the stakes plainly: "For decades, we have been on track to reach a very high human development world by 2030, but this deceleration signals a very real threat to global progress."[85]

The outliers teach us more than the averages. Seychelles and Mauritius demonstrate that small, well-governed states can reach rich-world human development within two generations. Equatorial Guinea demonstrates the opposite lesson: decades of reliance on oil income have lifted its income per person into Africa's top 10, yet its human development rank trails its income rank by some two dozen places, because petroleum revenue does not automatically become classrooms or clinics.[86] Money is only an ingredient of development, and not a synonym for it.

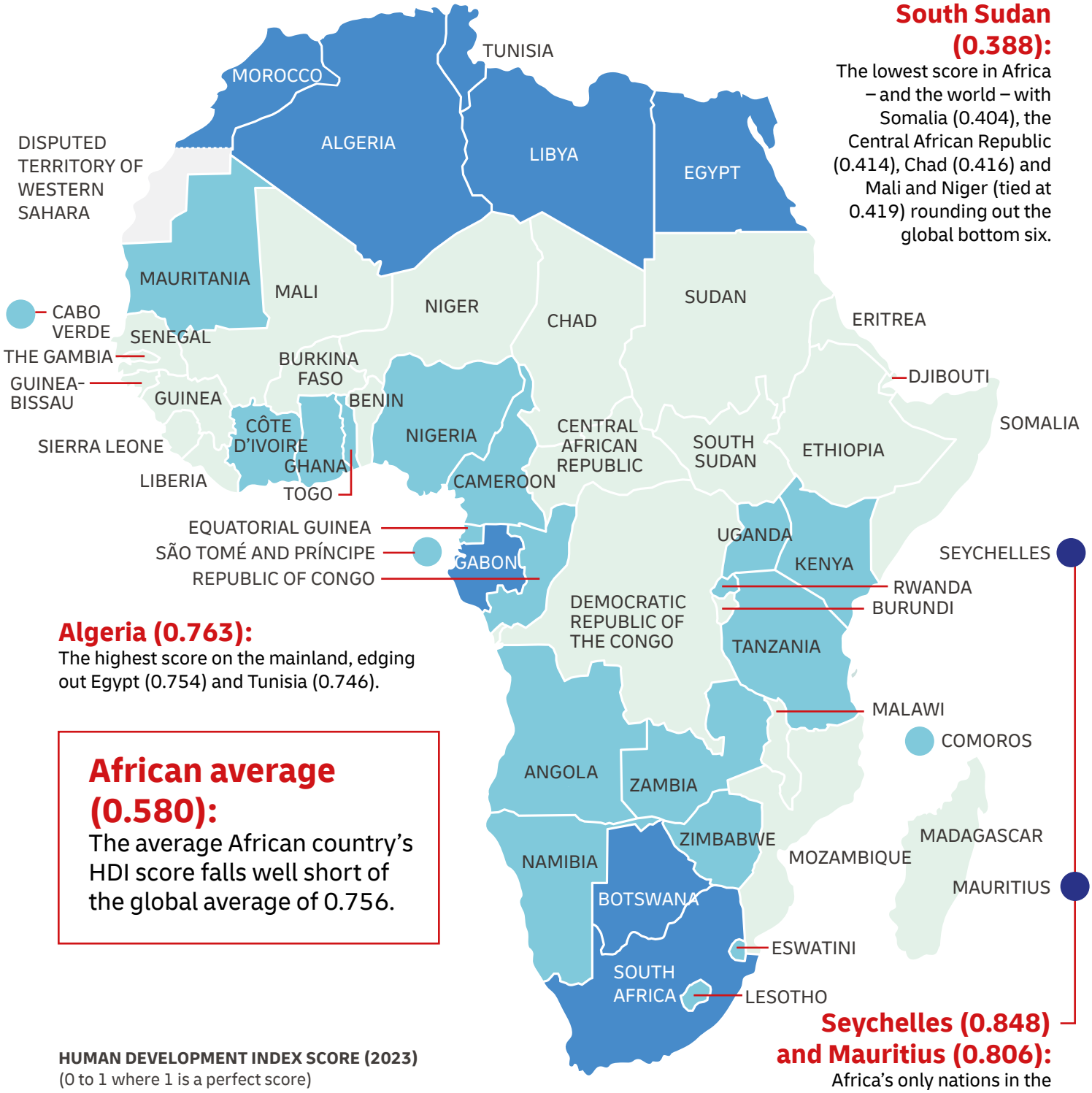
With plentiful resources, a technological revolution at hand and a youthful, growing population, Africa holds ingredients that could, in time, make the Rawlsian choice a far harder call to make.

> "Nearly every African country now scores higher than it did in 1990, and the tier boundaries – marked directly on this map – are being crossed upward, not downward.

[80] Rawls, J. (1971). *A theory of justice*. Harvard University Press.
[81] Sen, A. (1999). *Development as freedom*. Alfred A. Knopf.
[82] United Nations Development Programme (UNDP). (2025a). *Human development report 2025: A matter of choice: People and possibilities in the age of AI*. UNDP.
[83] UNDP (2025a).
[84] UNDP (2025a).
[85] UNDP. (2025b, May 6). *Human development progress slows to a 35-year low according to UN Development Programme report*. UNDP.
[86] UNDP (2025a).

South Sudan (0.388):

The lowest score in Africa – and the world – with Somalia (0.404), the Central African Republic (0.414), Chad (0.416) and Mali and Niger (tied at 0.419) rounding out the global bottom six.



Algeria (0.763):

The highest score on the mainland, edging out Egypt (0.754) and Tunisia (0.746).

African average (0.580):

The average African country's HDI score falls well short of the global average of 0.756.

HUMAN DEVELOPMENT INDEX SCORE (2023)
(0 to 1 where 1 is a perfect score)

- < 0.550 (LOW)
- 0.550 – 0.699 (MEDIUM)
- 0.700 – 0.799 (HIGH)
- ≥ 0.800 (VERY HIGH)
- NO DATA

Seychelles (0.848) and Mauritius (0.806):

Africa's only nations in the UNDP's 'very high' tier, which groups nations with scores 0.800 and higher.

Source: United Nations Development Programme. (2025). Human Development Report 2025: A matter of choice: People and possibilities in the age of AI. United Nations Development Programme.

9 THE ANATOMY OF GROWTH

HOW FAST CAN AFRICAN ECONOMIES REALLY GROW?

Economic growth is not everything. However, growth and quality of life are reliably associated. A 2026 study of 33 European countries finds that richer countries report not only greater life satisfaction but greater day-to-day emotional wellbeing, and that both rise when a country's own income rises.[87] On average, a doubling of GDP per capita corresponds to roughly a 0.9-point gain in life satisfaction and a 0.6-point gain in emotional wellbeing on a ten-point scale.

Two models of growth have come to be relied upon widely. The Harrod–Domar model (Roy Harrod[88] and Evsey Domar[89] reached almost identical conclusions independently) treats growth as something we can design. An economy's pace is its rate of saving and investment divided by the amount of capital each unit of output requires. Invest a fifth of income, where four units of capital yield one of output, and the economy grows at 5% a year.

Robert Solow's 1956 model supplies the corrective. Capital runs into diminishing returns, so accumulation alone peters out. In the long run, only productivity – the efficiency with which capital and labour are combined – sustains the pace, though poorer economies can grow faster as they catch up.[90]

The figure mapped is RMB's own estimate, the average of the two models' readings: an investment-led ceiling tempered by a productivity-minded check – a structural cruising speed and not a forecast of any given year.

The spread matters, because growth compounds. At Ethiopia's 6%, an economy doubles every 12 years. At South Africa's 1.8%, the slowest, doubling takes nearly 40 years. That the continent's most industrialised economy carries its slowest structural pulse is the map's most arresting fact – and the models explain it: savings are thin, the capital stock matures, the easy catch-up gains banked long ago. Rwanda (5%) and a quartet at 4.5% – Ghana, Kenya, Tanzania, and Zambia – occupy the opposite pole, where high investment meets the long runway of low starting incomes.

> “ An economy's pace is its rate of saving and investment divided by the amount of capital each unit of output requires.

The average pace across the 31 countries modelled is 3.6% – brisk by rich-world standards, yet it must outrun population growth of some 2.3% a year[91] before anyone feels richer, leaving a margin per person of barely a point. And decades of 'financing gap' planning taught development economics that investment does not mechanically become growth where institutions cannot make capital productive.[92]

For now, though, the machine is running above its rated speed. The African Development Bank counts 12 of the world's 20 fastest-growing economies of 2025 on this continent, with Ethiopia (9.8%), Rwanda (7.5%) and Uganda (6.4%) setting the pace.[93]

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87 Fors Connolly, F., Hjerm, M., & Gärling, T. (2026). Economic development and emotional well-being: Longitudinal evidence from 33 European countries. *Scientific Reports, 16*(1), 20568.
88 Harrod, R. F. (1939). An essay in dynamic theory. *The Economic Journal, 49*(193), 14–33.
89 Domar, E. D. (1946). Capital expansion, rate of growth, and employment. *Econometrica, 14*(2), 137–147.
90 Solow, R. M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics, 70*(1), 65–94.
91 World Bank (2025c), population growth series.
92 Easterly, W. (1999). The ghost of the financing gap: Testing the growth model used in the international financial institutions. *Journal of Development Economics, 60*(2), 423–438.
93 African Development Bank. (2026). *Africa's macroeconomic performance and outlook 2026*. African Development Bank Group.

Mind the gap:

Sub-Saharan Africa invests 24% of GDP. China invests 40%.

Beating the odds:

Ethiopia grew 9.8% in 2025 against a mapped structural pace of 6% – investment surges can outrun the models, for a while.

Twelve years versus forty:

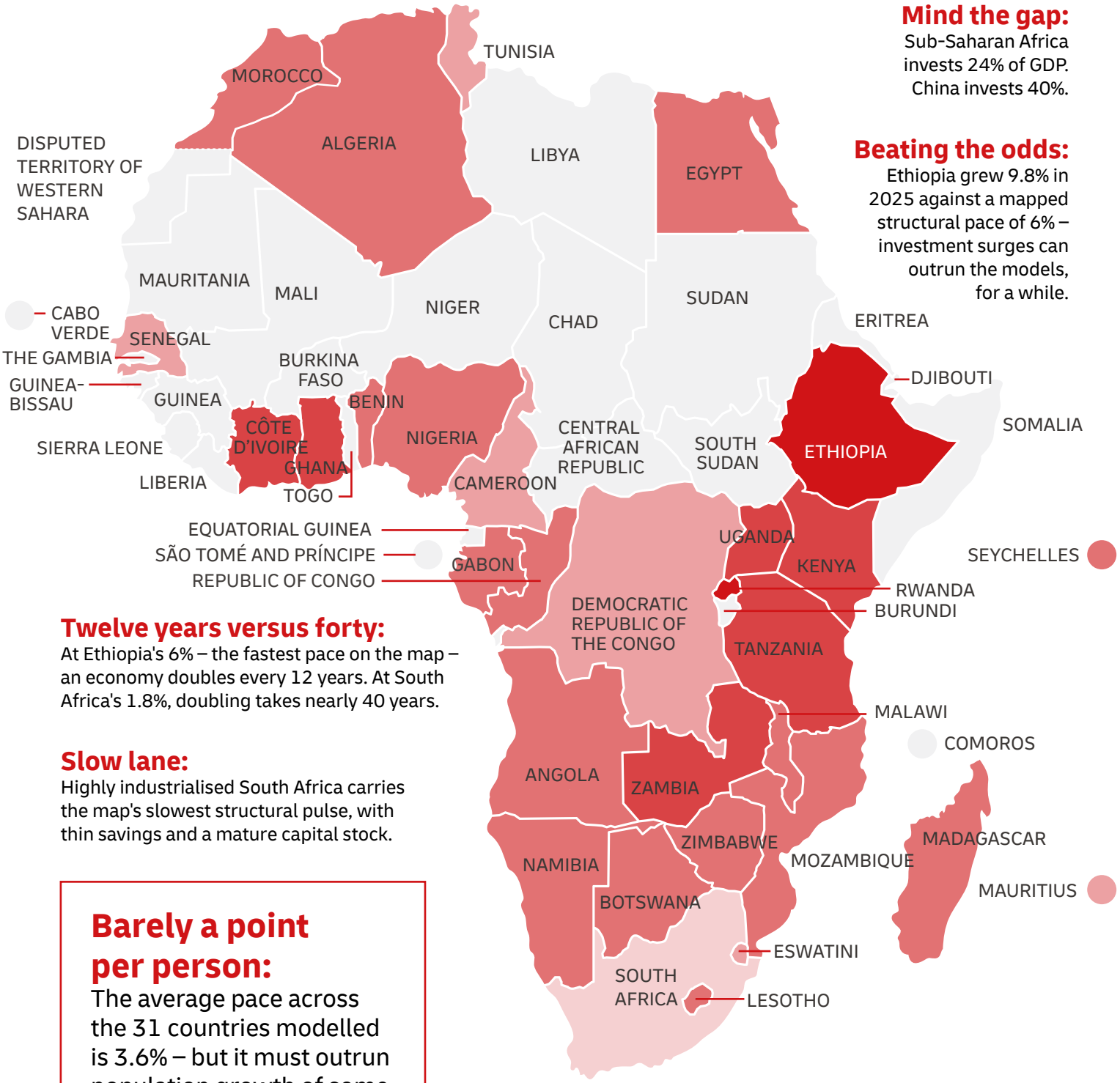
At Ethiopia's 6% – the fastest pace on the map – an economy doubles every 12 years. At South Africa's 1.8%, doubling takes nearly 40 years.

Slow lane:

Highly industrialised South Africa carries the map's slowest structural pulse, with thin savings and a mature capital stock.

Barely a point per person:

The average pace across the 31 countries modelled is 3.6% – but it must outrun population growth of some 2.3% a year before anyone feels richer.



Economic growth structure (%) is the growth rate that a country's foundational structures suggest is sustainably achievable. It is the average of the growth rate predicted using two well-established models. First, the Harrod–Domar model, which relies on savings, investment, and the accumulation of capital. Second, the Solow model, which accounts for physical capital, human capital and technological progress.

ECONOMIC GROWTH STRUCTURE, ANNUAL % (2026)

1 – < 2% | 2 – < 3% | 3 – < 4% | 4 – < 5% | ≥ 5% | NO DATA

Source: Rand Merchant Bank. (2026). RMB Where to Invest in Africa 2026/2027. RMB.

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

10 GROWING INTO PLENTY

WHERE ARE FARMERS SQUEEZING MORE OUTPUT FROM LAND, LABOUR, AND TECHNOLOGY?

What could lift Africa's food supply in the coming years? More fertiliser, less crop spoilage, timely weather data, perhaps drones to speed up farm tasks? The data point to a plainer explanation for the past quarter-century: across the continent, farmers simply opened up more land.[94] Cropped-area expansion, far more than productivity gains, explains why sub-Saharan Africa has posted the fastest agricultural growth in the world since 2000.[95]

It is an unsatisfying explanation for a business as exposed to weather and geopolitics as farming. To see which countries are growing more productive, economists look beyond land and labour to technology, irrigation and the education of farmers: "total factor productivity" (TFP) captures the output gained from all inputs combined, and so says more than yields per hectare. "Over the long term, improvement in agricultural productivity has been the world's primary means of assuring the needs of a growing population don't outstrip the capacity of the world's resources to supply food," says the US Department of Agriculture's Economic Research Service, which compiles the index.[96]

The map holds surprises. From a baseline of 100 in 2015, Zimbabwe's index reached 154 in 2023, the biggest gain in Africa, with Libya (125) and Mozambique (121) next. Egypt rose to 119, while Ethiopia, the source of most of the Nile water on which Egyptian farmers depend, slipped to 87. The wider picture is sobering: 33 of the 53 African countries measured were less productive (all else equal) in 2023 than in 2015, and the median country's index stood at 94.[97]

In West Africa, digital technology is making a difference. Farmers in Côte d'Ivoire are engaging more effectively with markets, their peers in Benin have easier access to farm machinery, and in Cameroon an e-voucher system had delivered seed and fertiliser subsidies to almost 4,000 producers by the end of 2024.[98] Yet a study of ten southern African countries between 2000 and 2025 found TFP growing far below the rate needed for "sustainable food availability" at forecast population growth. Catching up, the researcher Bornwell Mutale concludes, "requires sustained government investment, functioning markets, institutional strengthening and climate-adaptive infrastructure", together with technology transfer.[99]

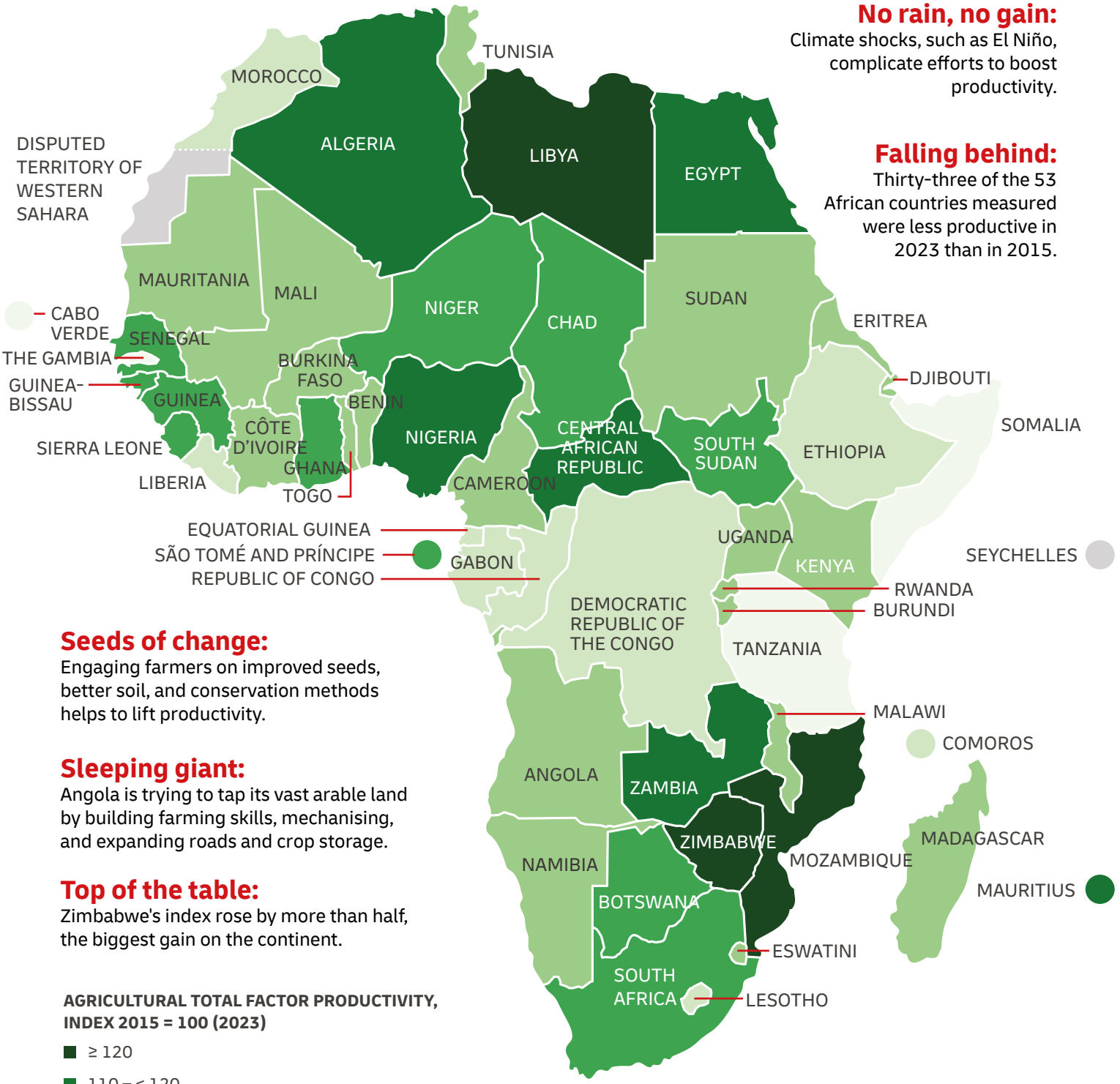
The risks keep coming. A strong El Niño in 2026 could cut rainfall in southern Africa into 2027 while bringing heavier rain, and the threat of floods, to East Africa, the International Monetary Fund warns. "Crop and pasture losses could reduce rural incomes and raise food prices; lower reservoir levels could constrain hydropower."[100] Agricultural technology, patient capital, and research at field level can help Africa adapt. The prize is the productivity its food system will need with a billion more people on the way by mid-century.[101]

> "From a baseline of 100 in 2015, Zimbabwe's index reached 154 in 2023, the biggest gain in Africa, with Libya (125) and Mozambique (121) next.

[94] Jayne, T. S., Fox, L., Fuglie, K., & Adelaja, A. (2021). *Agricultural productivity growth, resilience, and economic transformation in sub-Saharan Africa: Implications for USAID* (pp. 9, 48). Board for International Food and Agricultural Development; Association of Public and Land-grant Universities.
[95] Jayne et al. (2021), p. 44; U.S. Department of Agriculture, Economic Research Service. (2026, January 27). *International agricultural productivity*. USDA ERS. The ERS data set tells the same story to 2023: between 2000 and 2023 sub-Saharan Africa's agricultural output index rose by 111%, its input index by 91% (land by 67%) and its TFP index by 10%.
[96] U.S. Department of Agriculture, Economic Research Service (2026).
[97] U.S. Department of Agriculture, Economic Research Service (2026); calculated from the 2023 index values for the 53 African countries covered.
[98] World Bank. (2025a, March 4). *From fields to markets: The role of digital platforms in West Africa's agricultural success*. World Bank.
[99] Mutale, B. (2026). Agricultural total factor productivity growth in Southern Africa: Decomposition, determinants, and pathways to food security. *Cogent Food & Agriculture, 12*(1), Article 2725384.
[100] International Monetary Fund. (2026b). *Regional economic outlook update: Sub-Saharan Africa – Resilient growth, clouded outlook* (October 2026). IMF, Box 1: El Niño: Risks to food and electricity supply in 2026–27.
[101] UN DESA (2024b).

No rain, no gain:
Climate shocks, such as El Niño, complicate efforts to boost productivity.

Falling behind:
Thirty-three of the 53 African countries measured were less productive in 2023 than in 2015.



Seeds of change:
Engaging farmers on improved seeds, better soil, and conservation methods helps to lift productivity.

Sleeping giant:
Angola is trying to tap its vast arable land by building farming skills, mechanising, and expanding roads and crop storage.

Top of the table:
Zimbabwe's index rose by more than half, the biggest gain on the continent.

AGRICULTURAL TOTAL FACTOR PRODUCTIVITY, INDEX 2015 = 100 (2023)

- ≥ 120
- 110 – < 120
- 100 – < 110
- 90 – < 100
- 80 – < 90
- < 80
- NO DATA

Data harvest:
West African farmers are using digital platforms to get real-time market information, geospatial data, and subsidised inputs.

Source: U.S. Department of Agriculture, Economic Research Service. (2026). International agricultural productivity [Data set].

11 SUN-RICH, PANEL-POOR

WHY DOES THE SUNNIEST CONTINENT MAKE SO LITTLE SOLAR POWER?

This map does not show sunshine. The fill shows how much electricity a kilowatt of fixed solar panels would generate in a day, averaged over the long term, on land where a utility-scale plant could actually be built. On that measure Africa holds the world's best resource. Namibia ranks first of the 209 countries and territories assessed in the World Bank's global study, at 5.38 kilowatt-hours per installed kilowatt per day, and Egypt, Lesotho, Libya and Botswana are all in the top ten.[102] Twenty-nine of Africa's 54 states average above 4.5, the study's "excellent" threshold, which only some 70 countries worldwide clear; a single one, São Tomé and Príncipe, falls below 3.5.[103] Germany scores 2.96.

The colours track heat as well as light. Panels lose efficiency as they warm, so the sun-baked Sahel scores below the cool southern plateaus: Chad receives more sunlight than Lesotho but yields less, 4.84 against 5.13. The cloudy equatorial belt is weakest, with Gabon at 3.60. The resource is also steady: the study's seasonality index, best month over worst, is below 1.6 for every African country, against 4.4 for Germany and 5.1 for Britain.

The circles show what the continent does with it. In 2024 Africa generated 36 terawatt-hours of solar electricity, 1.7% of the world's total, from a fifth of its people: 24 kilowatt-hours per person against 263 worldwide, 877 in Germany and 1,880 in Australia. South Africa alone produced half; 32 of the 51 countries with data made less than five kilowatt-hours per person.[104] The International Energy Agency puts it in a line: Africa has 60% of the world's best solar resources and 1% of its solar capacity.[105]

Why? Not the sun, and not the land: Ethiopia would need to cover 0.003% of its territory in panels to meet its annual electricity consumption.[106] The first answer is money. A solar farm is almost all upfront cost, so its electricity is priced by the cost of capital, which the IEA finds two to three times higher in Africa than in advanced economies; the continent has 20% of the world's people and draws under 2% of its clean-energy spending.[107] The second is buyers. A plant needs a grid and a utility that pays its bills. More than 560 million people in sub-Saharan Africa are not connected, and when the World Bank last audited the region's 39 power sectors, 19 covered their operating costs and two were financially viable.[108] Where governments ran credible auctions and honoured the contracts, in South Africa, Egypt and Morocco, the panels followed. Where they did not, the sun shines on empty ground.

> "Chad receives more sunlight than Lesotho but yields less, 4.84 against 5.13. The cloudy equatorial belt is weakest, with Gabon at 3.60.

The picture is changing faster than the statistics. Africa installed a record 4.5 gigawatts in 2025, led by South Africa and Nigeria, and panel imports suggest the true installed base may be nearly three times the 22 gigawatts IRENA records, as rooftops and back-up systems go unmetered.[109] Ember expects another record in 2026.[110] The sun is the one input this map distributes fairly. Grids, capital and creditworthy buyers it does not.

[102] ESMAP. (2020). *Global photovoltaic power potential by country*. World Bank. Country figures are the Level 1 country averages in the study's companion dataset (Solargis, 2020).
[103] ESMAP (2020).
[104] Ember. (2026b). *Yearly electricity data* [Data set], as compiled in Our World in Data's energy dataset. Solar generation per person, 2024.
[105] International Energy Agency. (2022). *Africa energy outlook 2022*. IEA.
[106] Solargis (2020).
[107] International Energy Agency. (2023). *Financing clean energy in Africa*. IEA.
[108] IEA, IRENA, UNSD, World Bank, & WHO. (2026). *Tracking SDG 7: The energy progress report 2026*. World Bank; Trimble, C., Kojima, M., Perez Arroyo, I., & Mohammadzadeh, F. (2016). *Financial viability of electricity sectors in Sub-Saharan Africa: Quasi-fiscal deficits and hidden costs* (Policy Research Working Paper 7788). World Bank.
[109] Global Solar Council. (2026). *Africa market outlook 2026–2029*. Global Solar Council; International Renewable Energy Agency. (2026). *Renewable capacity statistics 2026*. IRENA.
[110] Ember. (2026a, August 27). *Africa is on track for a record year of solar installations in 2026, up 45% year-on-year, driven largely by distributed solar*. Ember.

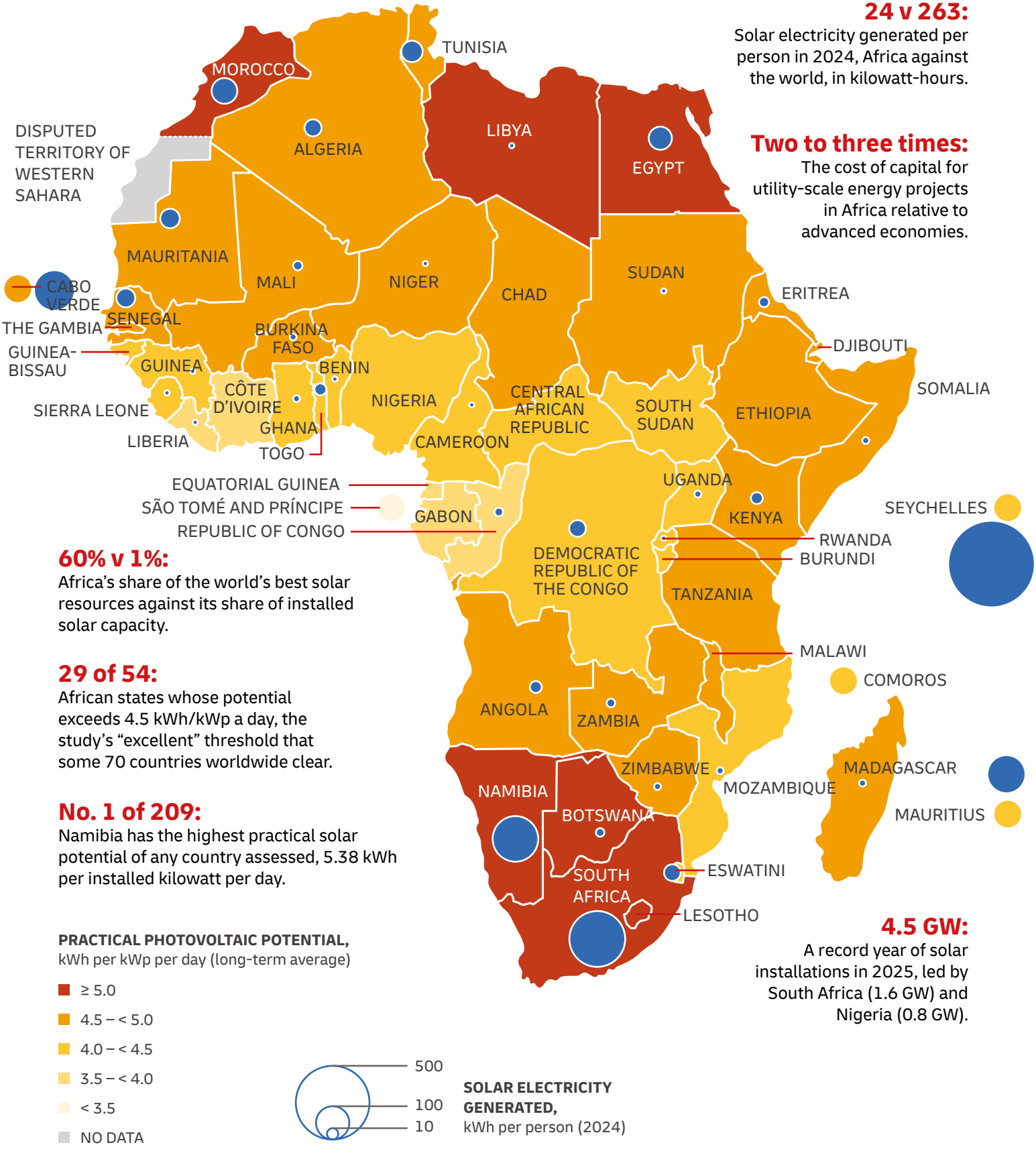
24 v 263:
Solar electricity generated per person in 2024, Africa against the world, in kilowatt-hours.

Two to three times:
The cost of capital for utility-scale energy projects in Africa relative to advanced economies.

60% v 1%:
Africa's share of the world's best solar resources against its share of installed solar capacity.

29 of 54:
African states whose potential exceeds 4.5 kWh/kWp a day, the study's "excellent" threshold that some 70 countries worldwide clear.

No. 1 of 209:
Namibia has the highest practical solar potential of any country assessed, 5.38 kWh per installed kilowatt per day.



4.5 GW:
A record year of solar installations in 2025, led by South Africa (1.6 GW) and Nigeria (0.8 GW).

Source: ESMAP. (2020). Global photovoltaic power potential by country. World Bank (data by Solargis); Ember. (2026). Yearly electricity data. Ember. Natural Earth.

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

12 DUG HERE, SMELTED THERE

WHY DOES THE CONTINENT THAT MINES THE WORLD'S COBALT, PLATINUM AND MANGANESE PROCESS SO LITTLE OF IT?

Africa's minerals carry more weight in the world economy than its factories yet do. In 2025 the Democratic Republic of Congo (DRC) mined an estimated 73% of the world's cobalt.[111] South Africa, Gabon and Ghana were the three largest producers of manganese ore and, with Côte d'Ivoire, supplied about three-quarters of it to the world.[112] South Africa and Zimbabwe mined four-fifths of the world's platinum.[113]

This map counts something more prosaic. The Africa Finance Corporation (AFC), a multilateral financial institution created by African sovereign states in 2007 to provide pragmatic solutions to the continent's infrastructure deficit and challenging operating environment,[114] published its first *Compendium of Africa's Strategic Minerals* in 2026.[115] The map shows how many of the 24 minerals it calls strategic each country is listed as producing at all. Thirty-six of the 54 states produce at least one. South Africa produces 18, Morocco and Nigeria 10 each, Namibia nine, the DRC and Tanzania eight. Only 18 are listed as producing none.[116]

The rings show where ore is turned into metal, and they are scarce. AFC's matrix lists 160 producer entries but only 84 processing entries, 16 of them South Africa's. The DRC produces eight strategic minerals and processes two, Tanzania eight and one, and 11 producing countries process nothing. Three others – Cameroon, Congo-Brazzaville and Libya – process without producing.[117] No African country makes anode material for batteries from its graphite or enriches its uranium.[118] Beyond the continent the funnel narrows further. Excluding rare earths, the average share of the single largest refining country across key minerals rose to 72% in 2025, and China's share of the world's copper-smelting capacity has grown from around 15% to 50% since 2005.[119]

> "The map shows how many of the 24 minerals it calls strategic each country is listed as producing at all. Thirty-six of the 54 states produce at least one.

Turning ore into metal needs cheap, reliable power and buyers nearby, and Africa is short of both. Some 655 million people lacked electricity in 2024, more than 560 million of them in sub-Saharan Africa.[120] Even South Africa, the continent's principal processor, saw its output of platinum-group metals fall by an estimated 9% in 2025, a decline the US Geological Survey attributes in part to "ongoing disruptions to the supply of electricity".[121] Demand at home is too thin to anchor a smelter: Africans used 29 kg of steel a head in 2025 against a world average of 209 kg, and the continent made 1.6% of the world's crude steel.[122] A furnace built in Africa therefore sells into someone else's business cycle.

Read the map for where the dark fills and the large rings coincide: South Africa and Zimbabwe, with Morocco some way behind. The pale, ringless middle is where the least has been mined, and where the matrix is silent. The constraint, in AFC's phrase, "is not geology, but conversion".[123]

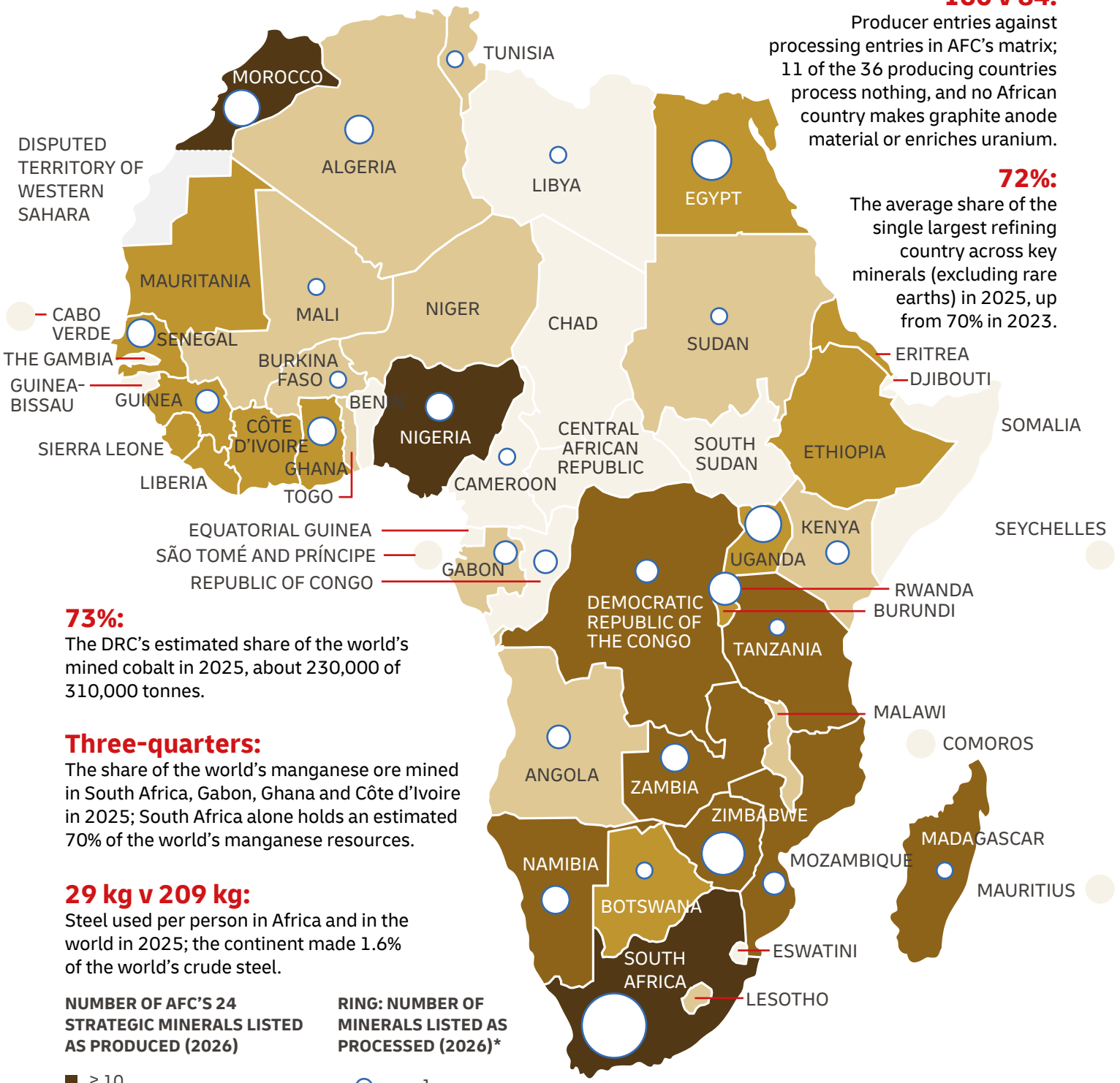
[111] U.S. Geological Survey. (2026). *Mineral commodity summaries 2026*. U.S. Geological Survey (Cobalt).
[112] U.S. Geological Survey (2026), Manganese.
[113] U.S. Geological Survey (2026), Platinum-group metals.
[114] Africa Finance Corporation. (n.d.). *Our company*. Africa Finance Corporation website, retrieved 14 September 2026.
[115] Africa Finance Corporation. (2026). *Compendium of Africa's strategic minerals 2026*. Africa Finance Corporation.
[116] Africa Finance Corporation (2026), Value Chain Disconnection Matrix, pp. 35–38; counts derived in the companion workbook. The 24 minerals are the matrix's 22 boxes with the 3Ts counted as tin, tungsten and tantalum, which the matrix lists separately.
[117] Africa Finance Corporation (2026), pp. 35–38. Processing entries include units the matrix flags as idle, closed, on care and maintenance, planned or under construction.
[118] Africa Finance Corporation (2026), pp. 35–38.
[119] International Energy Agency. (2026). *Global critical minerals outlook 2026*, executive summary. IEA.
[120] IEA, IRENA, UNSD, World Bank, & WHO (2026).
[121] U.S. Geological Survey (2026), Platinum-group metals.
[122] World Steel Association. (2026). *World steel in figures 2026*. worldsteel.
[123] Africa Finance Corporation (2026), p. 2.

160 v 84:

Producer entries against processing entries in AFC's matrix; 11 of the 36 producing countries process nothing, and no African country makes graphite anode material or enriches uranium.

72%:

The average share of the single largest refining country across key minerals (excluding rare earths) in 2025, up from 70% in 2023.



73%:

The DRC's estimated share of the world's mined cobalt in 2025, about 230,000 of 310,000 tonnes.

Three-quarters:

The share of the world's manganese ore mined in South Africa, Gabon, Ghana and Côte d'Ivoire in 2025; South Africa alone holds an estimated 70% of the world's manganese resources.

29 kg v 209 kg:

Steel used per person in Africa and in the world in 2025; the continent made 1.6% of the world's crude steel.

NUMBER OF AFC'S 24 STRATEGIC MINERALS LISTED AS PRODUCED (2026)

- ≥ 10
- 6 – 9
- 3 – 5
- 1 – 2
- NONE LISTED
- NO DATA

RING: NUMBER OF MINERALS LISTED AS PROCESSED (2026)*

- 1
- 5
- 16

*Not necessarily currently active.

18 of 24:

South Africa is listed as producing 18 of AFC's strategic minerals and processing 16, more than any other country; Morocco and Nigeria (10 each), Namibia (9), the DRC and Tanzania (8) follow.

Source: Africa Finance Corporation (2026), *Compendium of Africa's Strategic Minerals 2026*, Value Chain Disconnection Matrix. Natural Earth.

13 CLIMBING MOUNT COMPLEXITY

WHEN IS MORE COMPLEXITY BETTER THAN LESS?

Food, power and minerals are inputs; this map measures what an economy makes of them. Albert Einstein is famously said to have insisted that "everything should be made as simple as possible, but not simpler."[124] Economic reality demands a caveat. Complexity for its own sake is unhelpful, but economies benefit enormously from making and exporting more complex products.

Mining and shipping iron ore is a good thing. Mining it, processing it, and then shipping it is better. This way, the home country applies more skills and captures more of the benefit along the supply chain. At the sharp end, countries designing advanced chips grow ever more prosperous.

Economic complexity – a measure pioneered by Hidalgo and Hausmann[125] – is a powerful predictor of economic success, better in their estimates than measures of schooling or governance.[126] This map uses the Economic Complexity Index (ECI) published by the Observatory of Economic Complexity (OEC), which scores countries on the diversity and sophistication of their exports at the finest six-digit product detail. Zero is the overall average; 130 countries were scored for 2024.

As the index's creators put it: "The enormous income gaps between rich and poor nations are an expression of the vast differences in productive knowledge amassed by different nations."[127]

Africa's reading is sobering. Of the 35 African countries scored in 2024, only two sit above zero: South Africa (+0.10, 54th in the world), on the strength of vehicles, machinery and processed metals, and Tunisia (+0.02, 59th), wired into European manufacturing chains. Even the leader is slipping: South Africa scored +0.58 in 1998. At the other end of the spectrum, Chad (−2.50) and Guinea (−2.46) are the two least complex economies measured anywhere.[128]

Nineteen African countries are not scored at all, their trade too thin or too patchily reported for the index – an absence that is itself diagnostic. The index also dissolves a paradox visible on the development map: resource booms frequently raise revenue without raising capabilities. Oil-rich Nigeria ranks 128th of 130. That is how an economy can be resource-rich yet score low on complexity, and why such wealth so rarely survives the commodity cycle.

> "The enormous income gaps between rich and poor nations are an expression of the vast differences in productive knowledge amassed by different nations.

Complex economies compound capabilities into adjacent products – the 'product space' logic, by which garments lead to textile machinery, and wiring harnesses to cars.[129]

The hopeful reading is that complexity is learned and not endowed. Knowledge migrates through foreign investment that trains, trade that teaches, and diasporas that return. Vietnam's score has risen from −1.57 in 1998 to −0.09 in 2024 – most of the way to the world average within a generation. North Africa shows the route exists on this continent: over the same period Tunisia climbed from −1.21 to above zero, and Morocco from −1.30 to −0.45. The question is who climbs next.[130]

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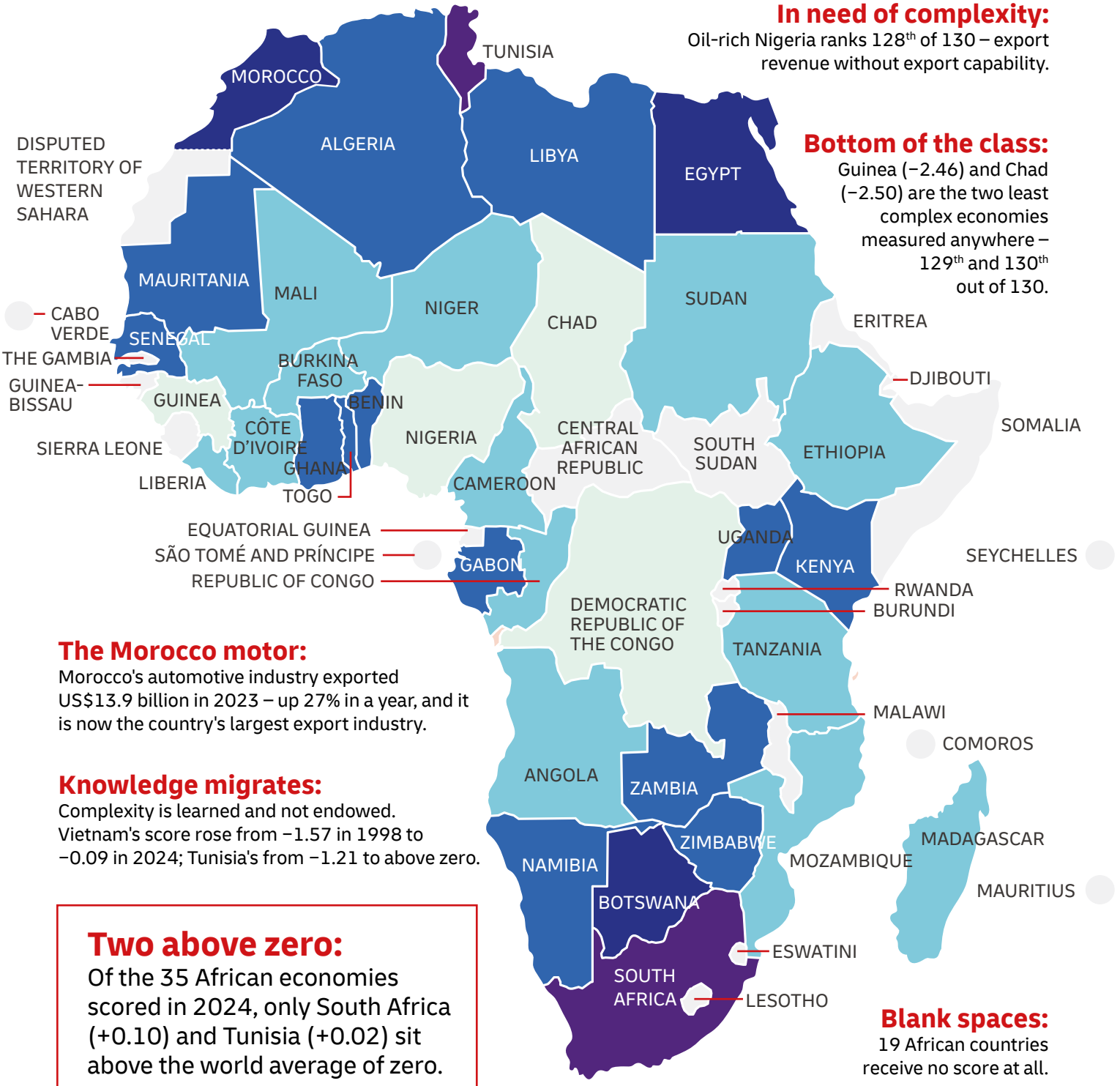
[124] The aphorism is a compression rather than a verbatim quotation. Sessions, R. (1950, January 8). How a 'difficult' composer gets that way. *The New York Times*; Einstein, A. (1934). On the method of theoretical physics. *Philosophy of Science, 1*(2), 163–169.
[125] Hausmann, R., Hidalgo, C. A., Bustos, S., Coscia, M., Simoes, A., & Yildirim, M. A. (2014). *The atlas of economic complexity: Mapping paths to prosperity*. MIT Press.
[126] Hidalgo, C. A., & Hausmann, R. (2009). The building blocks of economic complexity. *Proceedings of the National Academy of Sciences, 106*(26), 10570–10575.
[127] Hausmann et al. (2014), p. 15.
[128] Simoes, A. J. G., & Hidalgo, C. A. (2011). The Economic Complexity Observatory: An analytical tool for understanding the dynamics of economic development. In *Proceedings of the AAAI workshop on scalable integration of analytics and visualization*. AAAI Press; Observatory of Economic Complexity. (2026). *Economic Complexity Index (ECI Trade, HS6, HS96 revision), 1998–2024*. OEC.
[129] Hausmann et al. (2014).
[130] Observatory of Economic Complexity. (2026). Economic Complexity Index (ECI Trade, HS6, HS96 revision), 1998–2024 [Data set]. OEC.

In need of complexity:

Oil-rich Nigeria ranks 128th of 130 – export revenue without export capability.

Bottom of the class:

Guinea (−2.46) and Chad (−2.50) are the two least complex economies measured anywhere – 129th and 130th out of 130.



The Morocco motor:

Morocco's automotive industry exported US$13.9 billion in 2023 – up 27% in a year, and it is now the country's largest export industry.

Knowledge migrates:

Complexity is learned and not endowed. Vietnam's score rose from −1.57 in 1998 to −0.09 in 2024; Tunisia's from −1.21 to above zero.

Two above zero:

Of the 35 African economies scored in 2024, only South Africa (+0.10) and Tunisia (+0.02) sit above the world average of zero.

Blank spaces:

19 African countries receive no score at all.

ECONOMIC COMPLEXITY INDEX (ECI) SCORE (2024)

Economic complexity scores are centred on zero, the world average. The further a country's score is above zero, the more complex its economy; the further below, the less complex. Countries with no score are shown in grey.

< −1.50 | −1.50 – < −1.00 | −1.00 – < −0.50 | −0.50 – < 0 | ≥ 0 | NO DATA

Source: Observatory of Economic Complexity. (2026). Economic Complexity Index (ECI Trade, HS6, HS96 revision), 2024 [Data set]. OEC.

14 PLUGGED IN – PARTIALLY

HOW CONNECTED IS THIS CONTINENT?

The DHL Global Connectedness Index (GCI) measures how deeply each country participates in international flows of trade, capital, information, and people. Africa's 2024 scores run from 57 for Seychelles – 40th in the world and ahead of many far richer states – down to 39 for São Tomé and Príncipe, which at 179th of 180 countries holds the continent's lowest rank.[131] South Africa, at rank 53, leads the continent's large economies.

Africa is the lowest-scoring region on the index, but the texture matters more than the rank. The report's framework distinguishes depth (international flows relative to domestic activity) from breadth (how widely they are spread). Many African economies connect narrowly – one commodity, few partners – which registers as fragility and not integration. And the continent trades comparatively little with itself. Intra-African trade is commonly placed at around one-sixth of the continent's exports, against roughly two-thirds for intra-European trade.[132]

The classic result in trade economics is that openness raises income – causally and not just by association.[133] For a continent of 54 mostly small economies, external connectedness substitutes for the internal scale each country lacks. A landlocked market of 10 million people prospers only as a node in someone's network.

For strategy, the index often doubles as a gateway directory. Firms rarely enter 'Africa'. They enter through Johannesburg, Casablanca, or a similar hub and radiate outward along precisely the connections this measure captures. The tiny islands of Seychelles and Mauritius, and the North African bridge economies, punch far above their weight by making connection itself part of the business model.

Global connectedness matched its record high in the latest data. This suggests the 'deglobalisation' narrative is, so far, unsupported. Further, information and digital flows are among the fastest-rising components. As the report's lead author, Steven Altman, observes: "The risks to globalization are real, but so is the resilience of global flows."[134]

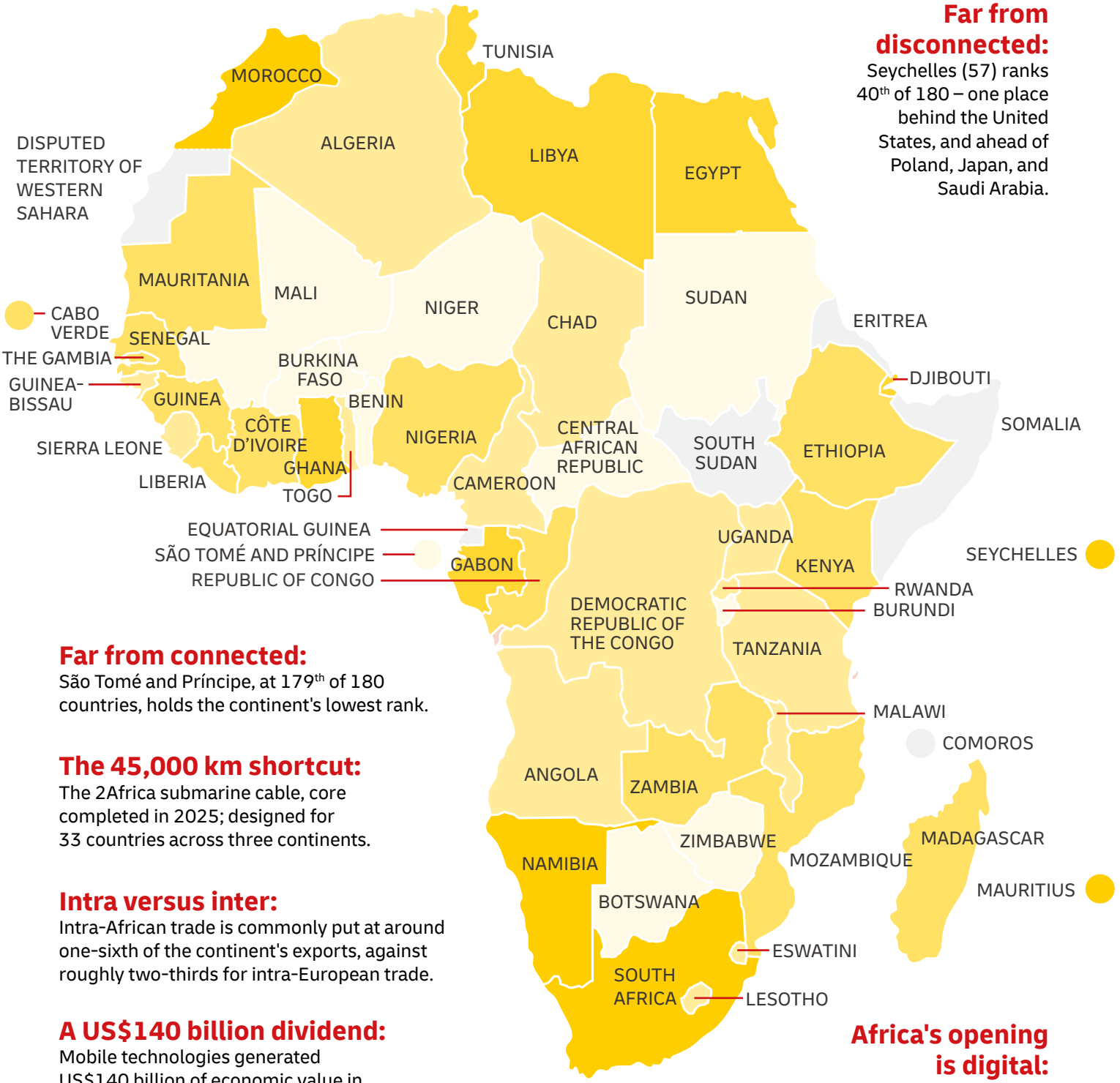
> "For a continent of 54 mostly small economies, external connectedness substitutes for the internal scale each country lacks.

Africa is becoming more connected and benefiting from the digital era. Cables and code cross the continent's vast and often difficult geography far more cheaply than containers do. A region that arrived late to shipping lanes need not arrive late to bandwidth. Between 2019 and 2024, 23 of the 49 ranked African countries climbed the global rankings – Namibia by a remarkable 60 places. Africa's international internet bandwidth is expanding faster than that of any other region, compounding at 38% a year since 2021.[135] DHL's own connectedness tracker adds that sub-Saharan Africa led every world region in trade growth in the first nine months of 2025.[136]

[131] Altman, S. A., & Bastian, C. R. (2026a). *DHL global connectedness report 2026*. DHL Group & New York University Stern School of Business.
[132] United Nations Conference on Trade and Development. (2024). *Economic development in Africa report 2024*. UNCTAD.
[133] Frankel, J. A., & Romer, D. (1999). Does trade cause growth? *American Economic Review, 89*(3), 379–399.
[134] DHL Group. (2026b, March 10). *Globalization holds firm at a record level, while the U.S. and China continue to decouple – DHL Global Connectedness Report 2026*. DHL Group.
[135] TeleGeography. (2025, September 23). *International internet bandwidth now sits at 1,835 Tbps*. TeleGeography.
[136] Altman, S. A., & Bastian, C. R. (2026b). *DHL global connectedness tracker* (March 2026). DHL Group & New York University Stern School of Business.

Far from disconnected:

Seychelles (57) ranks 40th of 180 – one place behind the United States, and ahead of Poland, Japan, and Saudi Arabia.



Far from connected:

São Tomé and Príncipe, at 179th of 180 countries, holds the continent's lowest rank.

The 45,000 km shortcut:

The 2Africa submarine cable, core completed in 2025; designed for 33 countries across three continents.

Intra versus inter:

Intra-African trade is commonly put at around one-sixth of the continent's exports, against roughly two-thirds for intra-European trade.

A US$140 billion dividend:

Mobile technologies generated US$140 billion of economic value in sub-Saharan Africa in 2023 – 7.3% of GDP.

Africa's opening is digital:

International internet bandwidth to Africa is compounding at 38% a year – the fastest growth of any region.

DHL GLOBAL CONNECTEDNESS INDEX SCORE (2024)

Scale ranges from 0 to 100. Higher scores indicate greater connectivity.

< 42 | 42 – < 45 | 45 – < 48 | 48 – < 50 | ≥ 50 | NO DATA

Source: Altman, S. A., & Bastian, C. R. (2026). *DHL Global Connectedness Report 2026*. DHL Group.

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

15 NEW CUSTOMERS, OLD CARGO

WHO DOES AFRICA TRADE WITH?

In the Map Men's reconstruction of the night in June 1788, when the African Association was founded in a London tavern, the Earl of Galloway gives his reason for exploring Africa: "We could find millions more customers to buy British things."[137] Mark Cooper-Jones and Jay Foreman admit the dialogue is invented. The motive was real, and for two centuries, the answer to who Africa traded with was Europe. This map shows how far that has changed, and how little.

The main map colours each country by the destination that took the largest share of its goods exports in 2023, from each country's own customs returns to UN Comtrade, or its partners' returns where it does not report.[138] Twenty-seven countries send their largest share to the Global South: China leads with 10, among them Angola, the DRC, and South Africa; the United Arab Emirates takes nine, mostly gold, from Guinea and Sudan to Rwanda; India for five, among them Tanzania. Europe and the United States top the list for 17 countries, in a narrower pattern than the colonial map: the Netherlands for four (Nigerian crude, Ivorian cocoa), France for four, Switzerland for three gold and copper exporters, the United States for one. Customs returns record the first destination rather than the final buyer, so entrepôts such as the Netherlands, the United Arab Emirates and Switzerland loom larger on this map than the consumers behind them. Ten countries sell most to an African neighbour, five of them to South Africa.

Imports are less varied. Africa Business Partners, an advisory firm run from Tokyo and Nairobi by Yukari Umemoto, finds China the largest supplier to 34 of the 54 countries in Africa in 2023, South Africa to seven, and Portugal, France, Italy and Spain to five between them.[139]

By 2025, almost all of Africa's 54 states traded more goods with China than with the United States; the holdouts were Lesotho and, on some counts, Eswatini – the two kingdoms inside South Africa's customs union.[140] China overtook the United States as the continent's largest partner in 2009,[141] and by 2025 the gap was four to one: US$348 billion of goods trade against US$83.3 billion.[142] Composition matters as much as size: Chinese exports to Africa rose by a quarter while imports from Africa rose by 5%, leaving a US$102 billion deficit; from May 2026, China extended zero-tariff access to all 53 African states it has relations with.[143]

> "Twenty-seven countries send their largest share to the Global South: China leads with 10, among them Angola, the DRC, and South Africa.

Joe Studwell, whose How Asia Works (2013) became the standard account of East Asian industrialisation, argues in How Africa Works (2026) that the continent's route runs where Asia's did: through productive smallholder farming into labour-intensive manufactured exports.[144] Set that against this map and the problem is clear. The customers have changed, from Lisbon and London to Dubai and Shanghai. The cargo has not. Gold, crude, copper, cocoa, and coffee leave much as they did in 1960, and the largest flow back is Chinese machinery, vehicles, and solar panels.

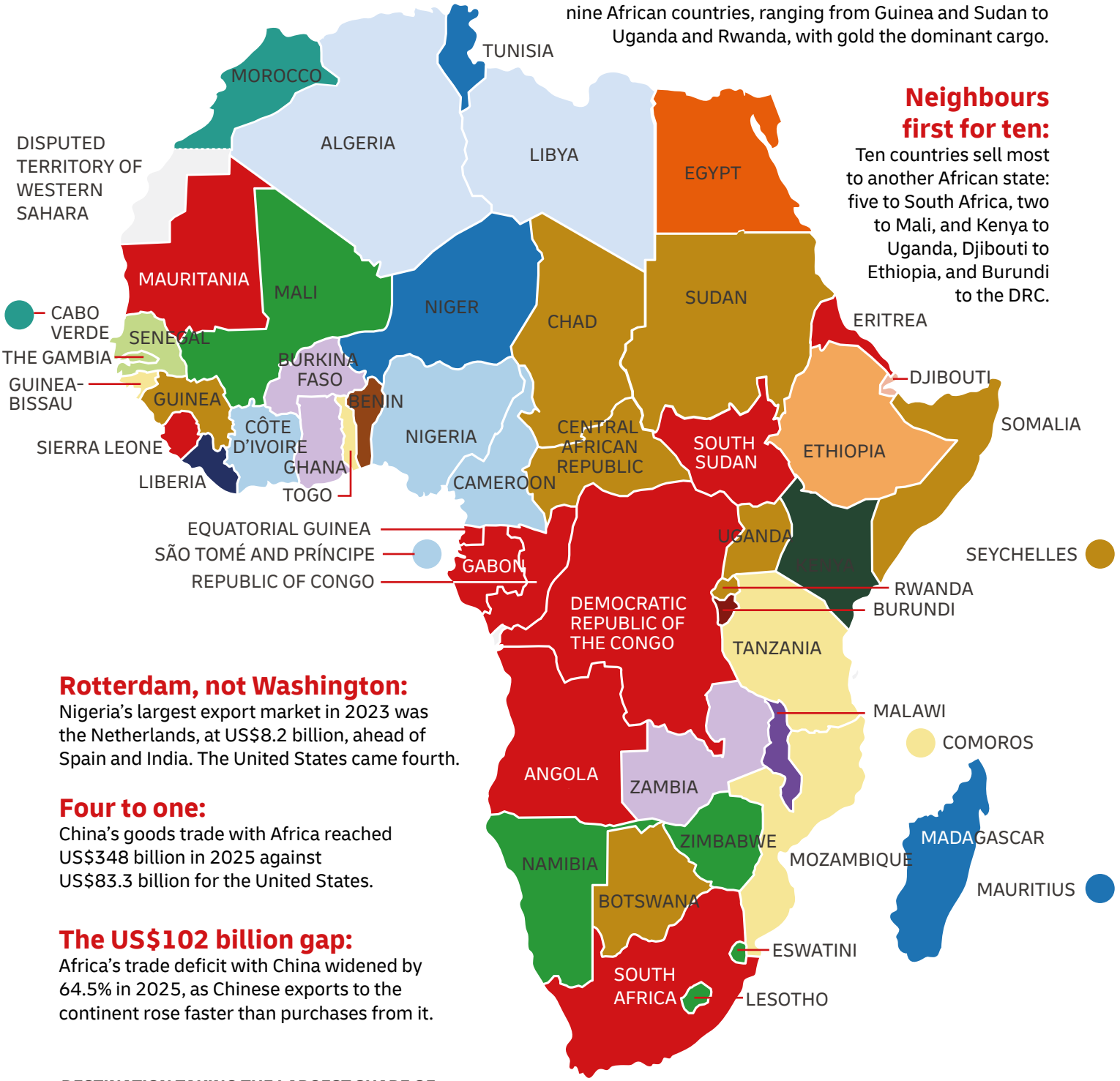
[137] Cooper-Jones & Foreman (2025), p. 69.
[138] United Nations. (2026a). *UN Comtrade database*. United Nations.
[139] Umemoto, Y. (2025, April 6). *Trade partners of Africa's 54 countries and the impact of Trump tariffs*. Africa Business Partners.
[140] United Nations (2026a).
[141] State Council Information Office of the People's Republic of China. (2013). *China-Africa economic and trade cooperation (2013)*. SCIO.
[142] General Administration of Customs of China. (2026). *Imports and exports by country (region), 2025*. GACC; U.S. Census Bureau. (2026). *Trade in goods with Africa*. U.S. Census Bureau.
[143] General Administration of Customs of China (2026); Customs Tariff Commission of the State Council. (2026, April 28). *Announcement [2026] No. 5*. Customs Tariff Commission.
[144] Studwell (2026).

Gold goes to the Gulf:

The United Arab Emirates is the top export destination for nine African countries, ranging from Guinea and Sudan to Uganda and Rwanda, with gold the dominant cargo.

Neighbours first for ten:

Ten countries sell most to another African state: five to South Africa, two to Mali, and Kenya to Uganda, Djibouti to Ethiopia, and Burundi to the DRC.



Rotterdam, not Washington:

Nigeria's largest export market in 2023 was the Netherlands, at US$8.2 billion, ahead of Spain and India. The United States came fourth.

Four to one:

China's goods trade with Africa reached US$348 billion in 2025 against US$83.3 billion for the United States.

The US$102 billion gap:

Africa's trade deficit with China widened by 64.5% in 2025, as Chinese exports to the continent rose faster than purchases from it.

DESTINATION TAKING THE LARGEST SHARE OF EACH COUNTRY'S GOODS EXPORTS (2023)

GLOBAL SOUTH
- CHINA
- UAE
- INDIA
- SAUDI ARABIA
- BANGLADESH
- TÜRKIYE

EUROPE AND US
- NETHERLANDS
- FRANCE
- SWITZERLAND
- ITALY
- SPAIN
- BELGIUM
- UNITED STATES

AFRICA
- SOUTH AFRICA
- MALI
- DR CONGO
- ETHIOPIA
- UGANDA
- NO DATA

Source: United Nations. (2026). UN Comtrade database [Data set]. United Nations. Goods exports by partner, 2023; partners' reported imports, where a country does not report.

16 TRADING PLACES

WHEN DID AFRICA'S TRADE TILT FROM AMERICA TO CHINA?

The previous map showed where each country's exports go today. This pair of maps, 35 years apart, shows how the continent changed partners. In 1990, the United States was the larger goods trading partner for 48 of the 51 African countries for which the IMF has records. China led only in The Gambia, Mali and Sudan.[145] America's trade with the continent, US$24.8 billion, was 15 times China's US$1.6 billion, and much of it was oil: Nigeria, Algeria, and Angola were three of its five largest African partners.[146] By 2025, the colours had swapped. China was the larger partner for 53 of 54 countries, Lesotho the lone exception, and China–Africa goods trade of US$348 billion was more than four times America's US$83 billion.

The switch was rapid. In 2000, the year the Forum on China-Africa Cooperation was founded and a year before China joined the World Trade Organization, America was still the bigger partner for 36 countries against China's 17.[147] In 2005, China led in a majority for the first time. By 2010 the count was 41 to 12, and by 2013 it was 47 to 6. Two forces worked at once. China's appetite for oil, copper, cobalt and iron ore, and its exports of manufactures, grew with its economy. America's trade with Africa, meanwhile, peaked at US$146 billion in 2008 and has since fallen by 43%, as shale oil displaced Nigerian and Angolan crude from US refineries.[148] China's has more than tripled over the same period.

China's lead is now wide almost everywhere. In 2025, 48 countries traded at least twice as much with China as with America, and 24 at least 10 times as much. Copper- and cobalt-rich Democratic Republic of Congo did US$26.6 billion of its trade with China against US$2.1 billion with America. Angola did US$20.8 billion with China against US$2.0 billion.[149] The exceptions are instructive. Lesotho's garment factories ship to America duty-free under the African Growth and Opportunity Act (AGOA). Its US$153 million of exports to the US compare with almost nothing sold to China.[150] Morocco, America's only free-trade partner on the continent, stays close to parity, as does Egypt. Everywhere else the contest is over.[151]

> "Two forces worked at once. China's appetite for oil, copper, cobalt and iron ore, and its exports of manufactures, grew with its economy.

Africa is the extreme case of a global pattern. The Lowy Institute calculates that 145 economies, about 70% of the world, traded more with China than with America in 2023, up from fewer than one in five in 2001. China was the largest single partner for 60 economies, the United States for 33.[152] In Africa, the share is 98%. The maps count goods only. They say nothing about services, investment or aid. Nonetheless, the direction is clear: for the typical African exporter, the customer that matters sits in Shanghai, and not in New York.

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[145] International Monetary Fund. (2026a). *International trade in goods (by partner country) (IMTS)*. IMF Data Portal. Annual series retrieved 27 October 2026. Two-way trade is goods exports (FOB) plus goods imports (CIF) with each partner. Each African country is classed by its own returns as compiled and gap-filled by the IMF from counterpart data, with US- and China-reported data used for the five Southern African Customs Union members in 1990, when SACU reported to the IMF as a bloc. Eritrea and South Sudan were not yet independent in 1990. Equatorial Guinea is shown as no data in 1990, because the IMF records under US$1m of trade with either partner.

[146] International Monetary Fund (2026a). Continental totals and the country magnitudes quoted in the text are the US- and China-reported series (US Census Bureau and China customs returns as compiled by the IMF), which are complete for all 54 countries. Several African countries' own 2025 returns are still partial.

[147] Ministry of Foreign Affairs of the People's Republic of China. (2000, October 12). *Beijing Declaration of the Forum on China-Africa Cooperation*. World Trade Organization. (n.d.). *China and the WTO*. China's accession took effect on 11 December 2001.

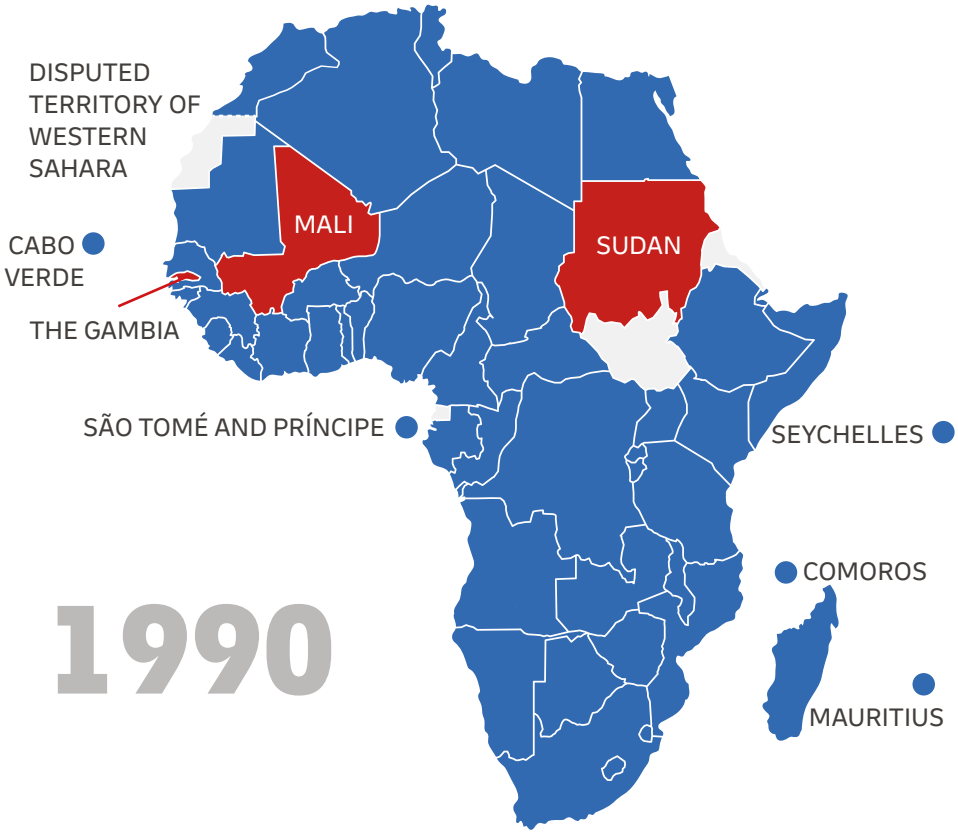
[148] Brune, N. E. (2015). The impact of the U.S. shale boom in Africa. *Journal of International Affairs, 69*(1), 101–120.

[149] International Monetary Fund (2026a), US- and China-reported series.

[150] Office of the United States Trade Representative. (n.d.). *Lesotho*. USTR. Lesotho qualifies for the textile and apparel benefits of the African Growth and Opportunity Act (AGOA), the US preference scheme for sub-Saharan Africa in force since 2000. Export and import figures from International Monetary Fund (2026a).

[151] Congressional Research Service. (2006). *Morocco-U.S. Free Trade Agreement* (CRS Report No. RS21464). The agreement entered into force on 1 January 2006.

[152] Rajah, R., & Albayrak, A. (2025). *China versus America on global trade*. Lowy Institute. Calculated from the IMF Direction of Trade Statistics for 205 economies. 2023 is the latest year in the study.



All but one:

China is the larger goods trading partner for 53 of Africa's 54 countries. In 1990, America led in 48 of the 51 countries with records.

Fifteen to one:

In 1990, America's goods trade with Africa was 15 times that of China. By 2025, China's was four times that of America.

Tipping point:

2005 was the first year China out-traded America in a majority of African countries.



Last holdout:

Lesotho, whose garment factories ship to America under AGOA, is the only African country still trading more with the US than with China.

Order of magnitude:

24 African countries now trade at least 10 times as much with China as with America.

LARGER TWO-WAY GOODS TRADING PARTNER (1990 AND 2025)

- UNITED STATES
- CHINA
- NO DATA

Source: International Monetary Fund. (2026). International trade in goods (by partner country) (IMTS) [Data set]. IMF Data Portal.

17 ONE MARKET, ONE DAY

CAN A TREATY MANUFACTURE A MARKET?

Whoever Africa's customers abroad may be, its customers next door remain under-served. This map shows something rare in international politics: near-unanimity. Forty-nine African states are full parties to the African Continental Free Trade Area, four more (Benin, Libya, South Sudan and Sudan) have signed but not yet deposited ratification, and exactly one – Eritrea – has not signed at all.[153] By membership numbers, it is the largest free-trade area assembled since the founding of the World Trade Organization.

The prize, as modelled by the World Bank, is substantial. Full implementation could raise African real incomes by about 7% – roughly US$450 billion – by 2035 and lift some 30 million people out of extreme poverty, with most of the gains coming not from tariff cuts but from trimming non-tariff barriers and the frictions at borders.[154] That detail deserves emphasis. The treaty's value lies less in its schedules than in the customs posts, standards regimes and payment systems it obliges members to fix.

Why it matters so much here: Africa is a continent of small economies – the median member's GDP is smaller than that of a mid-sized European city – fragmented by the borders mapped later in this series. Scale is the missing input of African industrialisation, and no single country can supply it alone. The AfCFTA is, in effect, an attempt to legislate the market size that geography and history withheld.

The sceptic's caveat is earned. Africa's regional communities have a patchy record of implementing what they sign, and commerce under the agreement's protocols remains a small fraction of what the treaties promise. However, read the map for what it already proves: political consensus at a scale no other continent has attempted. The law now exists. The lorries are the remaining argument. The intent, at least, is not in doubt. As Wamkele Mene put it on being sworn in as the area's first Secretary-General: "[W]e dare not fail in this historic mission to integrate Africa."[155]

> "Africa is a continent of small economies – the median member's GDP is smaller than that of a mid-sized European city.

There are green shoots of action. A Guided Trade Initiative has been shipping goods under AfCFTA preferences since 2022, and its seven pilot countries had grown to 37 state parties, cleared to trade, by late 2024.[156] The Pan-African Payment and Settlement System now links central banks across 28 countries.[157] South Africa alone shipped some US$47 million of goods on AfCFTA preferences in its first 15 months.[158] Sign-ups still outrun shipments – the Trade Law Centre counted roughly 10 states actively trading by early 2025.[159] However, every customs union in history began as paperwork that lorries learned to trust.

[153] Trade Law Centre. (2026). *Status of AfCFTA ratification* (September 2026). Tralac.
[154] World Bank. (2020). *The African Continental Free Trade Area: Economic and distributional effects*. World Bank.
[155] Mene, W. (2020, March 19). *Statement on the occasion of the swearing-in as Secretary-General of the African Continental Free Trade Area Secretariat*. African Union.
[156] US International Trade Administration. (2024, November 1). *AfCFTA update – November 2024*. International Trade Administration.
[157] Launch Base Africa. (2026, July 9). *PAPSS inches closer to continent-wide coverage as Central African central bank joins*. Launch Base Africa.
[158] Department of Trade, Industry and Competition. (2025, May 22). *South Africa's exports under AfCFTA preferential terms steadily increasing*. Government of South Africa.
[159] Trade Law Centre. (2025). *AfCFTA frequently asked questions* (May 2025). Tralac.

The US$5 billion payment fix:

Afreximbank expects the Pan-African Payment and Settlement System to save Africa more than US$5 billion a year in payment transaction costs.

One to go:

Only Eritrea has not signed at all.

A US$450 billion prize:

World Bank modelling puts full implementation at roughly 7% higher real incomes by 2035 – US$292 billion of it from stronger trade facilitation alone.

A win for women:

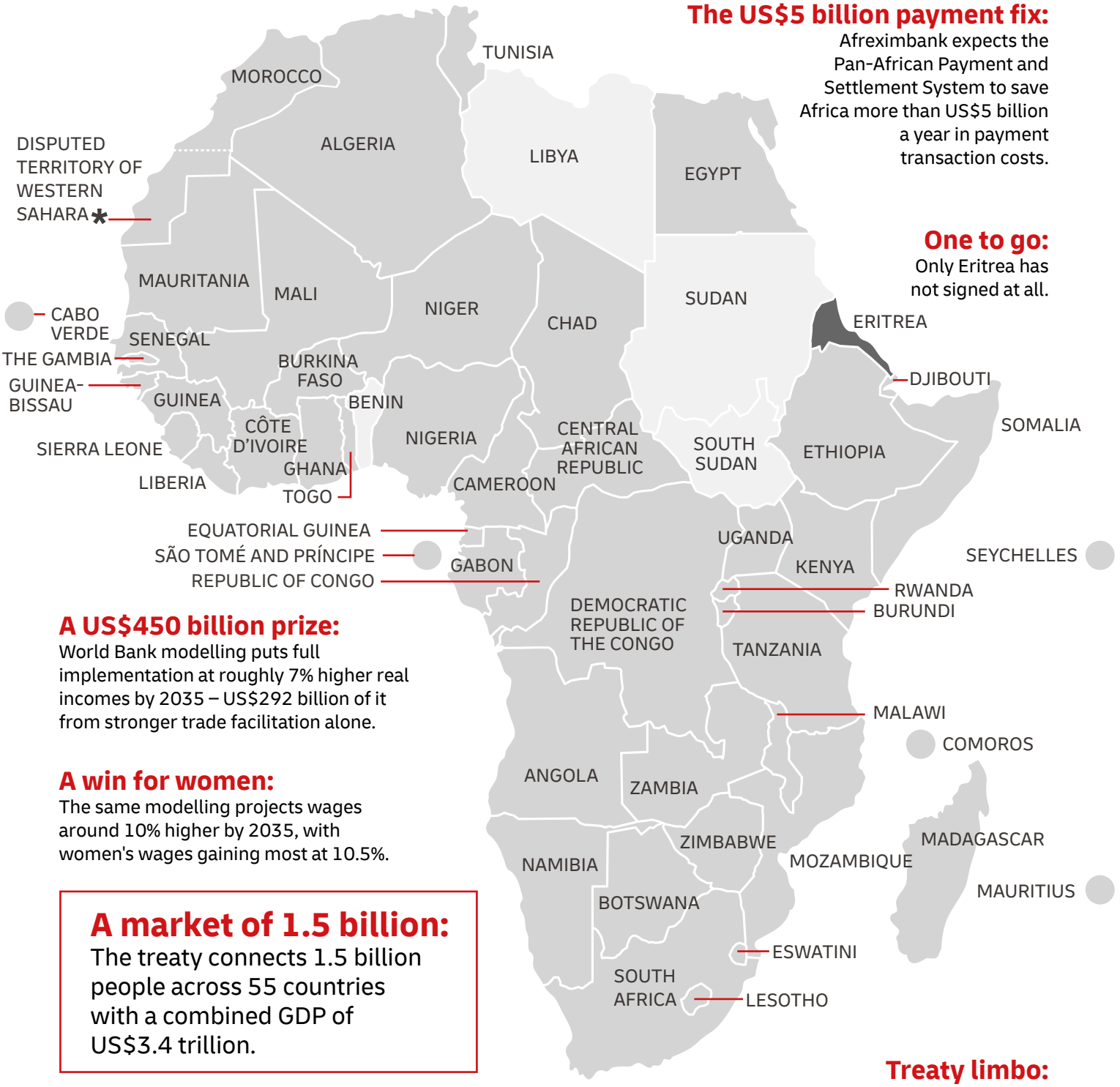
The same modelling projects wages around 10% higher by 2035, with women's wages gaining most at 10.5%.

A market of 1.5 billion:

The treaty connects 1.5 billion people across 55 countries with a combined GDP of US$3.4 trillion.

Treaty limbo:

Four states have signed but not yet deposited ratification – a halfway status that keeps their traders outside the preferences.



* Sahrawi Republic has deposited a ratified instrument as a recognised member state of the African Union (AU). However, it is not recognised as a sovereign state by the United Nations (UN).

AFRICAN CONTINENTAL FREE TRADE AREA (AFCFTA) STATUS (SEPTEMBER 2026)

- INSTRUMENT OF RATIFICATION DEPOSITED
- SIGNED, NOT YET RATIFIED
- NOT SIGNED

Source: Trade Law Centre. (2026). Status of AfCFTA ratification (September 2026). Tralac.

18 THE PRICE OF PERCEPTION

WHY DOES CAPITAL COST SO MUCH IN AFRICA?

Before a single road is graded or a factory fitted, every international investment in Africa must overcome a barrier: the discount rate. The country risk premium (CRP) is the extra annual return investors demand for one market over a 'safer' one.

Professor Aswath Damodaran of New York University's Stern School of Business provides a widely used collection of country risk premiums.[160] He blends sovereign ratings with measures of political structure, corruption, violence, and legal and property rights.[161] He observes: "The parts of the world that are most exposed to corruption and violence, and have capricious legal systems, tend to have higher equity [and country] risk premiums."[162]

The dozen Aaa-rated economies, from Norway to New Zealand, set the benchmark at zero. As of July 2026, Damodaran prices 178 markets at an average premium of 5.4%. His 42 African markets average 8.6%, against 4.4% for the rest of the world – the typical African market must promise close to double the going rate elsewhere, before a single project-level risk is weighed.

The arithmetic compounds. A few extra points on the discount rate barely dent a three-year payback. They quietly kill a 20-year one.

Moody's ratings offer further granularity. Only two African sovereigns – Botswana (Baa1) and Mauritius (Baa3) – hold investment-grade ratings. Morocco, Côte d'Ivoire and South Africa round out the top five. No African state is rated in the A range, and 25 of the rated 30 states sit at single-B or below – 13 of the world's 30 ratings of Caa1 or worse are African.

Damodaran prices 12 African countries among his 21 frontier markets. These lack sovereign ratings, so he estimates their premiums by other means. The estimates run high: the frontier 12 average 10.6%, and Sudan, at 27.2%, carries the highest premium in the data set. The remaining 12 of Africa's 54 states appear not at all: unrated, unpriced, and invisible to the very investors the premium is meant to guide.

The UN Development Programme (UNDP) counters that some of these premia are undeserved, estimating that less subjective ratings could save African countries up to US$74.5 billion in excess interest and forgone lending.[163]

> "The parts of the world that are most exposed to corruption and violence, and have capricious legal systems, tend to have higher equity [and country] risk premiums.

Yet the premium is substantially earned. Ghana and Zambia defaulted and have since completed restructurings.[164] Ethiopia agreed relief with its creditors in 2025 and 2026.[165] Markets are pricing an entire continent partly on the troubles of a few.

Where the average overstates risk, the investor who prices it accurately holds an advantage. And perceptions are shifting. Within nine months, S&P returned Morocco to investment grade[166] and upgraded South Africa for the first time in nearly 20 years.[167] Fitch lifted Zambia out of default[168] and then upgraded Ghana.[169]

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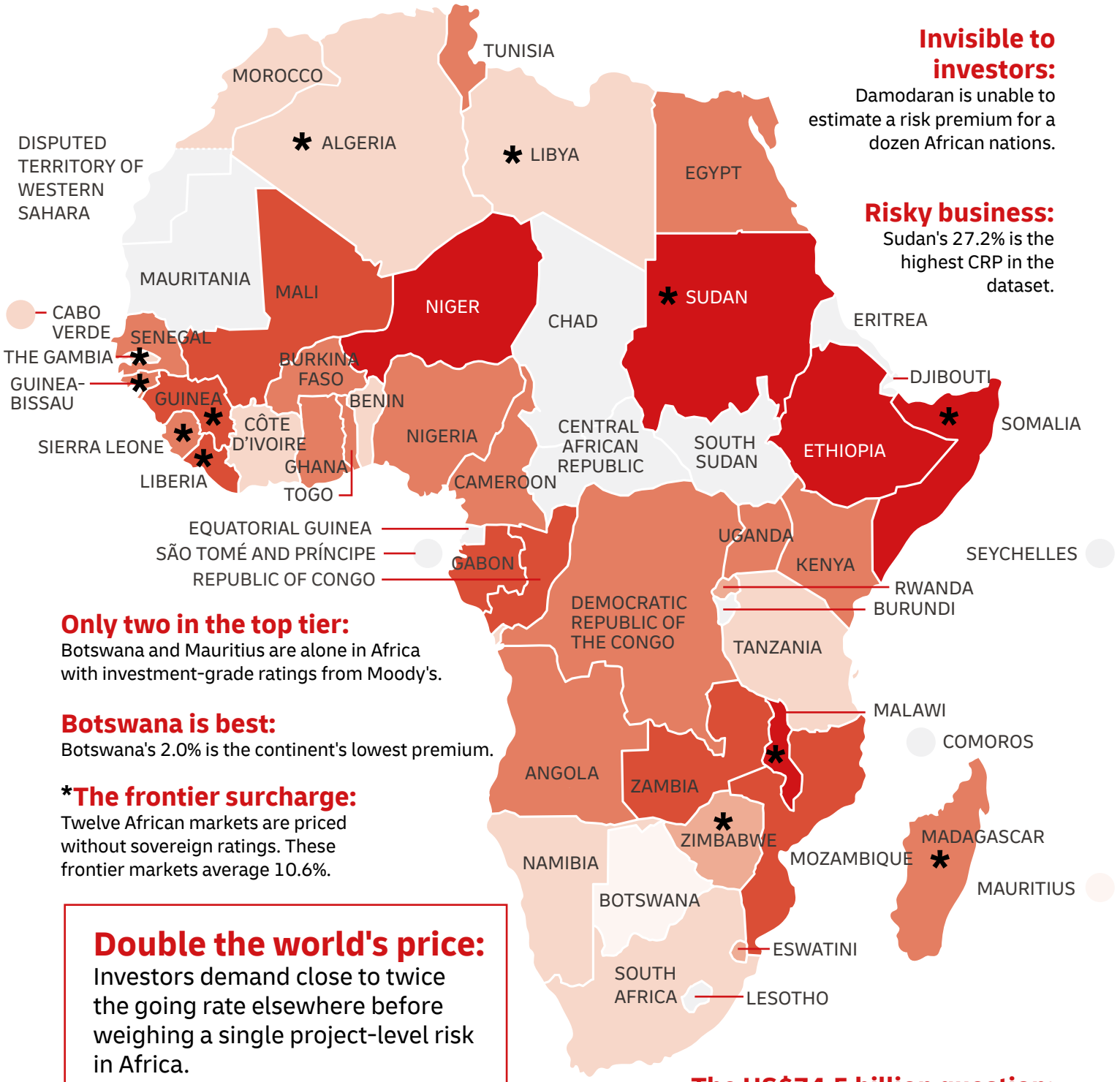
[160] Damodaran, A. (2026). *Country risk premiums by country* (July 2026 update). NYU Stern School of Business.
[161] Damodaran, A. (2025a). *Country risk: Determinants, measures and implications – The 2025 edition*. NYU Stern School of Business.
[162] Damodaran, A. (2025b, July 31). *Country risk 2025: The story behind the numbers!* Musings on Markets.
[163] United Nations Development Programme. (2023). *Reducing the cost of finance for Africa: The role of sovereign credit ratings*. UNDP.
[164] United Nations Economic Commission for Africa. (2025, December 6). *APRM, ECA and UNDP Africa welcome credit rating upgrades for African countries.* UNECA.
[165] Semafor. (2026, June 29). *Ethiopia agrees $1B bond restructuring deal.* Semafor.
[166] S&P Global Ratings. (2025, September 26). *Morocco long-term ratings raised to 'BBB–' on resilient growth; outlook stable*. S&P Global Ratings.
[167] Reuters. (2025b, November 14). S&P upgrades South Africa for first time in nearly 20 years as reforms gain traction. *Reuters*.
[168] Fitch Ratings. (2025, November 28). *Fitch upgrades Zambia to 'B–'; outlook stable*. Fitch Ratings.
[169] Fitch Ratings. (2026, May 8). *Fitch upgrades Ghana to 'B'; outlook positive*. Fitch Ratings.



Invisible to investors:

Damodaran is unable to estimate a risk premium for a dozen African nations.

Risky business:

Sudan's 27.2% is the highest CRP in the dataset.

Only two in the top tier:

Botswana and Mauritius are alone in Africa with investment-grade ratings from Moody's.

Botswana is best:

Botswana's 2.0% is the continent's lowest premium.

*The frontier surcharge:

Twelve African markets are priced without sovereign ratings. These frontier markets average 10.6%.

Double the world's price:

Investors demand close to twice the going rate elsewhere before weighing a single project-level risk in Africa.

The US$74.5 billion question:

UNDP estimates African countries could save up to US$74.5 billion, if credit ratings were based on less subjective assessments.

COUNTRY RISK PREMIUM (CRP), % (JULY 2026)

- < 3%
- 3 – < 6%
- 6 – < 8%
- 8 – < 10%
- 10 – < 12%
- ≥ 12%
- NO DATA

Source: Damodaran, A. (2026). Country risk premiums by country (July 2026 update) [Data set]. NYU Stern School of Business.

19 ECONOMIC FREEDOM

HOW FREE ARE AFRICA'S MARKETS?

Risk premiums price the rules of the game; this map grades the rules themselves. One of the most enduring relationships in economics is that between economic freedom and GDP. Milton Friedman, who helped conceive the index this map draws on, stated the case with characteristic force: "There is no alternative way, so far discovered, of improving the lot of the ordinary people that can hold a candle to the productive activities that are unleashed by a free enterprise system."[170]

The Fraser Institute's Economic Freedom of the World index grades 165 jurisdictions from 0 to 10 on 45 indicators across five areas: the size of government, legal systems and property rights, sound money, freedom to trade internationally, and regulation.[171] In the latest edition, covering 2023, the freest quartile of countries averaged GDP per person of US$66,434 against US$10,751 in the least free – and life expectancy of 79 years against 62.[172]

Africa's reading is stark. Of the continent's 54 states, 50 are rated, and just two make the world's top quartile: Mauritius (7.73, 21st globally, level with Spain) and Seychelles (7.58, tied with Belgium at 31st). Cabo Verde (44th) leads the chasing pack. Forty-three of the 50 rated African states sit in the bottom half of the world ranking, 23 of them in the bottom quartile. Half of the world's 10 least free economies are African – Chad, Libya, Algeria, Sudan, and Zimbabwe, the last at 164th of the 165 countries, ahead of only Venezuela.

The continent's leaders are small, open, trade-dependent economies, for which predictable rules are the business model. The bottom rungs, by contrast, are crowded with hydrocarbon and mineral states – Algeria, Libya, Chad, Congo-Brazzaville, Gabon, and Angola all sit in the bottom quartile – where resource rents finance the discretion the index penalises. The exceptions cut both ways. The Gambia (68th), Botswana (69th), and Uganda (72nd) show that modest incomes are no bar to decent rules, while Rwanda, widely cited for its business reforms, lands mid-table at 97th place – a sign that a streamlined investment climate is not the same thing as broad economic freedom.

> "There is no alternative way, so far discovered, of improving the lot of the ordinary people that can hold a candle to the productive activities that are unleashed by a free enterprise system.

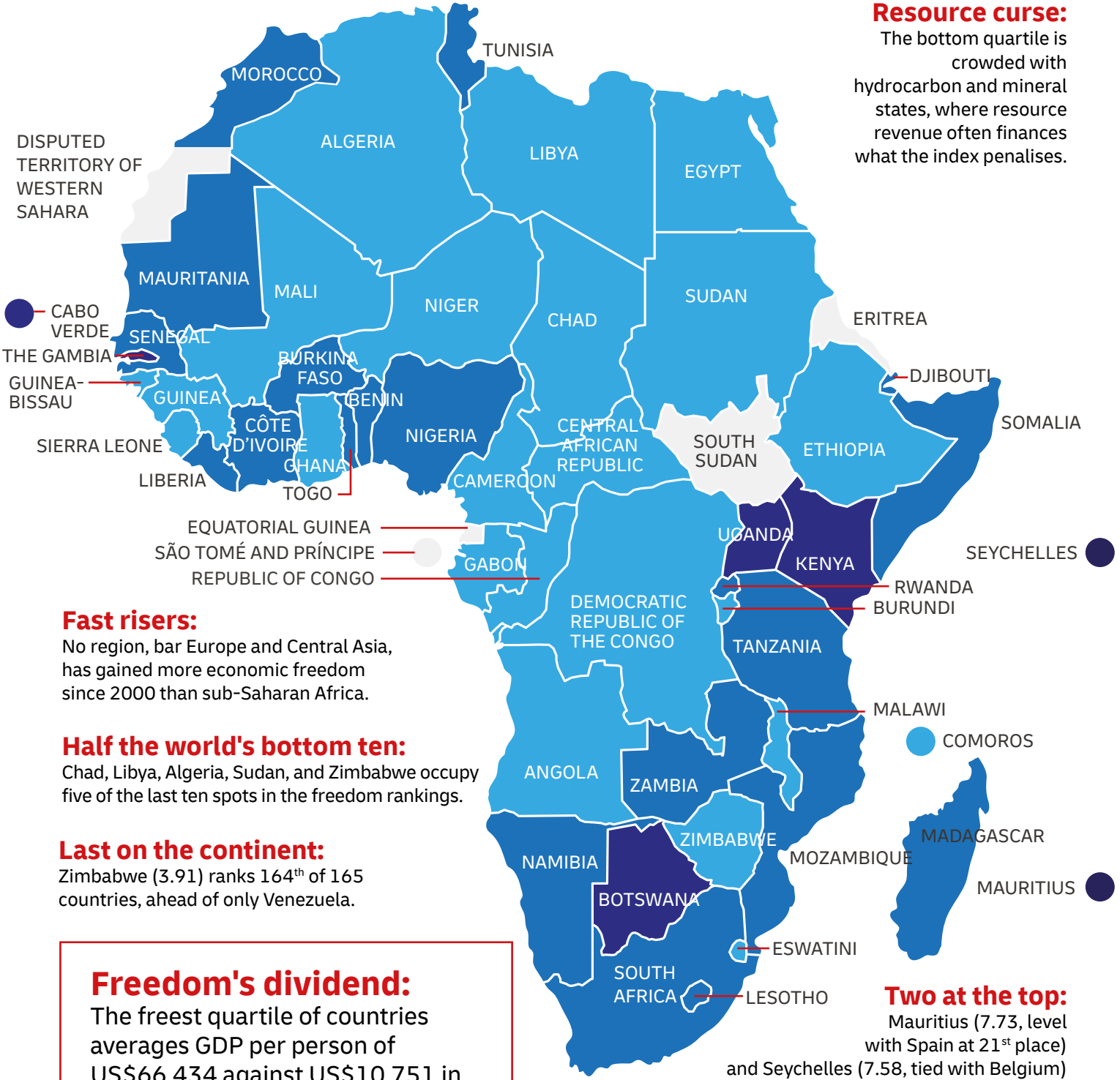
For the investor, the five areas read like a pre-flight checklist. Sound money is pricing, property rights are collateral, and trade freedom is a supply chain.

One encouraging property of this measure is that it moves. Freedom is choice and not fate, and countries have risen quickly when governments chose to. Indeed, the Fraser Institute's own long view singles the continent out: no region, bar Europe and Central Asia, has gained more economic freedom since 2000 than sub-Saharan Africa.[173]

[170] Friedman, M. (1979). *Interview by P. Donahue*. The Phil Donahue Show.
[171] Gwartney, J., Lawson, R., & Murphy, R. (2025). *Economic freedom of the world: 2025 annual report*. Fraser Institute.
[172] Gwartney et al. (2025).
[173] Gwartney et al. (2025).

Resource curse:

The bottom quartile is crowded with hydrocarbon and mineral states, where resource revenue often finances what the index penalises.



Fast risers:

No region, bar Europe and Central Asia, has gained more economic freedom since 2000 than sub-Saharan Africa.

Half the world's bottom ten:

Chad, Libya, Algeria, Sudan, and Zimbabwe occupy five of the last ten spots in the freedom rankings.

Last on the continent:

Zimbabwe (3.91) ranks 164th of 165 countries, ahead of only Venezuela.

Freedom's dividend:

The freest quartile of countries averages GDP per person of US$66,434 against US$10,751 in the least free.

Two at the top:

Mauritius (7.73, level with Spain at 21st place) and Seychelles (7.58, tied with Belgium) are Africa's only entrants in the top quartile.

FRASER INSTITUTE'S ECONOMIC FREEDOM OF THE WORLD QUARTILE (2023)

African nations are represented according to the quartile their economic freedom score places them into. Quartile 1 is most free. Quartile 4 is least free.

MOST FREE | SECOND QUARTILE | THIRD QUARTILE | LEAST FREE | NO DATA

Source: Gwartney, J., Lawson, R., & Murphy, R. (2025). Economic freedom of the world: 2025 annual report (2023 data). Fraser Institute.

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

20 THE RESILIENT CONTINENT

HOW DID AFRICA DEFY THE WORLD'S PESSIMISM?

The COVID-19 pandemic invited dire predictions for Africa as the world locked down and distanced itself in early 2020. The assumption was that the health systems would collapse. Millions would be thrown out of work. Governments would struggle to manage the crisis.[174] Africa, in short, would become more fragile on every front, from social cohesion to responsive governance. A hopeful trajectory would roll backward, and the economic growth and gains in living conditions achieved across two decades would sink.

Yet the opposite happened. Save for a handful of countries dealing with insurgencies and civil war, the continent is fitter than in 2019, according to the Fragile States Index produced by The Fund for Peace, a think tank based in Nigeria and the United States.[175]

The index draws on millions of media stories and research reports, quantitative data sets and analysis of key events to score countries on factors including group grievance, state legitimacy, public services, economic decline, and demographic pressures.

Kenya, with a stronger economy and less ethnic tension, joined Namibia and Algeria in showing the biggest improvements in the five-year period. Some of the continent's smallest countries revealed strength, too. Côte d'Ivoire became less fragile as brain drain and internal displacement eased. The island nation of Cabo Verde, west of Senegal, saw a 9.4-point gain as economic inequality and state legitimacy improved. The Gambia and Guinea-Bissau in mainland West Africa and Eswatini in southern Africa each posted changes greater than seven points.[176]

Even South Africa, which had almost half of Africa's recorded COVID infections and most of its deaths, became slightly less fragile, according to the index.

Africa proved resilient even as a debt crisis took hold, ushered in by copper-rich Zambia's default on a Eurobond payment in November 2020. Tourism, from airlines to wildlife lodges, took a major hit during the pandemic, and vulnerabilities symbolised by the lack of pharmaceutical manufacturing came to the fore. Not yet factored into the fragility equation: the pullback of US development aid and the economic impact of conflict in the Middle East.[177]

> "A hopeful trajectory would roll backward, and the economic growth and gains in living conditions achieved across two decades would sink.

A mere handful of countries exited the pandemic notably more fragile than they entered it. Chief among them was Burkina Faso, in the heart of the Sahel's conflict zone,[178] the only African country to post a double-digit slide over the five years, climbing 10.3 points on a scale in which a lower score (Sweden, Germany, Australia) means a stronger state. Libya and Mozambique, both coping with internal strife during COVID, edged upward in fragility. "Factionalised elites" and acute social pressures kept Somalia the world's most fragile country.

Nigeria became slightly less fragile between 2019 and 2024, while staying among the world's 15 most fragile countries. Mauritius, a financial hub in the Indian Ocean beyond Madagascar, is Africa's least fragile country, ranking alongside the Baltic states.

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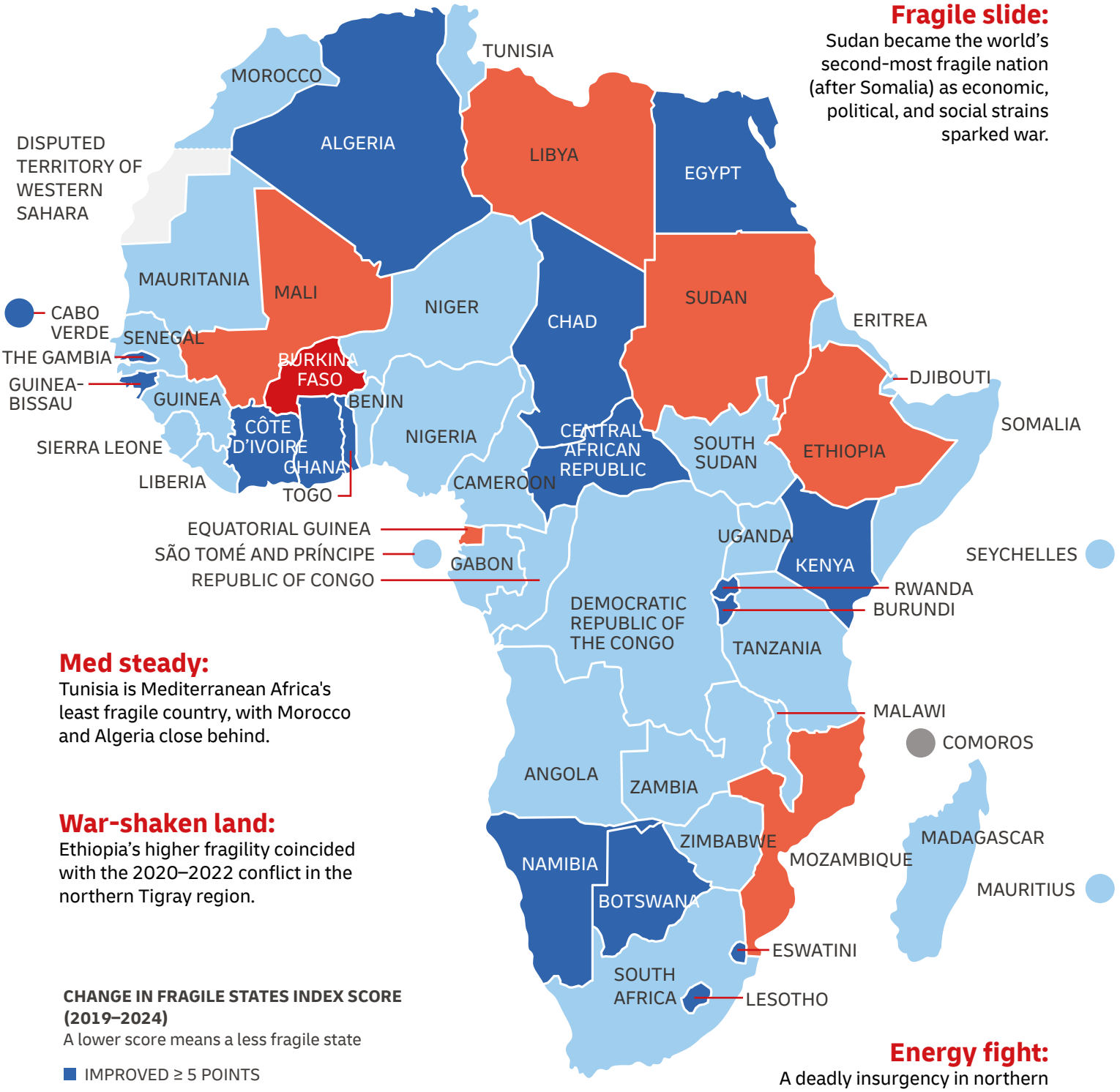
[174] United Nations Economic Commission for Africa. (2020). *COVID-19 in Africa: Protecting lives and economies*. UNECA; Imperial College London. (2020). *The impact of COVID-19 in Africa: Scenario analysis*. Imperial College London.
[175] The Fund for Peace. (2024). *Fragile States Index annual report 2024*. The Fund for Peace; The Fund for Peace. (2019). *Fragile States Index annual report 2019*. The Fund for Peace.
[176] The Fund for Peace (2019, 2024).
[177] International Monetary Fund (2026b).
[178] DeMarco, E. (2025, February 28). Crisis in the Sahel. *CQ Researcher*.

Fragile slide:

Sudan became the world's second-most fragile nation (after Somalia) as economic, political, and social strains sparked war.



Med steady:

Tunisia is Mediterranean Africa's least fragile country, with Morocco and Algeria close behind.

War-shaken land:

Ethiopia's higher fragility coincided with the 2020–2022 conflict in the northern Tigray region.

CHANGE IN FRAGILE STATES INDEX SCORE (2019–2024)

A lower score means a less fragile state

- IMPROVED ≥ 5 POINTS
- IMPROVED < 5 POINTS
- NO CHANGE
- MORE FRAGILE < 5 POINTS
- MORE FRAGILE ≥ 5 POINTS
- NO DATA

Energy fight:

A deadly insurgency in northern Mozambique forced a halt in a massive natural gas project.

Source: The Fund for Peace. (2024). Fragile States Index annual report 2024. The Fund for Peace; The Fund for Peace. (2019). Fragile States Index annual report 2019. The Fund for Peace.

21 WHERE TO INVEST IN AFRICA

WHERE WOULD YOU INVEST?

Growth, trade, risk, rules and resilience: the preceding maps supply the ingredients. This one combines them. Every corporate Africa strategy begins with the same question: where first? The Where to Invest in Africa report, produced by Rand Merchant Bank, compresses the answer into a single number built from 20 metrics across four pillars – economic performance and potential; market accessibility and innovation; economic stability and investment climate; and social and human development.[179] The map plots the result as a Z-score. Zero marks the average of the 31 countries ranked, positive readings sit above the pack, and negative ones below.

The podium confounds assumptions about size. Seychelles (+0.80) and Mauritius (+0.64), two of the continent's smallest economies, lead the field on the strength of stability, governance and human development. The giants follow at a distance: Egypt (+0.48), Morocco (+0.42) and South Africa (+0.35) fill the next three places, with Ghana (+0.27) and Côte d'Ivoire (+0.17) next. Nigeria, Africa's most populous country, sits at just +0.14 – barely above par – a reminder that the index measures the climate for capital and not the size of the prize. At the foot of the table, Zimbabwe (−0.65), Eswatini (−0.54), and Congo-Brazzaville (−0.52) trail the field.

Used properly, the ranking sets the order of due diligence rather than the destination of capital. Small, stable states top the table precisely because the model prizes what makes investment safe. The largest opportunities sit lower down, where scale and risk arrive together.

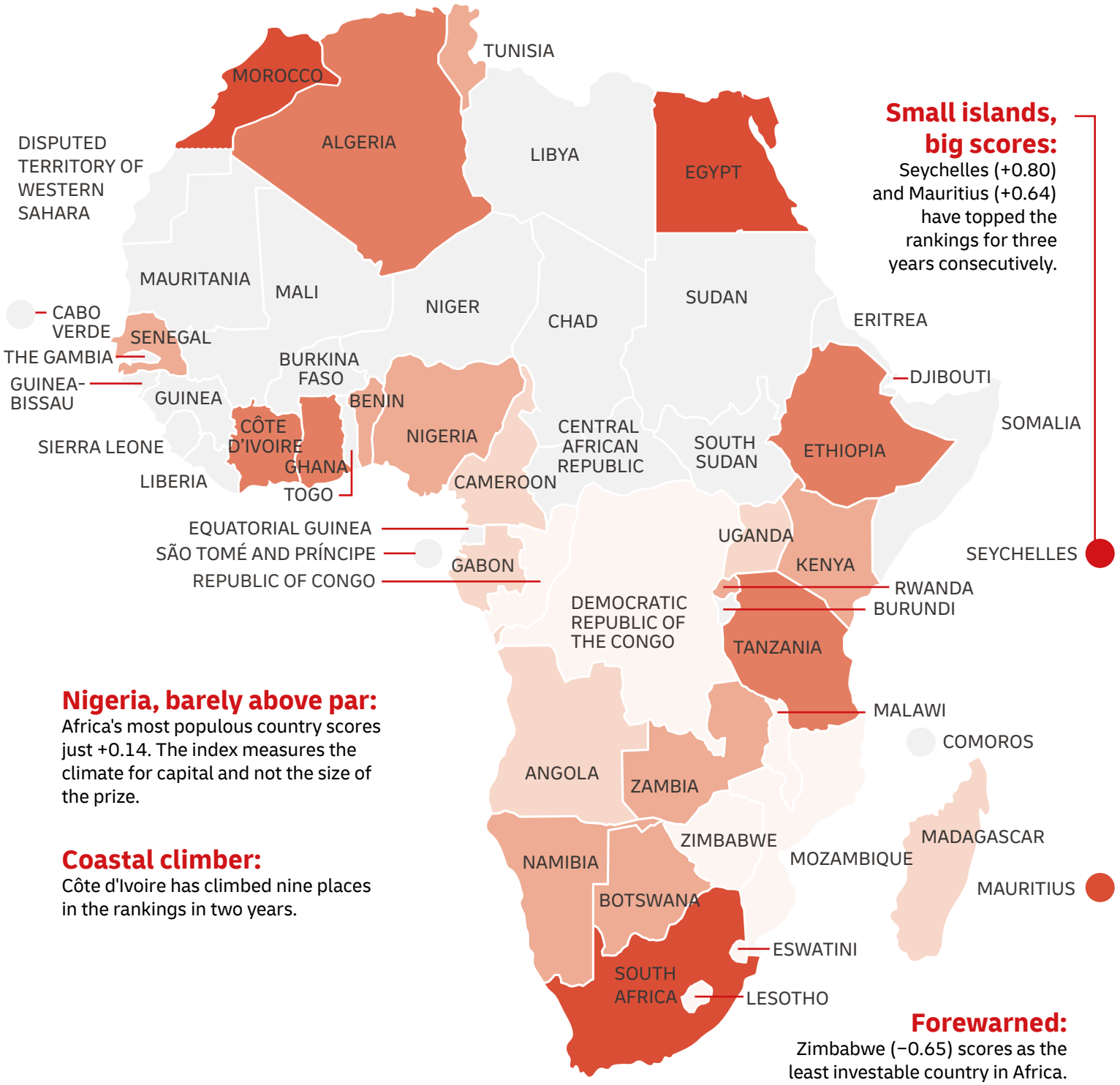
The model's use of 20 individual metrics reinforces the need for granularity. From there, the strategist must assign emphasis to what matters most. Firms needing scale to sell low-margin retail goods will find top-ranked Seychelles and Mauritius unexciting. However, those wanting predictable governance environments will be drawn to the idyllic islands.

> “ Small, stable states top the table precisely because the model prizes what makes investment safe.

The report's own archetypes concede the point: it groups Nigeria, South Africa, Egypt and Ethiopia as 'highflyers' – large, established markets – even as none cracks the top two.[180] The investor's task is not to pick the highest score, but to match an appetite for risk to a row of the table.

Aliko Dangote, the continent's most prolific industrial investor, offers the impatient version of the same counsel: "My advice is that you better invest now, before it's too late. The train is about to leave the station."[181] The report's forward-looking archetypes suggest where the next risers sit. It clears Senegal and Côte d'Ivoire 'for take-off' and tags Rwanda, Mozambique and Benin as 'low-base boomers' – small markets with room to grow explosively.[182]

[179] Rand Merchant Bank. (2026). *Where to invest in Africa 2026/2027*. Rand Merchant Bank.
[180] Rand Merchant Bank (2026).
[181] Kirkland, R. (2015, July 1). *Dangote Group on the Africa opportunity*, interview with A. Dangote. McKinsey & Company.
[182] Rand Merchant Bank (2026).



Small islands, big scores:
Seychelles (+0.80) and Mauritius (+0.64) have topped the rankings for three years consecutively.

Nigeria, barely above par:
Africa's most populous country scores just +0.14. The index measures the climate for capital and not the size of the prize.

Coastal climber:
Côte d'Ivoire has climbed nine places in the rankings in two years.

Forewarned:
Zimbabwe (−0.65) scores as the least investable country in Africa.

RMB WHERE TO INVEST IN AFRICA (WTIIA) SCORES (2026/27)
The 31 countries are assigned Z-scores, where zero represents the average.
The higher a score above zero, the more attractive the country is as an investment destination.
The lower a score is below zero, the less attractive it is as an investment destination.

- < −0.30
- −0.30 – ≤ 0
- > 0 – < +0.15
- +0.15 – < +0.35
- +0.35 – < +0.70
- ≥ +0.70
- NO DATA

Source: Rand Merchant Bank. (2026). RMB Where to Invest in Africa 2026/2027. RMB.

22 DRAWN WITH A RULER

WHY ARE SO MANY OF AFRICA'S BORDERS STRAIGHT?

Many of Africa's borders were drawn with a ruler. Europeans carved up the continent between the 1880s and the early 1900s, and the result is clearest in the Sahara. Egypt and Sudan, for example, are divided by a line of latitude, the 22nd parallel, fixed in 1899.[183]

This matters because a border decides who shares a state, a market, and a government. Stelios Michalopoulos and Elias Papaioannou, economists at Brown University and London Business School, respectively, laid today's borders over a 1959 map of Africa's ethnic homelands and found 229 of 825 with at least a tenth of their land in a second country. Where groups were split, political violence is about 40% more intense and lasts about 55% longer.[184] Independence did not reopen the question. In 1964, the Organisation of African Unity pledged "to respect the borders existing on their achievement of national independence."[185]

The Europeans who drew these lines knew remarkably little about the territories. In 1890, British Prime Minister Lord Salisbury said they had been "giving away mountains and rivers and lakes to each other", hindered only by "the small impediment that we never knew exactly where the mountains and rivers and lakes were."[186] Some of those mountains did not exist: the Mountains of Kong, recounted in the prologue, appeared on some 40 European maps between 1798 and 1892, and in one school geography book as a border, until Louis-Gustave Binger walked the route in 1887–89 and found none.[187]

Yet the popular story overstates the case. The claim that 80% of African borders follow lines of latitude and longitude comes with no calculation behind it, and the often-quoted 44% comes from a 1961 survey of tropical Africa only.[188] When the political scientists Jack Paine, Xiaoyan Qiu, and Joan Ricart-Huguet checked all 107 of Africa's bilateral borders, they found water bodies – rivers and lakes – to be the primary element of 63%, and straight lines of 37%. Europeans also "negotiated with African rulers to secure treaties and to learn about historical state frontiers", and those frontiers shaped 62% of the borders. The idea that Africa's borders are largely arbitrary, they conclude, is "as foundational as it is misguided."[189]

> "In 1964, the Organisation of African Unity pledged "to respect the borders existing on their achievement of national independence."

So why the straight lines? They were a choice. Europeans used them where there was little to follow and little they thought worth fighting over: deserts and thinly peopled land. As Paine et al. put it, "the exact placement of a straight-line border is typically arbitrary", but "the decision to draw a straight-line border should be conscious and strategic". The ruled lines on the map show where the colonisers cared least. Where people were many and the land was valuable, borders more often follow rivers and old kingdoms, and they have held ever since.

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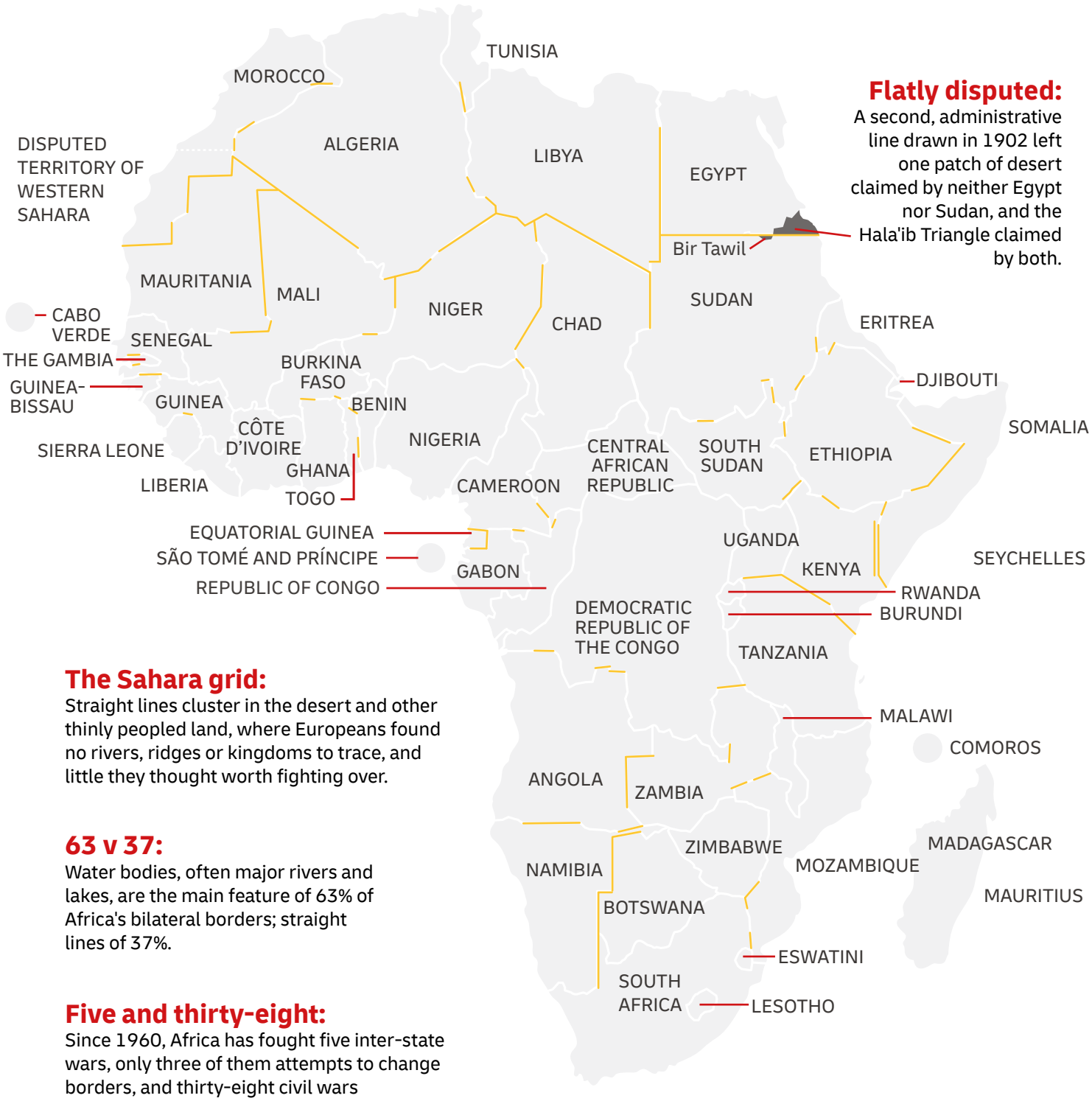
[183] U.S. Department of State, Office of the Geographer. (1962). *Sudan – United Arab Republic (Egypt) boundary* (International Boundary Study No. 18). U.S. Department of State.
[184] Michalopoulos, S., & Papaioannou, E. (2016). The long-run effects of the Scramble for Africa. *American Economic Review, 106*(7), 1802–1848.
[185] Organization of African Unity. (1964). *Border disputes among African states* (Resolution AHG/Res. 16(I)). OAU.
[186] Salisbury, R. (1890, August 7). Speech reported in *The Times*, as quoted in International Court of Justice. (1994). *Territorial dispute (Libyan Arab Jamahiriya/Chad): Separate opinion of Judge Ajibola*. I.C.J. Reports 1994.
[187] Bassett & Porter (1991); Cooper-Jones & Foreman (2025), pp. 78–81.
[188] Alesina, A., Easterly, W., & Matuszeski, J. (2011). Artificial states. *Journal of the European Economic Association, 9*(2), 246–277; Barbour, K. M. (1961). A geographical analysis of boundaries in inter-tropical Africa. In K. M. Barbour & R. M. Prothero (Eds.), *Essays on African population* (pp. 303–323). Routledge & Kegan Paul.
[189] Paine, J., Qiu, X., & Ricart-Huguet, J. (2025). Endogenous colonial borders: Precolonial states and geography in the partition of Africa. *American Political Science Review, 119*(1), 1–20.



Flatly disputed:

A second, administrative line drawn in 1902 left one patch of desert claimed by neither Egypt nor Sudan, and the Hala'ib Triangle claimed by both.

The Sahara grid:

Straight lines cluster in the desert and other thinly peopled land, where Europeans found no rivers, ridges or kingdoms to trace, and little they thought worth fighting over.

63 v 37:

Water bodies, often major rivers and lakes, are the main feature of 63% of Africa's bilateral borders; straight lines of 37%.

Five and thirty-eight:

Since 1960, Africa has fought five inter-state wars, only three of them attempts to change borders, and thirty-eight civil wars (Studwell, 2026).

Underlining the issue:

The Anglo-Egyptian agreement of 19 January 1899 set the boundary along a line of latitude for most of its 1,276 kilometres.

Source: Natural Earth. Authors' highlights in yellow.

23 THE LAND NOBODY WANTS

WHAT DOES IT TAKE TO MAKE A COUNTRY?

In June 2014 an American farmer made a 14-hour trek into the desert between Egypt and Sudan, planted a flag his children had designed and declared a kingdom, because his daughter, aged seven, wanted to be a princess. “This is no-man’s-land, and I have claimed it,” he said.[190] No government responded, and nobody else wanted the land either. What makes a country? The legal definition, which descends from the 1933 Montevideo Convention, has four parts: a permanent population, a defined territory, a government and the capacity to deal with other states.[191] The plainer answer is that a country is a claim others accept. The desert the farmer stood on has edges and nothing else.

The area is called Bir Tawil: about 2,000 square kilometres of sand and rock, roughly the size of Mauritius, with no permanent water, roads or other infrastructure. The Ababda, nomads who have long crossed it, now dig for gold there and make no declaration of statehood.[192] Its edges were drawn by British administrators in Cairo more than a century ago, when the Scramble for Africa was a matter of lines. Lord Salisbury, the British prime minister, put it that way in 1890: Europe had been “giving away mountains and rivers and lakes to each other, only hindered by the small impediment that we never knew exactly where the mountains and rivers and lakes were.”[193] Most of those lines hardened into borders. Here they were drawn twice.

The first draft, in 1899, was the ruler laid along the 22nd parallel that opened the previous map: Egypt to the north, Sudan to the south. The second, in 1902, bent the line to follow the people who used the land: a wedge of coast north of the parallel, Hala’ib, went to Khartoum, and the dry trapezoid south of it, Bir Tawil, went to Cairo.[194] This mattered little until Sudan became independent in 1956, when each country chose the version of the border that gave it the coast.[195] Herein lies the knot: each draft allocates both pieces at once, so to claim the desert either country would have to pick up the other draft and hand over the coast. Unscrambling the Scramble means choosing a draft that neither can afford to choose. So Bir Tawil sits outside the definition of a country, unclaimed by the only two states that could claim it.[196]

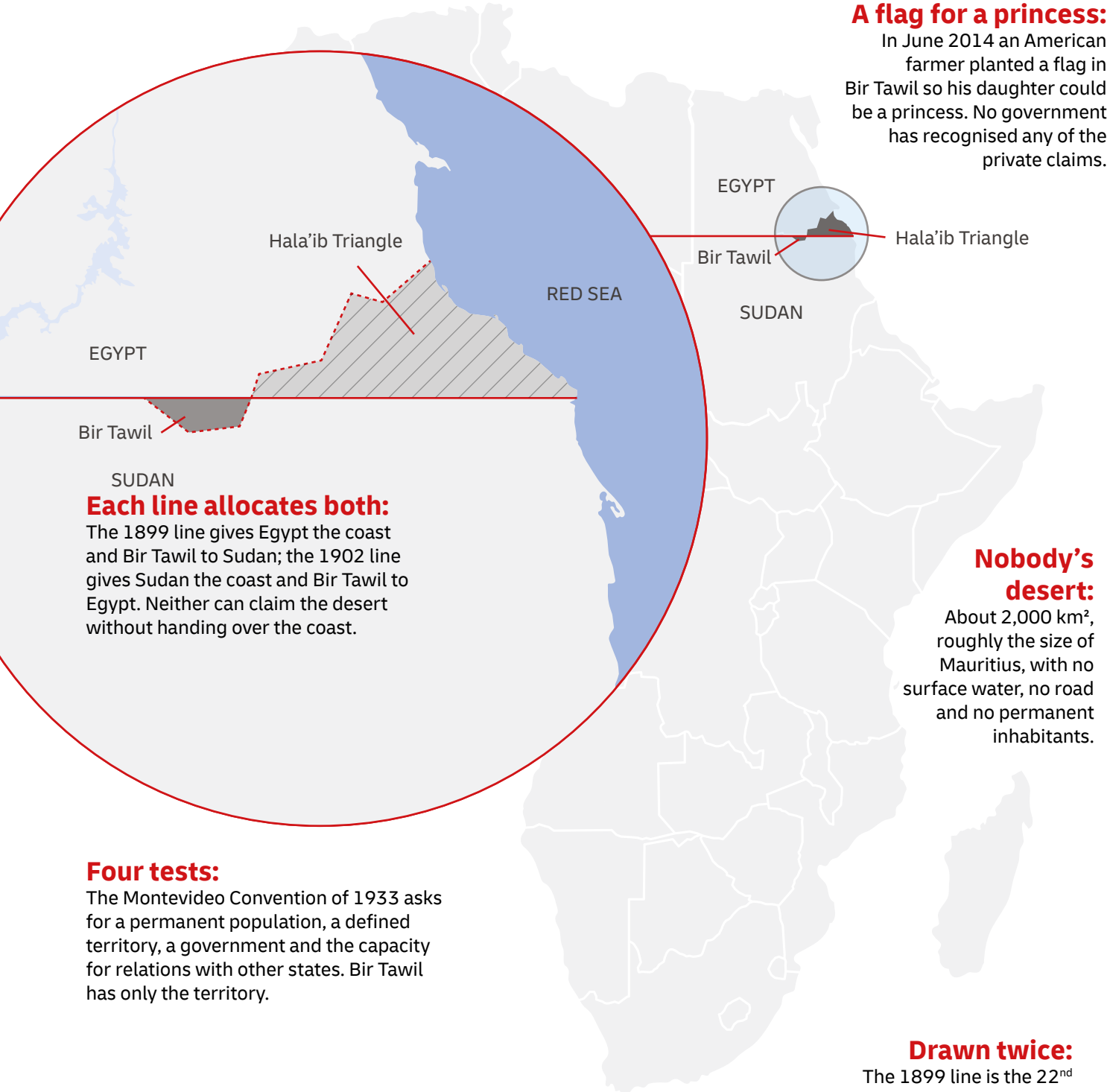
Bir Tawil is the rarer condition. Africa has had many territories that raised a flag and found the world’s map did not move: Katanga in 1960, Biafra in 1967, Azawad in 2012. Some lasted months, some years; a handful persist.[197] A country needs land that someone wants and a world that agrees. Those places had the first but not the second. Bir Tawil has neither.

> “The area is called Bir Tawil: about 2,000 square kilometres of sand and rock, roughly the size of Mauritius, with no permanent water, roads or other infrastructure. The Ababda, nomads who have long crossed it, now dig for gold there and make no declaration of statehood.

[190] Karalekas, D. (2020). Navigating terra nullius: The Ababda and the case for indigenous land rights in Bir Tawil. *Global Journal of Economics and Finance, 4*(2), 41–49, pp. 41–42.
[191] Convention on Rights and Duties of States (Montevideo Convention), December 26, 1933, 165 L.N.T.S. 19, Article 1.
[192] Karalekas (2020), pp. 41–44. Area measured from the Natural Earth (2022) Admin 0 – Disputed areas polygon (c. 2,020 km²); published figures range from 1,290 km² (Karalekas, 2020, p. 41) to 2,060 km². Mauritius: World Bank (2025c), land area series.
[193] Salisbury (1890), as quoted in International Court of Justice (1994); Pakenham, T. (1991). *The scramble for Africa, 1876–1912*. Weidenfeld & Nicolson.
[194] Agreement between Her Britannic Majesty’s Government and the Government of the Khedive of Egypt relative to the future administration of the Sudan (1899), Article 1; U.S. Department of State, Office of the Geographer (1962): arrêté of 25 July 1902, in force by decree of 4 November 1902, placing the Bisharin under Sudan and the Ababda under Egypt.
[195] U.S. Department of State, Office of the Geographer (1962), on Egypt’s demand of 1 February 1958 for the territory north of the parallel; Karalekas (2020), p. 41.
[196] Karalekas (2020), p. 41.
[197] United Nations Peacekeeping. (n.d.). *Republic of the Congo – ONUC: Background*; Stremlau, J. J. (1977). *The international politics of the Nigerian civil war, 1967–1970*. Princeton University Press; Lecocq, B., Mann, G., Whitehouse, B., Pelckmans, L., Badi, D., Belalimat, N., Hall, B., & Lacher, W. (2013). One hippopotamus and eight blind analysts: A multivocal analysis of the 2012 political crisis in the divided Republic of Mali. *Review of African Political Economy, 40*(137), 343–357; Bradbury, M. (2008). *Becoming Somaliland*. James Currey.

A flag for a princess:

In June 2014 an American farmer planted a flag in Bir Tawil so his daughter could be a princess. No government has recognised any of the private claims.



Each line allocates both:

The 1899 line gives Egypt the coast and Bir Tawil to Sudan; the 1902 line gives Sudan the coast and Bir Tawil to Egypt. Neither can claim the desert without handing over the coast.

Nobody's desert:

About 2,000 km², roughly the size of Mauritius, with no surface water, no road and no permanent inhabitants.

Four tests:

The Montevideo Convention of 1933 asks for a permanent population, a defined territory, a government and the capacity for relations with other states. Bir Tawil has only the territory.

Drawn twice:

The 1899 line is the 22nd parallel. The 1902 line bends to follow the people who used the land. Egypt holds to the first, Sudan to the second.

THE EGYPT–SUDAN BOUNDARY AS DRAWN IN 1899 AND IN 1902

- 1899 ANGLO-EGYPTIAN LINE (22ND PARALLEL): EGYPT'S POSITION
- 1902 ADMINISTRATIVE LINE: SUDAN'S POSITION
- CLAIMED BY NEITHER
- CLAIMED BY BOTH

Source: U.S. Department of State, Office of the Geographer. (1962). Sudan – Egypt (United Arab Republic) boundary (International Boundary Study No. 18). Geometry: Natural Earth (2022). 1:10m cultural vectors.

24 THE WALL THAT WAS NEVER A WALL

CAN YOU BUILD A WALL OUT OF TREES?

Not every line on the map is a border; this one was meant to hold back a desert. In 2007, the African Union launched the Great Green Wall: a belt of restored land 8,000 kilometres long, running from Senegal to Djibouti across 11 countries, with a target of 100 million hectares restored by 2030.[198] The idea was older. In 1952, the English forester Richard St Barbe Baker crossed the Sahara and proposed a "Green Front", a belt of trees roughly 50 kilometres wide to stop the desert spreading south.[199]

The stakes are high. Natalie Thomas and Sumant Nigam of the University of Maryland found that the Sahara grew by about 10% between 1920 and 2013, and that roughly a third of that growth came from climate change.[200] When crops or grazing fail, people fight over the land that is left. In the first half of 2018, more than 1,300 Nigerians died in violence between herders and farmers, about six times the civilian toll of Boko Haram, according to the International Crisis Group.[201]

Progress has been slow. By 2019, the countries had restored four million hectares inside the Wall's zone, 4% of the target. Donors pledged US$14.3 billion in 2021, but by March 2023, only US$2.5 billion had been paid out. The latest UN review counts 1.66 million hectares under restoration, drawn from fewer than 90 of 389 projects. In 2020, the UN put the cost of completing the job at about US$40 billion.[202]

The wall itself was the wrong idea. Planted trees need years of care, and the UN warns that a plantation with a low survival rate "is likely to disappear completely". When Annah Lake Zhu of Wageningen University and her colleagues studied 36 planted plots in northern Senegal, only two showed real greening, and only one did better than rainfall alone would explain.[203]

The desert is also a more capricious adversary than the wall's planners assumed. The UN's own 2020 report notes that over the past two decades, "the southern border of the Sahara has retreated steadily, and parts of the Sahel have become greener." The UN now describes the Wall as "a mosaic of different land use and production systems".[204]

> "the southern border of the Sahara has retreated steadily, and parts of the Sahel have become greener.

The Sahel's biggest success involved no planting at all. In 1983, Tony Rinaudo, an Australian agronomist working in Niger, noticed that the dead-looking stumps in farmers' fields were still alive underground. He persuaded farmers to protect the shoots instead of clearing them. Farmer-managed natural regeneration has since spread across an estimated five million hectares of southern Niger, about three times the area the UN's latest review records for all 11 countries.[205] The green wall that works may turn out to be millions of farmers, each looking after the trees on their own land.

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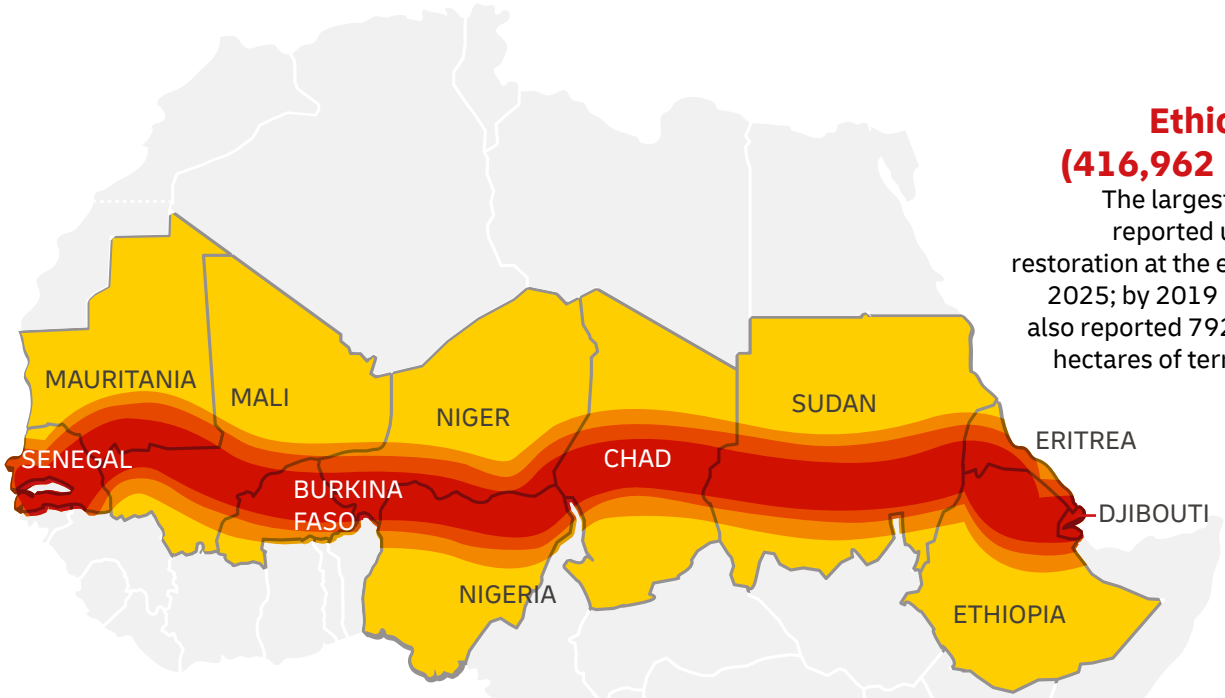
[198] United Nations Convention to Combat Desertification. (n.d.). *Great Green Wall Initiative*. UNCCD.
[199] St Barbe Baker, R. (1954). *Sahara challenge*. Lutterworth Press.
[200] Thomas, N., & Nigam, S. (2018). Twentieth-century climate change over Africa: Seasonal hydroclimate trends and Sahara Desert expansion. *Journal of Climate, 31*(9), 3349–3370.
[201] International Crisis Group. (2018). *Stopping Nigeria's spiralling farmer-herder violence* (Africa Report No. 262). International Crisis Group.
[202] United Nations Convention to Combat Desertification. (2020). *The Great Green Wall: Implementation status and way ahead to 2030*. UNCCD, pp. 23, 36; UNCCD. (2023, March 27). *Progress accelerated but targeted action needed*. UNCCD; UNCCD. (2026). *Five years of the Great Green Wall Accelerator*. UNCCD.
[203] UNCCD (2020), p. 33; Zhu, A. L., Ndiaye, A., Dahm, R., Mauclaire, M., & Boas, I. (2025). Africa's great green mirage? *Land Use Policy, 157*, 107670.
[204] UNCCD (2020), pp. 4, 29.
[205] Reij, C., Tappan, G., & Smale, M. (2009). *Agro-environmental transformation in the Sahel* (IFPRI Discussion Paper 00914). International Food Policy Research Institute; Right Livelihood Foundation. (2018). *Tony Rinaudo*. Right Livelihood.



Ethiopia (416,962 ha):

The largest area reported under restoration at the end of 2025; by 2019 it had also reported 792,711 hectares of terraces.

Senegal (8,770 ha):

The Wall's showcase nation reports less land under restoration than any founding country, except for Eritrea.

Two plots in 36:

Satellite analysis of planted parcels in northern Senegal found significant greening in just two out of 36 plots.

Promise versus reality:

By March 2023, just a fraction of the money pledged had actually been disbursed.

GREAT GREEN WALL INITIATIVE

FOCUS AREA — PARTICIPATING COUNTRIES

Source: United Nations Convention to Combat Desertification. (2026). *Five years of the Great Green Wall Accelerator: A journey of restoration, resilience and regional collaboration.*

25 ALL LINES LEAD ABROAD

WHY CAN'T YOU TAKE A TRAIN FROM MAPUTO TO BEIRA?

Mozambique has three railway systems, and each runs inland from a port, at Maputo, Beira, or Nacala, to a neighbouring country. A World Bank review described them as "three disconnected networks located in the north, central, and south".[206] To send a wagon from Maputo to Beira by rail, you have to go through another country. Travellers are better served by the airlines.

This matters because railways shape where towns grow and how trade flows, long after they are built. The economists Rémi Jedwab and Alexander Moradi found that Africa's colonial railways determined where economic activity settled, and that "these effects have persisted to date, although railroads collapsed and road networks expanded considerably after independence".[207] Lines that only run outward make it hard to build a national market.

The railways were built to serve Mozambique's neighbours. In 1895, Paul Kruger, president of the Transvaal (today part of South Africa), opened the line from Pretoria to Lourenço Marques, today's Maputo, to give the gold fields a port outside British control.[208] The Beira line reached Rhodesia (today's Zimbabwe) in 1898; the Nacala line was joined to Malawi in 1970, six years after independence. The system was developed primarily to service the trade and transport needs of South Africa, Zimbabwe, and Malawi.

The geographer Maxim Samson makes the same point in Earth Shapers: the lines run east and west to the ports, and none run north and south to hold the country together.[209] The trains carried people, too, as labour. The historian Charles van Onselen has traced the Mozambican miners who rode the trains from the border at Ressano Garcia to Johannesburg's gold mines between 1902 and 1955.[210]

The system is still slow and expensive. The passenger train from Beira to Moatize runs twice a week and takes up to 24 hours to cover 575 kilometres.[211] An audit for the World Bank found rail freight cost about twice the normal price, and stated that cargo from Nacala to Blantyre "sometimes takes 14–20 days".[212]

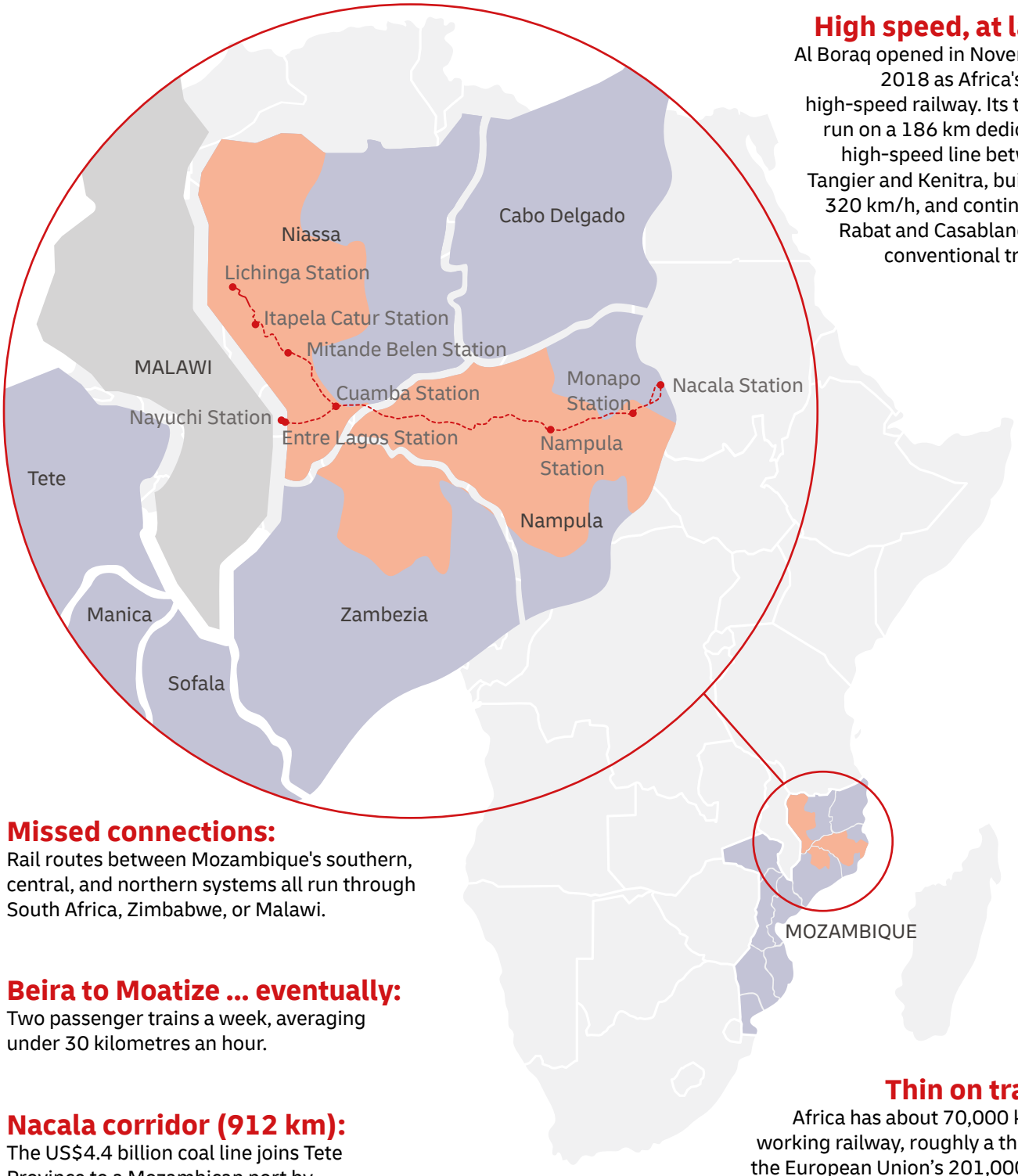
The newest railway follows the old pattern. The US$4.4 billion Nacala corridor, built by the mining company Vale and sold to Vulcan in 2022, carries coal 912 kilometres from Tete Province to the port of Nacala. Both ends are in Mozambique, but the line runs through Malawi.[213] The roads are starting to join the country up. Until 2009, the main north-south highway crossed the Zambezi by ferry at Caia; a bridge replaced it that year. The next railway would do well to follow the road.

> "The railways were built to serve Mozambique's neighbours. In 1895, Paul Kruger, president of the Transvaal (today part of South Africa), opened the line from Pretoria to Lourenço Marques, today's Maputo, to give the gold fields a port outside British control.

[206] Dominguez-Torres, C., & Briceño-Garmendia, C. (2011). *Mozambique's infrastructure: A continental perspective* (AICD Country Report). World Bank, p. 13.
[207] Jedwab, R., & Moradi, A. (2016). The permanent effects of transportation revolutions in poor countries: Evidence from Africa. *The Review of Economics and Statistics, 98*(2), 268–284.
[208] South African History Online. (n.d.). *Delagoa Bay railway line is officially opened*. SAHO.
[209] Samson, M. (2025). *Earth shapers*. Profile Books, ch. 2; Reardon, P. T. (2025, October 13). Review of *Earth shapers*, by M. Samson. *Third Coast Review*.
[210] Van Onselen, C. (2019). *The night trains: Moving Mozambican miners to and from the Witwatersrand mines, 1902–1955*. Jonathan Ball.
[211] Smith, M. (2026, January 1). *Train travel in Mozambique*. The Man in Seat 61; Smith, K. (2012, September 20). Walking on coal. *International Railway Journal*.
[212] Meeuws, R. (2004). *Mozambique: Trade and transport facilitation audit*. NEA for the World Bank, p. 50.
[213] Vale. (2021, December 21). *Vale announces the sale of its coal assets*. Vale; Nacala Corridor officially inaugurated. (2017, May 16). *Railway Gazette International*.

High speed, at last:

Al Boraq opened in November 2018 as Africa's first high-speed railway. Its trains run on a 186 km dedicated high-speed line between Tangier and Kenitra, built for 320 km/h, and continue to Rabat and Casablanca on conventional tracks.



Missed connections:

Rail routes between Mozambique's southern, central, and northern systems all run through South Africa, Zimbabwe, or Malawi.

Beira to Moatize ... eventually:

Two passenger trains a week, averaging under 30 kilometres an hour.

Nacala corridor (912 km):

The US$4.4 billion coal line joins Tete Province to a Mozambican port by crossing Malawi.

Thin on track:

Africa has about 70,000 km of working railway, roughly a third of the European Union's 201,000 km, spread across a land area more than seven times as large.

NACALA CORRIDOR

- DISTRICTS IMPACTED BY THE CORRIDOR
- PROVINCES
- NACALA RAILWAY
- RAILWAY INAUGURATED IN 2017
- MAIN TRAIN STATIONS

Source: Paris, R. G., & Rienow, A. (2025). Shedding light on local development: Unveiling spatial dynamics from infrastructure implementation through nighttime lights in the Nacala corridor, Mozambique. Remote Sensing Applications: Society and Environment, 37, 101388.

DHL Africa Through Multiple Lenses is produced by DHL Express Sub-Saharan Africa with the GIBS Centre for African Management and Markets (CAMM).

26 THE LONG ROAD TO THE SEA

LANDLOCKED OR LANDLINKED?

Sixteen African countries have no coastline. They make up half of the world's 32 landlocked developing countries, and they are home to about a quarter of Africa's people.[214] This is unusual. Paul Collier, the Oxford development economist, notes that outside Africa, only "a mere one percent" of people in developing countries live in landlocked countries without natural resources.[215]

Distance to the sea is expensive. The trade economists Nuno Limão and Anthony Venables found that the typical landlocked country pays 55% more to move its goods than a coastal one, and trades only 40% as much.[216] The rail-and-road corridor from Douala in Cameroon to N'Djamena in Chad runs some 1,840 kilometres, and in 2022 the World Bank put freight transit time between the two at about 20 days.[217]

Ethiopia shows the scale of the problem. With 132 million people it is the most populous landlocked country in the world, and more than 90% of its trade passes through a single port, Djibouti. A Chinese-built electric railway of about 750 kilometres, from Addis Ababa to the Port of Doraleh on the Red Sea, was designed to cut freight journeys to the port from up to 50 hours to 10.

Other landlocked countries are placing similar bets, and Zambia is hedging in both directions. To the west, the Lobito corridor would link the copper mines of Zambia and the southern Democratic Republic of Congo to Angola's Atlantic port of Lobito.[218] To the east, Zambia and Tanzania signed a US$1.4 billion agreement with China in November 2025 to revive the TAZARA railway, which runs from central Zambia to Dar es Salaam.[219]

On the other hand, a coastline is no guarantee of access to the sea. Nathan Nunn and Diego Puga, economists who measured how far each country's land lies from the coast, show that the Democratic Republic of Congo's land lies on average 1,016 kilometres from the sea, despite its access to the coast, farther than landlocked Uganda at 909 kilometres. Landlocked Eswatini, at 113 kilometres, is closer to the sea than coastal Senegal, at 165 kilometres.[220]

> "...outside Africa, only "a mere one percent" of people in developing countries live in landlocked countries without natural resources.

The most unusual case is The Gambia, a country that is almost all riverbank. Under an agreement with France in 1889, Britain kept "a strip, 10 kilometres wide on each bank" of the Gambia River, in the words of a British minister in 1904.[221] The popular story that the border marks the range of a gunboat's cannon is a myth.[222] The result is a thin country, reaching about 320 kilometres inland, which the author Joe Studwell calls "the long finger" that splits Senegal in two. For decades, lorries from Dakar to southern Senegal queued for a ferry, sometimes for 10 to 20 days, until a 942-metre bridge opened in January 2019. "Before, we could lose a whole day at the ferry," one transporter told the African Development Bank. "Today, I cross in a few minutes."[223]

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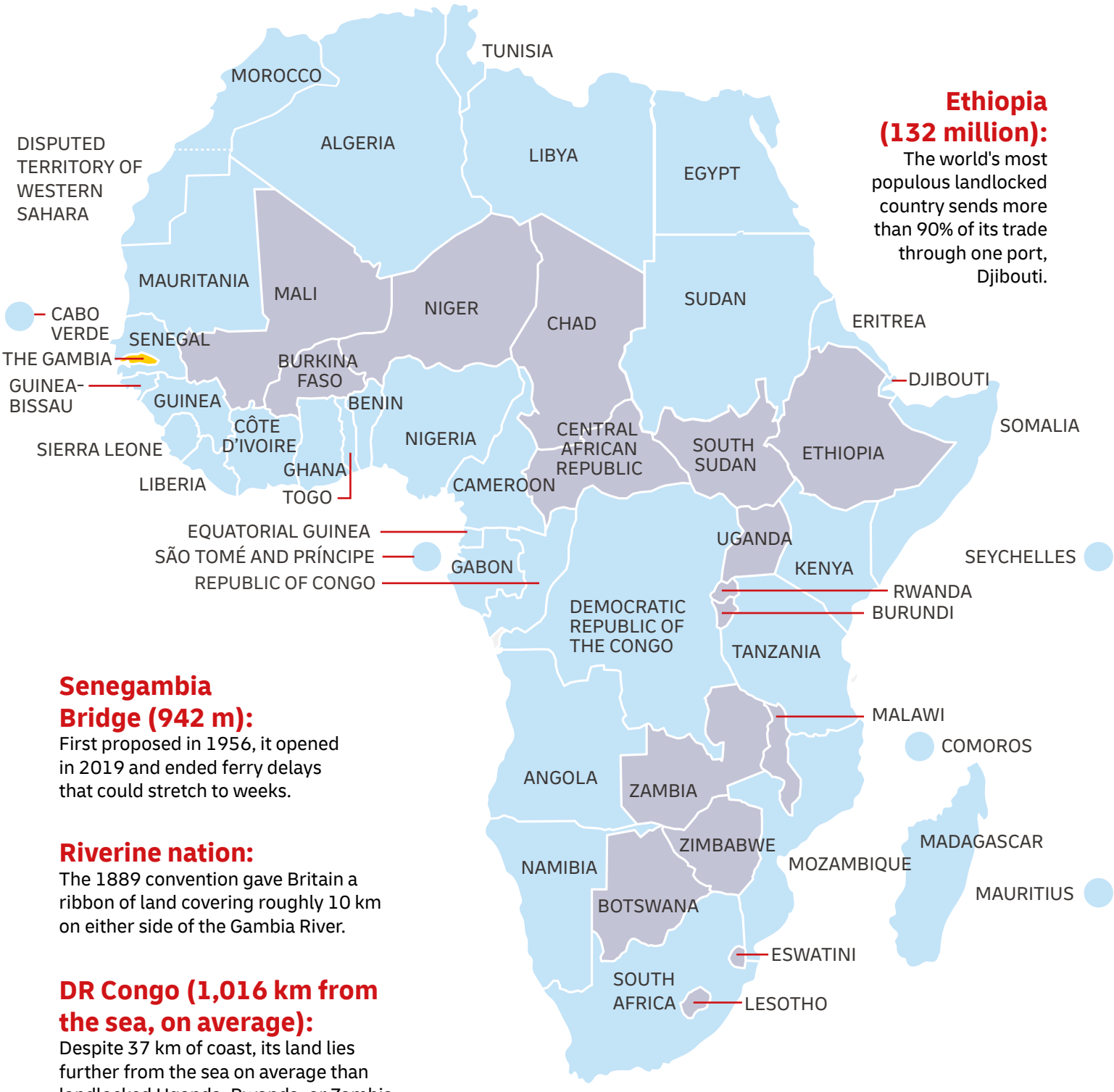

Ethiopia (132 million):

The world's most populous landlocked country sends more than 90% of its trade through one port, Djibouti.

Senegambia Bridge (942 m):

First proposed in 1956, it opened in 2019 and ended ferry delays that could stretch to weeks.

Riverine nation:

The 1889 convention gave Britain a ribbon of land covering roughly 10 km on either side of the Gambia River.

DR Congo (1,016 km from the sea, on average):

Despite 37 km of coast, its land lies further from the sea on average than landlocked Uganda, Rwanda, or Zambia.

ACCESS TO THE SEA

LANDLOCKED COASTAL THE GAMBIA

Source: Natural Earth. Authors' colouring.

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