

FORESIGHT AFRICA

TOP PRIORITIES
FOR THE CONTINENT
IN 2022



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FOR THE CONTINENT
IN 2022

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Letter from the director



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While the pandemic forced leaders to recognize that the best way to address these problems is to promote healthy economic growth, we are in danger of falling back to insufficient or even ineffective development strategies and returning to the status quo.

Two years in, the COVID-19 pandemic continues to dominate every narrative regarding the global economy. The future of trade, migration, travel, supply chains, economic growth, education, innovation, etc.,—in Africa and elsewhere—remains constrained by the uneven recovery from this virus.

Returning to “normal” will require a truly global effort to reduce and mitigate the devastation COVID-19 has had and is continuing to have on the human and financial health of countries. Instead, we have witnessed the emergence of a parallel but diverging world: The rich and vaccinated and the poor and unvaccinated. Africa remains among the latter: As of this writing, of its 1.3 billion people, less than 11 percent have been fully vaccinated. Moreover, the region is being left even further behind during the global economic recovery. This divergence in vaccination rates, the intensification of fiscal pressures, increased debt levels, and uneven economic recovery were major themes for the continent in 2021.

These themes compound the complex challenges the region was already facing, including burgeoning youth unemployment, inadequate infrastructure, and the ravages of climate change. While the pandemic forced leaders to recognize that the best way to address these problems is to promote healthy economic growth, we are in danger of falling back to insufficient or even ineffective development strategies and returning to the status quo.

Despite these obstacles, there are reasons to be cautiously optimistic about Africa’s future. While the region’s traditional powerhouses—e.g., Angola, Nigeria, and South Africa as well as Ethiopia—will continue to struggle in the year ahead, the International Monetary Fund forecasts strong growth for sub-Saharan Africa overall—in fact, 3.8 percent for 2022. Notably, medium-sized economies such as Ghana, Côte d’Ivoire, Kenya, and the Democratic Republic of the Congo will take up the slack with growth rates above 6 percent as high commodity prices and government reforms improve finances. Smaller countries such as the Seychelles, Rwanda, Mauritius, and Niger will also reach record-high growth rates in 2022. Moreover, we are only just beginning to see the fruits of the now-operational African Continental Free Trade Area as well as the region’s entrepreneurial and technology-savvy growing youth population.

Thus, I open this year’s *Foresight Africa* with a hopeful message given Africa’s proven ability to weather much of the pandemic with innovation and resilience. The Africa Growth Initiative team and I look forward to the modern, dynamic, and rising Africa captured on this year’s cover. Moreover, we hope that our approach to and innovations within the 2022 edition of *Foresight Africa*—including brand new themes and a more diverse and representative collection of contributors—reflects the dynamism and optimism of the region more broadly. In another change, instead of presenting the theme of good governance as a separate section, this year, each thematic chapter features a “good governance” viewpoint, underpinning the vital role of good governance in achieving Africa’s economic and political transformation.

In Chapter 1, our authors share reasons for confidence in **Africa’s economic recovery** and offer strategies for boosting financing to protect and enhance the economic gains of recent decades. The region’s entrepreneurial youth, technological revolution, sustained investments, recent economic successes, and promise of its “latent assets” all contribute to the positive trajectory the region is witnessing despite the emergence of COVID-19 variants that threaten to set the region back.

Africa's women and girls continue to flex their intellectual and metaphorical muscles across a variety of arenas—in politics, in offices, in the home, in schools, in laboratories, in hospitals, and on the global stage, to name just a few.

Indeed, much of Africa's economic recovery hinges on the world's ability to contain this virus in the long term—as we saw late last year in the reactive travel bans that punished Africa for the omicron variant already circulating around the globe. Clearly, national economies can only have robust growth if both the global economy and their populations are healthy. For this reason, we dedicate Chapter 2 to strategies for **preparing Africa's health systems** to be self-sufficient for tackling both current and future health crises as well as exploring strategies to achieve global health equity.

Notably, the world has witnessed remarkable leadership under African women when navigating these crises—at a time when recent gains in women and girls' education, health, and livelihoods have been reversed. Africa's women and girls continue to flex their intellectual and metaphorical muscles across a variety of arenas—in politics, in offices, in the home, in schools, in laboratories, in hospitals, and on the global stage, to name just a few. Thus, in a first-ever decision, this year, we dedicate a full chapter, Chapter 3, to strategies for further **empowering African women and girls**.

Africa has already shown its ability to lead when it comes to **tackling the global climate change crisis** through shared efforts like the Common Africa Position. It bears repeating that, despite contributing least to the problem, Africa is experiencing the worst effects—not only in increased natural disasters, but also in cascading impacts like migration and decelerated economic growth. Thus, in Chapter 4, our authors show that, through regional solidarity as demonstrated at the recent global climate negotiations at the U.N. Climate Change Summit; successful local and national responses to climate mitigation and adaptation; and increased global commitment to climate finance, this challenge does not have to be insurmountable.

Notably, a major tool in tackling climate change and other existential threats is technology. This year, we approach the **technological revolution** with an eye towards practicality: It is omnipresent, so how can Africa best leverage these new technologies? Thus, in Chapter 5, our authors approach the reality and practicability of technological tools, including cryptocurrencies, improved remittance systems, digital diplomacy, and data governance, for long-term socioeconomic gains.

We close this year's edition with an exploration of Africa's partnerships. The pandemic exposed holes in the fabric of global collaboration and the vulnerability of Africa to global headwinds. Even before the pandemic, though, African countries were looking to foster more balanced relationships with other parts of the world that understand the region's challenges and might share their lessons, resources, and political capital for equal economic advancement. Thus, in Chapter 6, our authors consider **Africa's relationships with emerging partners**, such as the Association of Southeast Asian Nations, Gulf states, Russia, and others, and examine how those relationships might lead to prosperous futures for all parties.

With this and every edition of *Foresight Africa*, we aim to capture the top priorities for the region in the coming year, offering recommendations for African and global stakeholders for creating and supporting a strong, sustainable, and successful Africa. In doing so, we hope that *Foresight Africa 2022* will promote an engaging and thoughtful dialogue on the key issues influencing development policy and practice in Africa during the upcoming year. We hope that this will ultimately lead to sound policies and strategies that sustain and expand the benefits of economic growth to all people of Africa.

Over the course of the year, we will incorporate the feedback we receive from our readers and continue the debate on Africa's priorities through research, knowledge products, and convenings.

01

**AFRICA'S
ECONOMIC
RECOVERY:
FINANCING
ROBUST
POST-PANDEMIC
GROWTH**

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Africa's pandemic recovery requires investments that build the foundation for the region's future

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Africa's future never looked brighter than it did during my time serving as the World Bank's vice president for Africa from 2012 through 2018. The continent was home to the world's fastest-growing economies—a growth fueled by high commodity prices. Free trade was becoming a reality with the rapid approach and realization of the African Continental Free Trade Agreement. Political instability was largely under control. And, even in the midst of an Ebola outbreak, the continent largely succeeded in containing the worst health and economic impacts of that virus.

Today, from my position as the managing director of the International Finance Corporation (IFC), I still see Africa's potential clearly—a global economic driver, digital innovation hub, and model for green, resilient infrastructure. But I am also concerned about Africa's future, especially for the young people coming of age in a time of great uncertainty. Conflict is on the rise, and the number of countries falling into instability is increasing. The impacts of climate change are worsening each year. And while COVID-19 has affected everyone, it has not affected everyone equally: This truth is especially salient for Africa, which saw decades worth of economic and social progress erased almost overnight.

Millions of people on the continent have already been pushed into poverty. Millions more are teetering on the brink. Africa's youth is Africa's biggest asset, but only if they have the opportunities and skills needed to build a better future.

If we do nothing, we risk losing them.

We cannot allow this to happen.

The path forward is clear: We must come together, as public and private actors, to ensure an inclusive, resilient recovery. We must unite around one shared and audacious goal: To create a more equitable and resilient world coming out of the pandemic than the one we had going into it.

As someone who has focused on the Africa region and broader development issues, both professionally and personally, I believe in this vision for our future. I especially believe in it for Africa. And I know private financing will play an essential role in getting us there.

Private sector investments have been critical to Africa's pandemic response. In the last fiscal year alone, IFC helped mobilize more than \$6 billion in investments that helped [develop vaccine manufacturers](#),¹ boost financing access for [small businesses](#),² support regional trade, and fund green and digital projects on the continent. These efforts saved lives and jobs during the height of the crisis.

But much more will be needed in the months and years ahead. The pandemic exposed and exacerbated existing vulnerabilities in many countries' physical and social infrastructures. Addressing these vulnerabilities will be key to ensuring no one is left behind as we move from response to recovery. Moreover, it will also safeguard against future global crises that could otherwise derail hard-fought development gains.

We must unite around one shared and audacious goal: To create a more equitable and resilient world coming out of the pandemic than the one we had going into it.

1 "IFC, Proparco, DEG and DFC Support South African COVID-19 Vaccine Maker, Aspen." International Finance Corporation, 2021.

2 "Africa: IFC Announces \$2 billion Investment in SMEs and Trade to Support Recovery from COVID-19." International Finance Corporation, 2021.

A few issues in particular require our urgent attention.

First, a healthy and resilient economy relies on healthy and resilient people, which vaccines help to support. While important progress is being made in this space in response to COVID-19, there are larger gaps in Africa’s immunization coverage that still need to be filled. Consider this: Almost 10 million African children each year do not receive the final dose of the diphtheria, tetanus, and pertussis (DTP) vaccine.

We need more partnerships between the private and public sectors that can help reduce the continent’s reliance on vaccine imports. Increasing regional production will support more affordable and widely available vaccines—saving lives and protecting Africa’s valuable human capital. (For more on strategies for increasing vaccine manufacturing in the region, see the viewpoint on page 39.)

Second, we all know that trade is the lifeblood of any economy—but a lack of trade finance is holding Africa back from reaching its full economic potential. The continent’s trade finance gap was more than \$80 billion before COVID-19, and it is certainly larger today. This gap makes it harder for goods to move across borders and for businesses to innovate, create jobs, and drive economic growth.

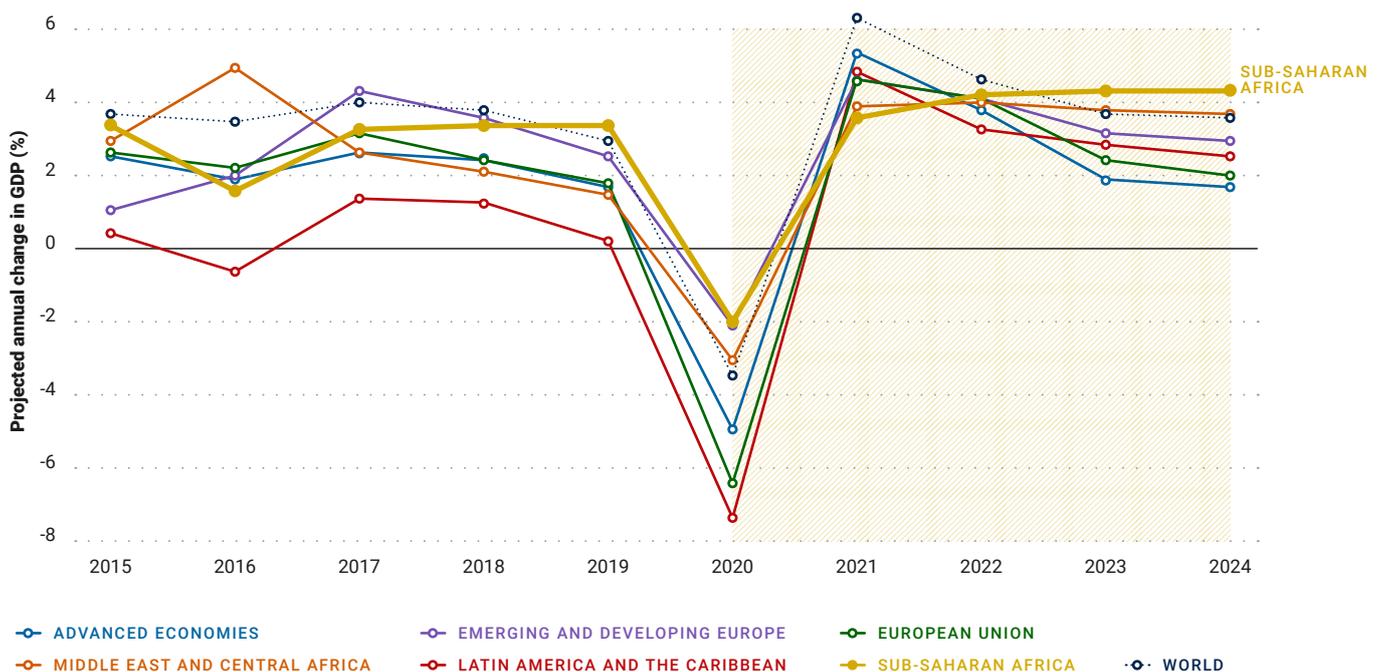
Development finance institutions like IFC have an important role to play in increasing the availability of trade financing in Africa. But these commitments must be supported by both the public and private sectors to ensure that demand is being met and money keeps flowing.

Third, the pandemic demonstrated that digital access is no longer a luxury reserved for a privileged few, but a necessity for all. The next “Bill Gates” may very well come from Africa—but only if we close the digital divide.

The pandemic demonstrated that digital access is no longer a luxury reserved for a privileged few, but a necessity for all.

FIGURE 1.1. THE PANDEMIC WILL NOT DETER SUB-SAHARAN AFRICA’S LONG-RUN GROWTH PATH

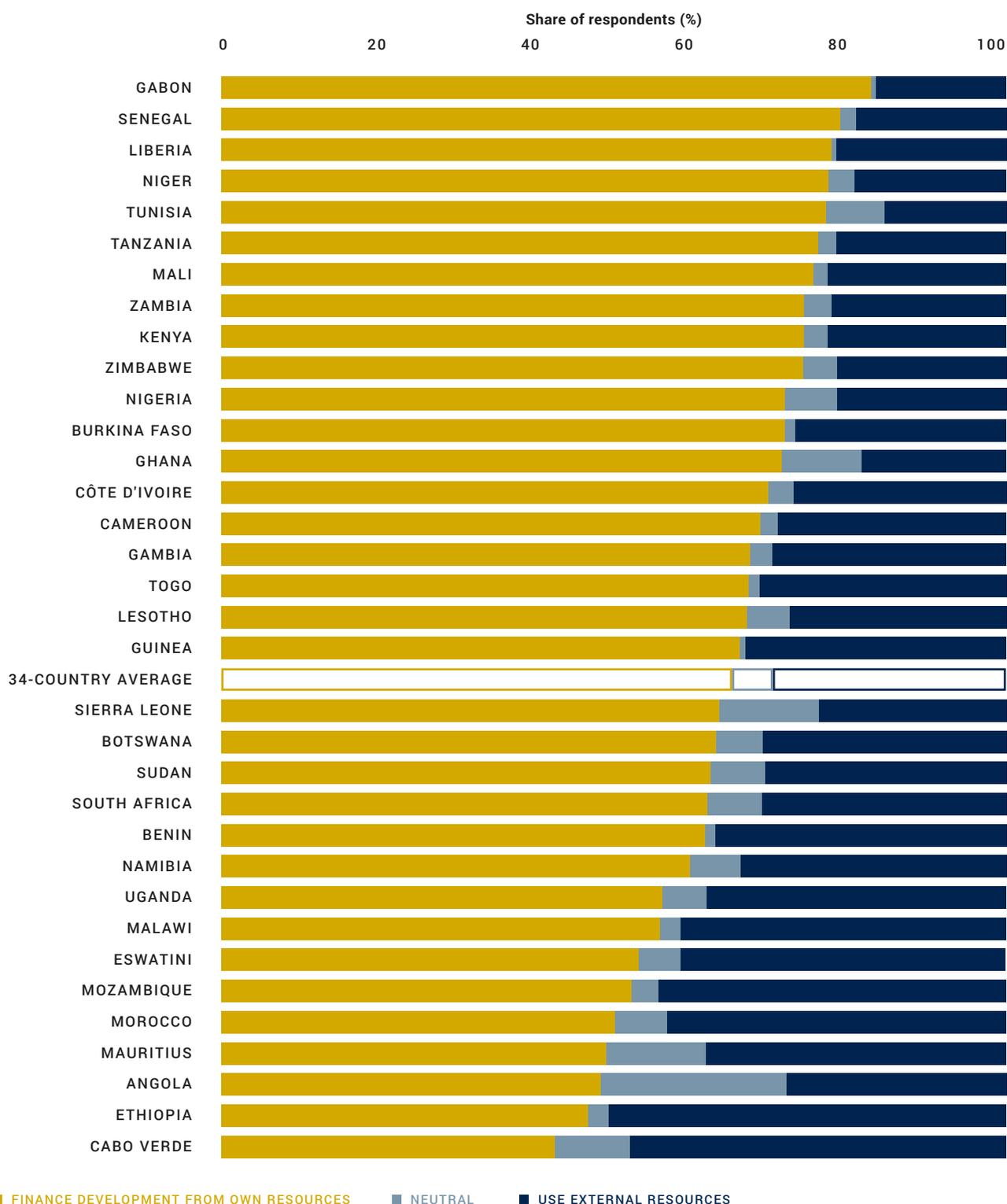
In 2020, sub-Saharan Africa suffered the weakest contraction of any world region (-1.9 percent reduction in GDP). Its recovery is projected to be robust, averaging an annual growth rate of 4.0 percent from 2022 to 2024, suggesting that the region will maintain its pre-pandemic growth path.



SOURCE: World Economic Outlook, International Monetary Fund. June 2021.

FIGURE 1.2. HOW SHOULD YOUR COUNTRY FINANCE ITS DEVELOPMENT?

Africans strongly believe that they should rely on their own resources to finance their development: In fact, nearly two-thirds of those surveyed by Afrobarometer across 34 countries prefer using domestic resources over external resources.



NOTE: Respondents were asked: Which of the following statements is closest to your view?

Statement 1: It is important that as an independent nation, we finance development from our own resources, even if it means paying more taxes.

Statement 2: We should use external loans for the development of the country, even if it increases our indebtedness to foreign countries and institutions.

SOURCE: Afrobarometer. (2021). Public Attitude Surveys. Afrobarometer.

Creating secure, reliable digital infrastructure is an urgent priority for the continent—and harnessing the power of the private sector is the fastest and most effective way to accomplish it. Universal and affordable broadband access is within reach for Africa, but we must act with intention and coordination to seize it.

Finally, and perhaps most importantly, private sector financing will be essential to addressing both climate change and Africa’s growing energy needs. We cannot forget that 578 million people in Africa still lack energy access—cutting them off from educational opportunities and the entire digital economy.

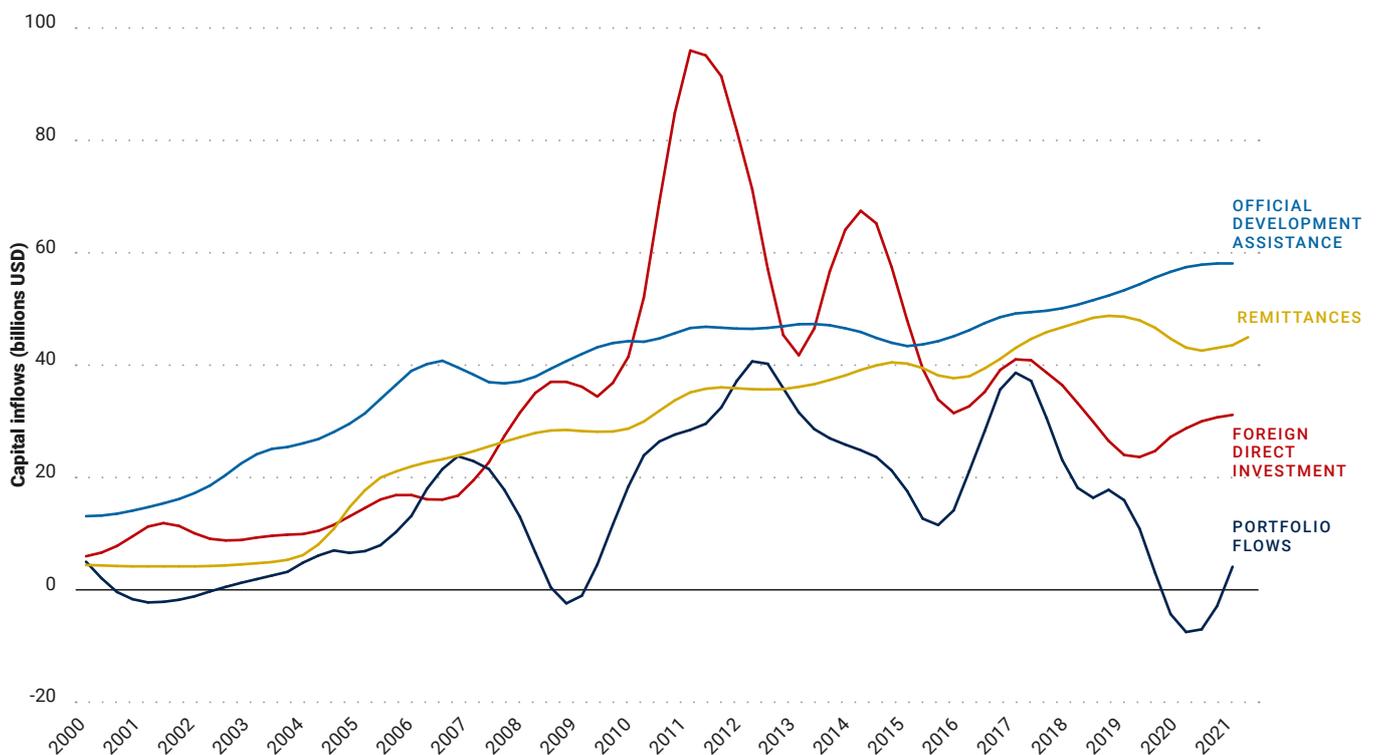
Electrifying Africa is not up for debate. It needs to happen, and it needs to happen as quickly as possible. But how it happens is just as important. By supporting blended financing options, creating a pipeline of bankable projects, and embracing innovative mitigation and adaptation solutions, we can get power to every household in every country—sustainably.

We find ourselves at a once-in-a-generation moment of possibility. We have the chance to create a better, greener, and more inclusive future for Africa. That vision is within reach. But we will only be able to seize it by prioritizing long-term investments over short-term fixes. Building infrastructure, lifting up small businesses, nurturing people—these are the investments that pay off for generations to come. They are the investments that will build the foundation for Africa’s future.

Building infrastructure, lifting up small businesses, nurturing people—these are the investments that pay off for generations to come.

FIGURE 1.3. CAPITAL INFLOWS TO SUB-SAHARAN AFRICA SHOW SIGNS OF RECOVERY

Throughout the pandemic, official development assistance (ODA) remained the most significant source of capital entering sub-Saharan Africa. Like ODA, foreign direct investment (FDI) increased in 2020, led in part by an uptick in mergers and acquisitions. Remittances to the region fell primarily due to a 28 percent decrease in Nigeria, the region’s primary recipient of remittances. All sources of capital inflows showed signs of recovery in late 2020 or early 2021.



NOTE: Values for 2021 are estimates. The data underlying the figure are smoothed using three-year averages.
SOURCE: Knomad. (2021). "Recovery: COVID-19 crisis through a migration lens." Migration and Development Brief 35. World Bank Group.

Zambia's success will be Africa's success

H.E. HAKAINDE HICHILEMA

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The year 2021 has been a landmark year for Zambia. Two important events occurred. The passing of the first president of independent Zambia, Dr. Kenneth Kaunda, was mourned in June. Then, in the election in August 2021, the people of Zambia voted decisively for change.

I mention the passing of Dr. Kaunda because Zambia has strong roots. He was a person who sought to serve ordinary Zambians and, even if some of the policy decisions his party made did not have optimal outcomes, his intention was to place ordinary Zambians at the center of the country's development.

Sadly, Zambia has not lived up to its promise. Over the last decade, we have witnessed the erosion of our economy and the corruption of our politics. As a consequence, our debt has risen to unsustainable levels, reducing the country's capacity to invest in productive areas of our economy and its ability to address the gaps in health care, education, and other social services.

Our national budget has been overwhelmed by debt servicing, emoluments, and consumption, when there should have been greater room for investment and growth. The scourge of corruption has eroded our much-needed resources including the debt itself, robbing us further of the opportunity for growth. This slide towards debt, disaster, and dependency set our country on a bleak course.

Fortunately, the people of Zambia that decided to change direction and the election— notably under difficult COVID-19 conditions—saw a change of government and the opportunity for a new beginning.

It was our third peaceful, democratic transfer of leadership since the advent of multi-party democracy three decades ago. It was an African success. Notably, Zambia's transition is an example of Africa's success in addressing its own challenges: The African Union played an instrumental role in ensuring our smooth transfer of power.

This transition also sends a clear message that Africa embraces the right to democratic choice. It comes after the historic stand taken by the courts in our neighbor, Malawi, where a rigged election outcome was rejected, and new elections were successfully held in 2019.

In both these cases, it was Africans who held the election, contested it, and adjudicated on its fairness. We can say with pride that Africans own democracy on the continent.

The road ahead will not be without challenges but, with a clear vision and plan, and with relentless determination, we will deliver on the aspirations of our people.

My administration's focus over the next five years will be on restoring macroeconomic stability and promoting the growth of the economy.

We will pay special attention to lowering the fiscal deficit, reducing public debt, and restoring social and market confidence. We will also promote national unity and good governance by strictly adhering to the rule of the law and democratic accountability.

Our priority is a simple one: We must find a way to include the jobless youth in our economy. In order to do that, we need to build our economy by encouraging new investment and giving our young people the skills they need to participate fully in the economy.

Notably, Zambia's transition is an example of Africa's success in addressing its own challenges: The African Union played an instrumental role in ensuring our smooth transfer of power.

Growing the economy requires agile thinking that uses all the levers at our disposal. We must urgently attend to restoring our mining sector to its rightful place as a leading global producer of copper by ensuring regulatory fairness and attending to obstacles that stand in the way of new investment. We must strive to increase the production of copper and other minerals so that Zambia can reclaim its place as one of Africa’s leading mining countries.

We need to make Zambia a preferred investment destination by cutting red tape and reducing policy uncertainty which cause investors to hesitate.

Our priority is a simple one: We must find a way to include the jobless youth in our economy.

We must encourage the growth of new businesses. We need 1,000—perhaps even 10,000—entrepreneurs to bloom, igniting our small business sector as a key employer and source of innovation and growth.

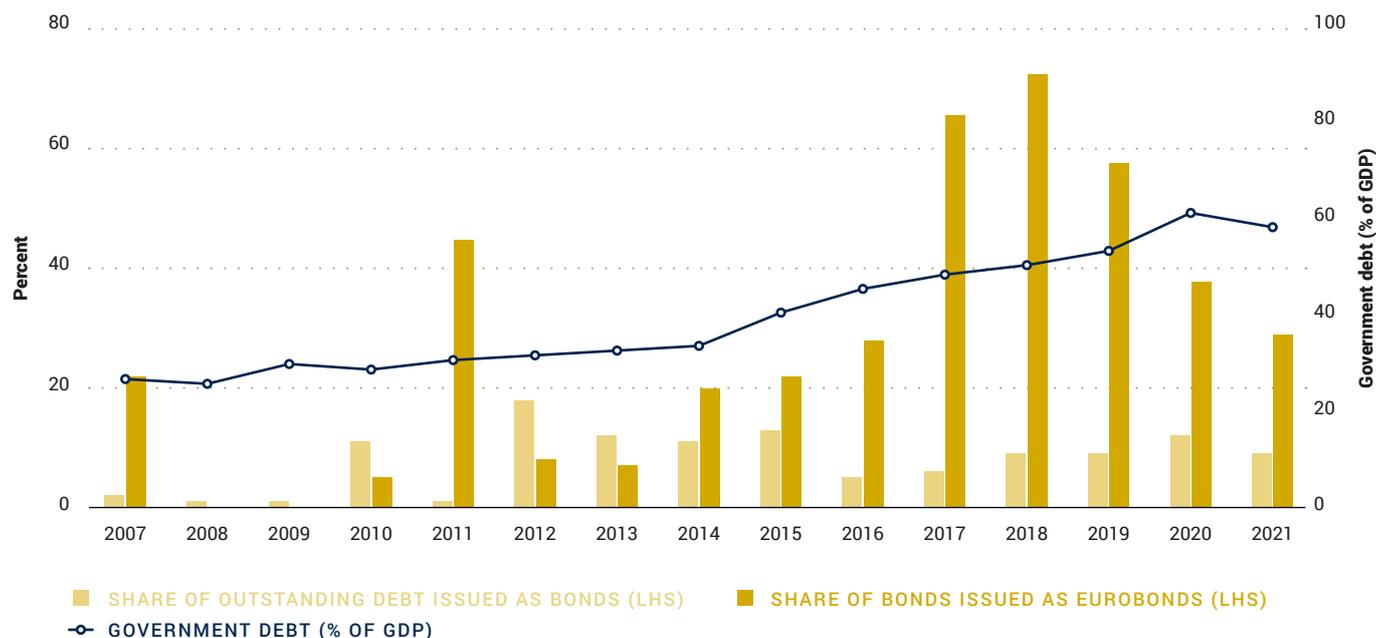
To do this, we must make it easier for small businesses to gain access to capital. Government must understand the challenges that entrepreneurs and investors face, and do its part to welcome investment, growth, and innovation.

None of this will happen without clean and purposeful governance. The institutions mandated to investigate and prosecute will be given unfettered autonomy to act without fear or favor and without political bias. Malpractice and mismanagement must be rooted out.

From the election to economic recovery, Zambia’s success will, in this way, be Africa’s success.

FIGURE 1.4. ROLE OF DOMESTIC BONDS AND EUROBONDS IN GOVERNMENT DEBT, SUB-SAHARAN AFRICA

Eurobonds in sub-Saharan Africa exploded in popularity in the aftermath of the Great Recession, growing from just 5 percent of bond issuance in 2010 to nearly 75 percent in 2018. During the pandemic, however, eurobond issuance declined rapidly, and Africa instead turned to domestic bonds to finance stimulus packages and economic recovery.



NOTE: Eurobonds include bonds denominated in dollars, euros, or British pounds.
SOURCE: Bloomberg. (2021). Sovereign bond holdings data. Bloomberg terminal. IMF. (2021). "World Economic Outlook 2021." International Monetary Fund.

Africa's youth are already leading the way to economic success

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With Africa's ever-increasing youth population projected to double by 2050,¹ the need for innovative and sustainable ways to support youth employment only continues to grow in importance. While the challenge is daunting, it also has inspired so many of Africa's creative and diligent young people to take charge of their own futures, coming up with innovative solutions to keep themselves employed and actively engaged. Consequently, training young people in entrepreneurship—how to create, run, and manage businesses—so that their creativity and efforts will bear fruit is central not only for improving individual lives, but for bolstering the entire region's economic gains.

As evidenced by the Tony Elumelu Foundation Entrepreneurship Programme,² African youth continue to show that they are innovative, creative, and diligent in seeing their ideas come to life. With adequate support, young entrepreneurs will create jobs, provide value, and innovate—which our continent desperately needs.

Young people are equipping themselves with skills beyond the classroom while being exposed to new and different career paths; this presents an opportunity to transform the continent in the catalytic ways. Platforms such as TEFConnect—our proprietary digital marketplace for African entrepreneurs—is one of such tools serving this purpose. With continued expansion, more young Africans will be able to access opportunities, learn, and explore intra-regional opportunities.

Promising sectors such as financial services and the tech ecosystem remind us of the many young African entrepreneurs creating transformative solutions and continuing to be innovative within these sectors and beyond. To accomplish all of these, challenges of irregular policy regulation, access to power and electricity, as well as in improving the logistics supply chain must be addressed.

The future is indeed bright: With the digital advancements of the last decade, the proliferation of digital technology and skills has drastically improved the lives of young people and offered unprecedented access to opportunities once hard to reach. The effects of the COVID-19 pandemic have shocked the continent, and building resilient businesses that can withstand uncertainties is a crucial way to support African youth. Moreover, the establishment of the African Continental Free Trade Area presents an opportunity to solve these issues and to improve entrepreneurship on the continent in a catalytic way. By building and streamlining business registration, operation, and regulatory processes, the future of entrepreneurship on the continent can be sustainable, efficient, and monumental.

Promising sectors such as financial services and the tech ecosystem remind us of the many young African entrepreneurs creating transformative solutions and continuing to be innovative within these sectors and beyond.

¹ Kariba, F. "The Burgeoning Africa Youth Population: Potential or Challenge?". Cities Alliance. 2020.
² "The Tony Elumelu Foundation Entrepreneurship Programme." The Tony Elumelu Foundation, 2022.

Investment in science and technology is key to an African economic boom

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The African continent represents 20 percent of the earth's surface and is home to 1.3 billion people—likely reaching 2.53 billion people by 2050. It boasts 60 percent of the world's arable lands, large swathes of forests, 30 percent of the world's reserve of minerals, and the youngest population of any continent. Yet, despite these riches, it produces only 3 percent of global GDP, accounts for less than 3 percent of international trade (mainly primary commodities and natural resources), and shoulders 25 percent of the global disease burden. The picture is particularly bleak when it comes to research and innovation: Africa contributes just 2 percent of world research output, accounts for only 1.3 percent of research spending and produces 0.1 percent of all patents.¹

How can a continent that has fueled the world's industrial revolutions, that helped drive the dominance of the mobile phone industry, and whose large store of rare earth minerals are integral to the global green energy transition tolerate such dismal statistics?

A lack of investment in science and technology has undermined Africa's economic transformation at both the structural level (the shift of workers and resources from low- to higher-productivity sectors) and the sectoral level (the growth of productivity within sectors). This lack of investment has had far-reaching consequences: Without the economic and scientific infrastructure necessary for innovation, the continent has continued to rely on the colonial development model of resource extraction, which is both unsustainable and largely responsible for its debilitating poverty and aid dependency. These challenges have been compounded by economic fragmentation, as smaller markets constrain the long-term investments and patient capital that would foster innovation and drive technology transfer in the context of globalization.

The silver lining is that there is potential here with growing recognition by policymakers of the role that science and technology can play in achieving national development goals and transforming Africa's economic growth story. Moreover, given the positive correlation between growth and environments that beget competition and innovation, competitiveness must be fostered.^{2,3}

Thus, African countries must create an enabling environment through pro-innovation, pro-science, and pro-technology policies dedicated to overcoming barriers related to regulation, corruption, and investment, while enabling private-sector innovation, adaptation, and adoption. At the same time, African governments must also invest in creating an ecosystem that facilitates investment in science and technology in a way that will not just accelerate discovery but allow innovations to enter the marketplace more quickly.

Bridging the skills deficiency gap in science, technology, and innovation is vital to unlocking Africa's potential and accelerating economic growth and prosperity. The best-trained, most talented researchers gravitate to environments where their work is leveraged by modern equipment, reliable utilities, and sufficient funding for supplies—and, perhaps most critically, where they can benefit from the presence of other talented people. Thus, the tide of Africa's brain drain must be reversed by creating a world-class education

- 1 Kariuki, T., and Kay, S. (2017). There are not enough scientists in Africa. How can we turn this around? World Economic Forum.
- 2 OECD. (2019). *Measuring external factors influencing innovation in firms in Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation*, 4th Edition, OECD Publishing, Paris.
- 3 Notably, Mauritius, Tunisia, South Africa, Botswana, Egypt, and Morocco consistently rank among the top 12 Africa countries in the most recent editions of the Global Innovation Index, the Global Competitiveness Report, and the Human Development Index.

The tide of Africa's brain drain must be reversed by creating a world-class education and research infrastructure that will keep the best minds on the continent and attract new ones.

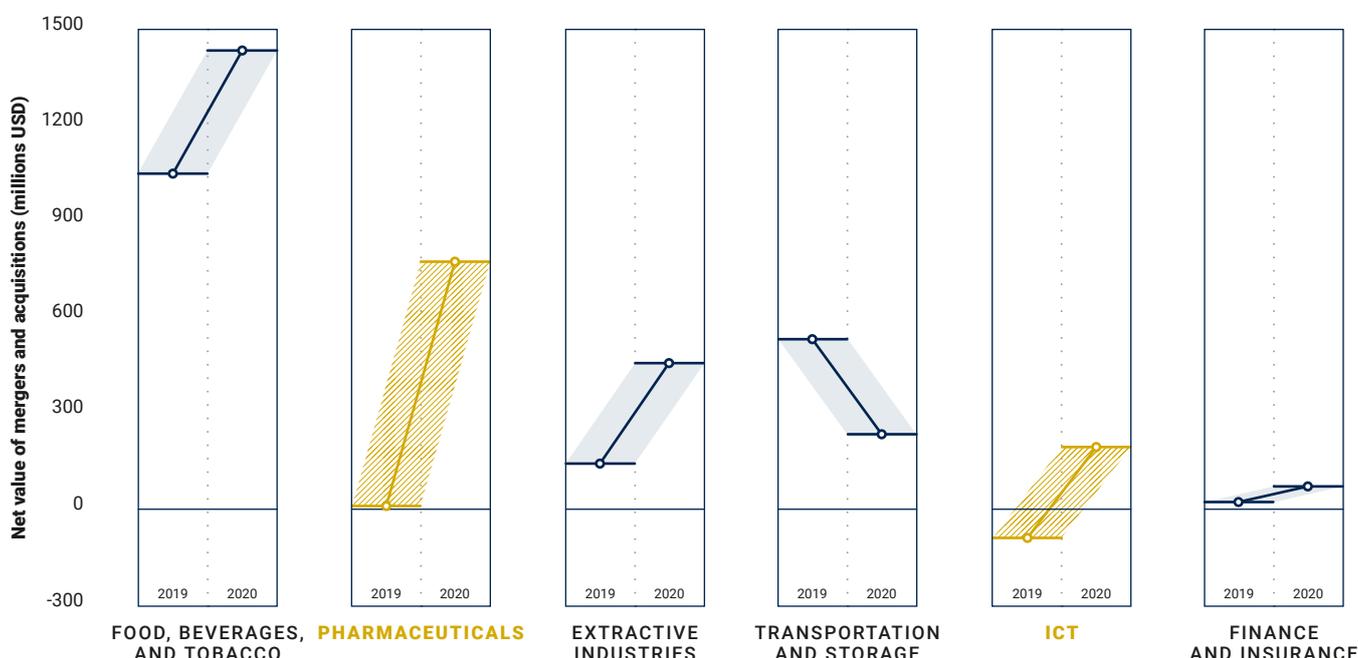
and research infrastructure that will keep the best minds on the continent and attract new ones. Already, South Africa leads the way here, with a robust research system comprised of excellent universities and science facilities that allow it to be a full-fledged contributor to the global scientific community and an integral participant in international collaborations.⁴

As human talent is developed across the continent, investment in research, science, and innovation will increase dramatically across various sectors, including manufacturing, which will be a significant factor in helping Africa realize its development potential and narrow its income and welfare gaps. In fact, business-to-business spending in manufacturing in Africa is projected to reach \$1 trillion by 2050⁵—a trend that creates a massive opportunity for the continent's overall growth.⁶

Creating an ecosystem where scientific culture can be central to economic transformation and policymaking decisions is a long-term investment that must not be at the mercy of either political or business cycles. Success will require effective tripartite (public-private-academia) collaborations and partnerships that will need to be sustained over time. If Africa can do this in the era of the African Continental Free Trade Area, the benefits of science, technology, and innovation can be marshaled for greater economic, social, and environmental sustainability, both on the continent and beyond.

FIGURE 1.5. NET M&A IN AFRICA INCREASED NOTABLY IN ICT AND PHARMACEUTICALS IN 2020

Mergers and acquisitions (M&A) are often countercyclical, serving as a source of capital inflow in emerging markets when other types of equity leave. A positive M&A value indicates that investors, whether in Africa or outside Africa, are taking a special interest in African companies. In sub-Saharan Africa, the value of M&A transactions increased significantly in 2020, particularly in the information and communications and pharmaceutical sectors.



SOURCE: UNCTAD. (2021). "World Investment Report 2021." United Nations Conference on Trade and Investment.

4 Indeed, South African scholars continue to play a key role in detecting and sharing information about emerging COVID-19 variants.
 5 Signé, L. (2020). *Unlocking Africa's business potential: Trends, opportunities, risks, and strategies*. Brookings Institution Press.
 6 In particular, for countries such as South Africa, Egypt, and Nigeria (all regional outperformers on the Global Manufacturing Competitiveness Index) and rising players such as Ethiopia, Morocco, Rwanda, and others that have recently adopted promising policies for boosting manufacturing and industrial development.

Addressing Zimbabwe's inflation: The role of the digitalization of financial transactions

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When I was sworn in as Zimbabwe's minister of finance and economic development in September 2018, our economy was characterized by sustained fiscal imbalances, financial sector vulnerabilities, and cash shortages. Since 2013, the Government had been incurring budget deficits as high as 12.9 percent in 2017, up from 1.3 percent of GDP in 2013. As a result, I immediately introduced a set of economic and structural reforms to stabilize the economy.

Indeed, through a combination of fiscal consolidation and widening of the tax base, we were able to turn these perpetual deficits into surpluses during the periods 2019 and 2020, setting the stage for stability.

More specifically, after years of hyperinflation, the country officially dropped the Zimbabwean dollar in 2015 and introduced a temporary multi-currency platform, which ended up bringing confusion into the system. In 2019, we introduced a new Zimbabwe Dollar as the domestic currency alongside a foreign exchange foreign currency auction system in 2020 to improve transparency in the foreign currency market and facilitate the discovery of a market-based exchange rate.

Consequently, prices of goods and services have stabilized, with annual inflation dropping from a peak of 761 percent in August 2020 to 50 percent in August 2021 and is expected to close the year within the range of 45 percent to 55 percent. While the system has secured relative price stability, we will continue to monitor the system to ensure it achieves the twin objectives of supporting domestic currency and eliminating arbitrage opportunities.

DIGITALIZATION OF FINANCIAL TRANSACTIONS IN ZIMBABWE

Alongside these reforms, Zimbabwe had already been looking to adopt and promote a number of digital payment systems, which included the Real-Time Gross Settlement (RTGS), Electronic Funds Transfer (EFT), mobile money, and electronic cards (both local and international), among others.

Indeed, in recent years, the growth in digital transactions in Zimbabwe has been astronomical: The number of mobile money agents increased significantly from 38,745 in December 2015 to 59,218 at the end of 2019, while the number of active mobile subscriptions increased from 3.3 million in 2016 to 7.67 million as of March 31, 2020.

In addition, the number of point-of-sale (POS) devices in Zimbabwe has grown dramatically from 16,363 in December 2015 to 121,413 in 2019—driven mainly by Government efforts to promote electronic payments and introduce POS devices to micro, small, and medium enterprises (MSMEs).

Notably, this shift towards digital transactions reduced the demand for hard cash—which had been the norm during the hyper-inflationary era.

Notably, this shift towards digital transactions reduced the demand for hard cash—which had been the norm during the hyper-inflationary era.

LESSONS AND CHALLENGES

The introduction of digital financial transactions in Zimbabwe has brought numerous transformational benefits: First, it saved the country from the burden of continuous money printing to meet demand, especially in such a hyperinflationary environment.

Second, it dramatically added to increased financial inclusion for marginalized citizens, particularly rural folks. Because informal businesses or startups struggle to access funding from normal banking services, the flourishing of products that enable digital financial transactions has somewhat increased access to the financial sector.

Third, to some extent, this financial digitization process also contributed to transformation and increased uptake of information and communications technologies in the country, including ramping up demand for internet services. In essence, the process created other economic opportunities through the creation of new and innovative businesses, generating employment opportunities in the process.

The major challenge in rolling out the digital financial system was limited coverage of network, especially in rural areas where there is no electricity, this then requires costly diesel-powered generators for network boosters. Furthermore, the country being under sanctions, has limited options for external financing, therefore, ICT companies were finding it difficult to undertake the necessary investment to expand network coverage to meet demand.

This financial digitization process also contributed to transformation and increased uptake of information and communications technologies in the country.

Africa's latent assets

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Will Africa finally begin a sustained convergence to the living standards of the developed world in the way China has done in the last 40 years? If so, on what basis will that happen?

While many scholars and commentators see few similarities between the Chinese and African economic experiences, we argue that, in fact, there are profound similarities, which Africa can draw from. Prior to Deng Xiaoping's 1978 reforms, China suffered for 200 years. The country was convulsed by civil wars, corruption, colonialism, state failure, and disastrous, misguided economic policies like the Great Leap Forward. But it turned out that China had many latent assets and hidden social strengths on which economic prosperity could be built. A central one was a social norm that, as Confucius put it, one should "promote those who are worthy and talented," (2003, p. 138). Meritocracy turned out to be a powerful asset on which to build an inclusive market economy once Deng Xiaoping initiated his reform plan.

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In the modern period, Africa has similarly suffered from many of the same adverse shocks and syndromes. Then again, we believe, also like China, Africa has deep latent assets, of which we focus on three. If properly recognized and harnessed, such assets can not only evoke a new way of thinking about the future of economic development in the continent, but turn Africa's economic potential into economic success.

Data shows that Africans' perceptions and anticipations of social mobility are the highest in the world.

MERITOCRACY

Like China, the majority of African societies are built on achieved, not ascribed status: Indeed, data shows that Africans' perceptions and anticipations of social mobility are the highest in the world. These expectations are important for behavior and policy preferences. Why are Africans so optimistic? One reason is that they see that their lives and futures are under their control: More than any anywhere else, Africans are more likely to say that the way to get ahead economically is through hard work, not luck and connections. These are also exactly the values they wish to transmit to their children.¹

COSMOPOLITANISM

This second asset is distinct from the Chinese experience. Because of the heterogeneous and small-scale nature of African society, Africans endlessly deal with differences: different languages, different cultures, and different histories. Africans are the least monolingual people in the world and, interestingly, the word for "stranger" and "guest" are the same in most African languages. This experience makes Africans the most able culturally to cope with our modern globalized world—and people who can deal with differences and adapt will succeed.²

SKEPTICISM TOWARDS AUTHORITY

The final asset, also different from China, is Africa's political culture, which features a deep skepticism towards authority. Historically, this tendency kept the size of African polities small. Today, it can form the basis for effective inclusive states that work in the national interest because people are skeptical and thus attuned to the abuse of power. The difficult political terrain that the colonial powers bequeathed the region has prevented the formation of such states. But the latent skepticism holds significant promise: Africa will not fall foul of the types of charismatic populists that one sees in Latin America.

Africa's latent talents are sociological, as China's were, and they point to the real reason to be optimistic about the future: Not the extent of natural resources, but the talents and character of Africa's peoples. For them to bear fruit, some basic institutional problems have to be solved, but China's history is again revealing. Deng did not solve all the institutional problems for China's latent assets to lead to an economic take-off. Critically, he knew, even in a challenging context, which areas could best take advantage of the latent assets the society possessed.

Such is the task for African policymakers: To stop focusing on shopping lists of Western best practices and, instead, become attuned to where the constraints that stop the latent assets of their societies from flourishing are.

Such is the task for African policymakers: To stop focusing on shopping lists of Western best practices and, instead, become attuned to where the constraints that stop the latent assets of their societies from flourishing are.

Here is an example: On July 20, 2014, a Nigerian-American infected with Ebola landed in Lagos, Nigeria from Liberia. He collapsed and died four days later, having lied about having been in contact with Ebola patients. He was initially treated for malaria, and, before people understood the true problem, he had infected medical staff who infected others. An insuperable problem for a state with weak capacity, no? Not at all. Within a matter of days, the Nigerian state contact traced and quarantined over 500 people. Ebola was stopped in its tracks. The Nigerian state may be weak in many dimensions, but in personal connections to society, critical for something like contact processing, it is far stronger than the U.S., which was never able to implement such a system during the COVID-19 pandemic. A latent asset of most African states is that they are deeply embedded in society. Maybe this cannot be leveraged to do many of things they are "supposed" to do, but perhaps it can be used to do many other things which are critical to sustaining economic growth.

¹ Robinson, James A and Henn, Soeren. "Africa's Latent Assets," Working Paper, 2021.

² Ibid.

Philanthropy plays a vital role in meeting development challenges and mitigating crises in sub-Saharan Africa

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Not only have private donors increased their giving, African countries have also witnessed the rapid advancement of new tools and vehicles for giving, including impact investments, collective giving, and pooled funds.

The outpouring of generosity on the African continent in response to the COVID-19 pandemic has been tremendous.¹ Not only have private donors increased their giving, African countries have also witnessed the rapid advancement of new tools and vehicles for giving, including impact investments, collective giving, and pooled funds.

Despite this progress, addressing the urgent humanitarian issues in the region requires an acceleration of efforts to harness private sector resources from individual donors, foundations, and corporations.

Still, as the most recent Global Philanthropy Environment Index (GPEI)² reveals, significant challenges to expanding philanthropic flows in sub-Saharan Africa persist (Figure 1.6). The index, which measures the global philanthropic environment by using a standard instrument completed by country-based experts, examines the incentives and barriers that could impact individuals' and organizations' philanthropic efforts.

In the most recent index, the country-level experts based in sub-Saharan Africa submitted scores below the global average on all five components,³ including ease of operating a philanthropic organization (3.47), tax incentives (3.33), cross-border flows (3.00), and socio-cultural environment (3.50). The political environment for philanthropy (2.75) also imposes constraints. While the experience of these six countries should not be generalized to the entire continent, it is worth noting some broad themes experts reported, including: increasing barriers to cross-border flows; lack of government support for civil society organizations; increasing scrutiny of philanthropic organizations focusing on advocacy, democratization, and human rights; and political instability, among others. Additionally, in some countries, cross-border giving faces significant challenges due to changes in policies or regulations, often to meet international requirements on anti-money laundering and combating financing of terrorism.

While the index primarily measures the environment for institutionalized philanthropy, it is important to highlight that, despite the low scores, generosity and informal philanthropy are significant on the African continent. The various religious roots, as well as traditional and cultural heritages contribute to a culture of generosity across societies.

Another positive trend in philanthropy is the emergence of tools to encourage and facilitate such giving. Indeed, technology has led to new ways of giving through social media, crowdfunding platforms, and mobile giving.⁴ Such tools could facilitate fundraising activities and serve as a catalyst for domestic giving.

In addition, diaspora communities have contributed both philanthropic flows and volunteer talent in key areas such as education, health, and climate mitigation. For example, universities are connecting with African donors throughout the continent—not just

¹ In addition to intergovernmental funds, we have seen an outpouring of generosity by individuals, corporations, and foundations in Africa in response to the crisis. For details by country, see Indiana University Lilly Family School of Philanthropy. (2021). Global Philanthropy Indices.

² Indiana University Lilly Family School of Philanthropy. (2018). The 2018 Global Philanthropy Environment Index. <https://globalindices.iupui.edu>

³ Based on data from 6 economies, which were scored on a 1–5 scale based on the five factors listed above.

⁴ Indiana University Lilly Family School of Philanthropy. (2020a). Global Philanthropy Tracker.

Generosity and informal philanthropy are significant on the African continent. The various religious roots, as well as traditional and cultural heritages contribute to a culture of generosity across societies.

alumni—and these new donors are in turn engaging their professional networks to support African universities.⁵

Given these emerging and unprecedented trends in giving, policymakers, researchers, and givers need new analytical capacities to fully understand the scope of global private giving in such an unprecedented context and ensure that a well-functioning philanthropic ecosystem allows givers to make a difference.

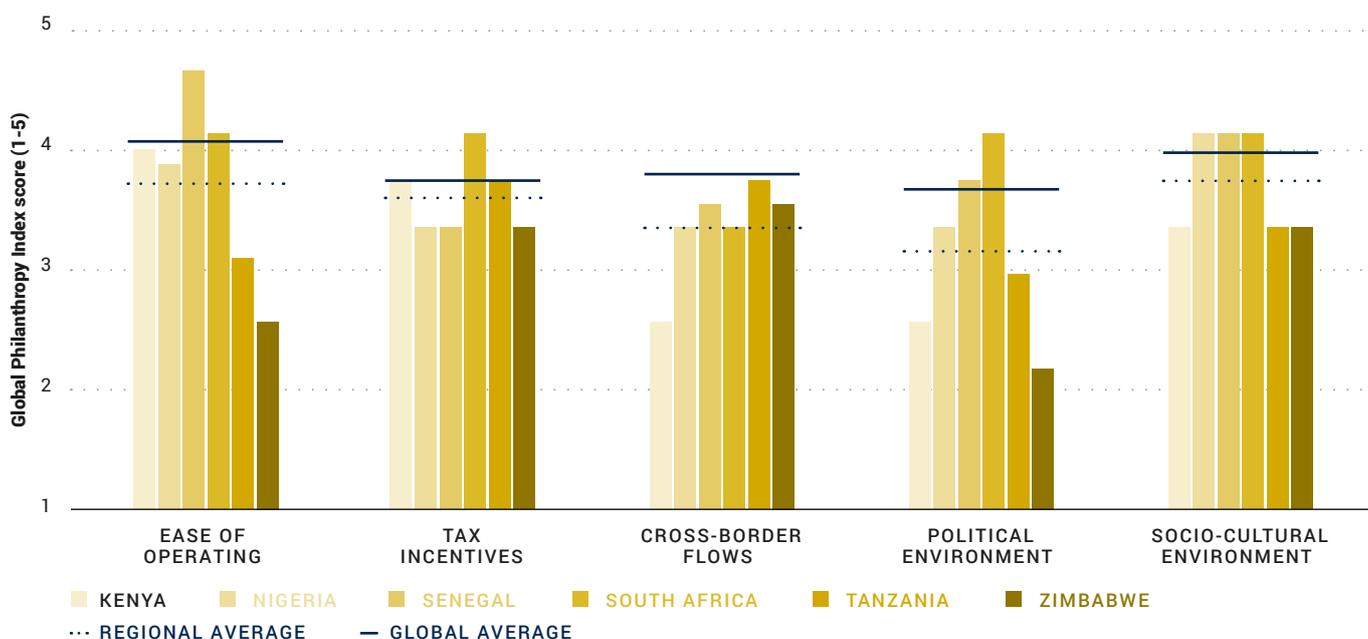
KEY INSIGHTS AND RECOMMENDATIONS

While giving in Africa by both internal and external groups is on the rise, such efforts still encounter obstacles in cases where national policies constrain the ease of operating (such as Zimbabwe) or ability to send or receive funds across borders (as in Kenya). With the additional complexity of the COVID-19 pandemic, the Lilly Family School of Philanthropy asked an international group of experts working in nonprofits, academic institutions, foundations, corporations, and government to share insights on national-level responses to the crisis. Their insights and recommendations are below:

- ✦ **We need to strengthen cross-sector collaborations.** Increased, intentional partnership across sectors—between nonprofit sectors and governments, but also regional and global partnerships—will be critical to societies’ ability to respond to the cascading health and economic crises brought about by the pandemic.

FIGURE 1.6. GLOBAL PHILANTHROPY ENVIRONMENT INDEX, SUB-SAHARAN AFRICA, 2018

The Global Philanthropy Environment Index documents the state of global philanthropy along five dimensions critical to givings’ success. The six countries covered by the data are closely aligned to other countries in the world with respect to their tax incentives, but are inhibited by the political environment and by fiscal and regulatory issues that impede donations across borders.



NOTE: The most recent update of the index covers the period between January 2014 and March 2018.
SOURCE: IUPUI. (2021). Global Philanthropy Environmental Index. Indiana University-Purdue University Indianapolis.

5 Indiana University Lilly Family School of Philanthropy. (2020b). Higher education and diaspora philanthropy in Sub-Saharan Africa.

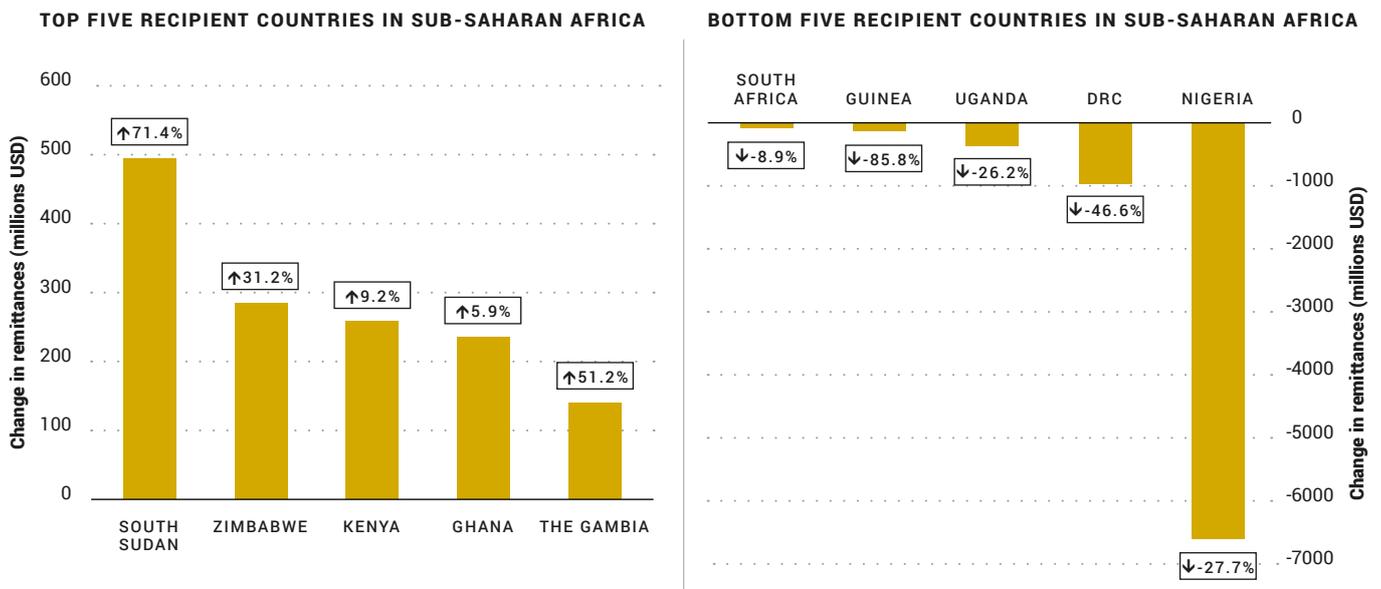
- Funders should actively engage grassroots organizations and leaders.**
 Grassroots organizations, local communities, and volunteers have spearheaded initiatives, especially when lockdowns or tightened restrictions prevented nonprofits from reaching out.
- Nonprofit organizations can benefit from less restrictive funding sources.**
 Nonprofit sectors need more flexible funding sources, reporting requirements, and unrestricted funding to drive change. Many funders pledged to make funds available quickly, and experts recommend that these changes should remain in place.
- Funders must address long-standing disparities.**
 The pandemic has disproportionately impacted vulnerable groups, including women and girls. Unrestricted funding will help organizations respond quickly to areas of greatest need.

These recommendations emphasize the need for bold action to catalyze private giving: We must expand effective governmental collaborations with nonprofits and funders, enlist the assistance of grassroots organizations, and reduce barriers to private and collective giving.⁶

Drawing on a long culture of giving in sub-Saharan Africa, COVID-19 provides unprecedented opportunities to boost recovery by accelerating the movement towards a just, equitable, and prosperous continent.

FIGURE 1.7. CHANGE IN REMITTANCES, SELECT COUNTRIES, 2019-2020

Remittances continue to be an important form of financing in Africa. Despite early warnings of a decrease in remittances to the region during the COVID-19 pandemic, remittances (excluding those from Nigeria) fell by only 1.4 percent from 2019 to 2020. In fact, changes in remittances varied by country. For some, such as South Sudan, Zimbabwe, and Kenya, remittances provided a valuable source of economic stimulus during a time when other types of capital were leaving. For others, Nigeria in particular, remittances fell remarkably.



SOURCE: Knomad. (2021). "Recovery: COVID-19 crisis through a migration lens." Migration and Development Brief 35. World Bank Group.

6 Garcia, S., Carrigan, C., & Osili, U. (2021). Global Philanthropy Response to the COVID-19 crisis during the first months. Association for Research on Nonprofit Organizations and Voluntary Action. Atlanta, Georgia, November 18, 2021.

Managing COVID-19 response public resources with accountability in Africa

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African countries cannot continue to create ad hoc mechanisms fit for emergencies; they need to institutionalize accountability across the entire public finance chain.

Africa's challenge with the COVID-19 pandemic goes beyond the health implications that have plagued the world, as the severe impact of the pandemic on global trade flows, investment opportunities, and commodity prices has also created unprecedented human and economic challenges.

While Africa might have the lowest relative incidence of COVID-19 among continents, there is a far more gory picture with the humanitarian disaster that has pervaded the crisis.¹ It is the pandemic of mistrust and poor accountability that has governed use of domestic stimulus packages.

Throughout the pandemic, several entities—domestic and international—rallied to provide significant funding for Africa, which reached \$51 billion in support over the last two years.^{2,3} However, evidence on how hurriedly distributed resources intended for COVID relief were abused for private gain litters Africa. For example, in Nigeria, a state lawmaker included palliatives in souvenir party packs.⁴ In Malawi, a minister was sacked due to corruption issues related to COVID-19 resources.⁵ While the pandemic should have deepened trust between the citizens and the government, it has widened the divide.

African countries cannot continue to create ad hoc mechanisms fit for emergencies; it needs to institutionalize accountability across the entire public finance chain. This ties into my previous experience with the Nigerian government where I placed significant emphasis on procurement reform through the establishment of the Budget Monitoring and Price Intelligence Unit.⁶ Africa needs to revamp its procurement framework by adopting the unit's Open Contracting Principles that liberalizes access to public spending in a transparent and inclusive manner.

In addition, African governments must embrace the agility that comes with technology in the delivery of its services. Running distribution schemes through human networks provides easy pathways to corruption. The continent of young people needs to accelerate civic-tech, through empowerment of young individuals with ideas in using machine learning, creative design, artificial intelligence, and other technologies to improve efficiency and ensure delivery.

The challenge of seeking more funds without commensurate accountability is that it further distorts the relationship between the citizen and state, leaving the people without expectations, thereby leading to a perpetual state of apathy on the side of the citizens. The pandemic represents a period for African governments to rebuild trust and reaffirm the social contract. It needs to make haste to truly ensure that resources in these unprecedented periods optimally work for the people.

¹ "Amid Recession, Sub-Saharan Africa Poised for Recovery." Press release. World Bank. March 31, 2021.

² This amount includes money from private donations, multilaterals, and public sector funding.

³ According to COVID Fund Africa, a platform developed by BudgIT and Connected Development. See Omolayo, Sodiq. "CSOs query utilisation of \$51billion fund for COVID-19 fight in Nigeria." The Guardian, 2021.

⁴ "Nigerians Expose How Lagos Assembly Member, Alli-Macaulay, Used COVID-19 Palliatives As Birthday Gift." Sahara Reporters, 2020.

⁵ Masina, Lameck. "Malawi President Fires Cabinet Minister Over COVID Funds." Voice of America, 2021.

⁶ For more on the success of the unit, see: Eze, Nwosu M. "Due Process in The Procurement System: The Nigeria Experience." International Journal of Engineering Sciences & Research Technology, vol. 4, no. 4, 2015.

02

**PUBLIC HEALTH:
ENSURING
EQUAL ACCESS
AND SELF-
SUFFICIENCY**

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Reimagining the future of health in Africa

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The idea or rhetoric of global solidarity in the face of a pandemic rang hollow. Africa has experienced firsthand what vehement declarations of solidarity for poor and vulnerable countries meant.

The COVID-19 pandemic has caused enormous global disruption and the loss of many lives and livelihoods. The pandemic is still unfolding: Worldwide, there are currently more than 300 million infected and 5.5 million dead as of January 2022—with 9.4 million confirmed infected and more than 220,000 confirmed dead in Africa alone.^{1,2} The situation is still unfolding, with several SARS-CoV-2 variants of concern emerging since the onset of the pandemic.³

COVID-19 has also exposed major flaws in the underlying logic of the pre-pandemic global health system.⁴ The assumption that infectious disease threats will emerge from the poorest countries and spread to wealthier ones has been dispelled. Unlike Ebola, which started in low-income countries and was largely contained, COVID-19 started in China and quickly engulfed developed countries in Europe and North America, sparing Africa to a large degree.⁵

Weaker economies were mostly correlated with weaker public health systems and, therefore, greater public health risks. The Global Health Security Index ranked the United States first in pandemic preparedness, clearly not anticipating an irrational and anti-science political leadership.⁶ This development suggests that wealthier economies' public health systems can be vulnerable to infectious disease threats.

The idea or rhetoric of global solidarity in the face of a pandemic rang hollow. Africa has experienced firsthand what vehement declarations of solidarity for poor and vulnerable countries meant. When the chips were down, almost every country and region prioritized their own interests.

Despite strong efforts by multilateral institutions, weak commitment to multilateralism by some national political leaders exposed some long-standing fallacies. For example, the assumption that, in a global crisis like that which we saw in 2020, wealthier countries like the United States would step up to ensure the poorest and most vulnerable countries are protected. Instead, the world witnessed the hoarding of critical equipment like masks and ventilators in the wealthier countries—many looking only after their national interests. Similar actions have resulted in certain low-income countries in Africa reaching less than 5 percent of COVID-19 vaccination rate,⁷ while many developed nations achieved 70 to 90 percent coverage to date and are now administering booster vaccine doses.

Faced with such glaring inequity, African leaders emerged to exercise leadership, taking a continental approach through the African Union's Partnership for Access to COVID-19 Tools, African Medical Supplies Platform, and African Vaccines Acquisition Task Team. This effort was led by private sector leaders as Special Envoys, the Africa Centers for Disease Control, United Nations Economic Commission for Africa, and African Export-Import Bank—and supported by the World Bank. (For a discussion on strategies for addressing global vaccine inequity, see page 31.)

1 "COVID-19 Dashboard." Center for Systems Science and Engineering, Johns Hopkins University, 2021.

2 The African numbers may be underestimated because of limited testing in the region compared to other parts of the world. "Outbreak Brief #99: Coronavirus Disease 2019 (COVID-19) Pandemic." African Union, 2021.

3 "Tracking SARS-CoV-2 variants." World Health Organization, 2021.

4 Dalglish, Sarah L. "COVID-19 gives the lie to global health expertise." *The Lancet*, Volume 395, Issue 10231, 2020.

5 "Preparing for the next pandemic: A conversation with Africa CDC Director John Nkengasong." The Brookings Institution, 2021.

6 "2021 Global Health Security Index." The Global Health Security Index, 2021.

7 As of this writing. For updated numbers, see: "COVID-19 Vaccines." World Health Organization, Regional Office for Africa, 2021.

Yet, Africa's development challenges persist: political and security crises; slow demographic transition; high youth unemployment; increasing urbanization; rapid population aging; epidemiological transitions with rising noncommunicable diseases in the face of background endemic infectious diseases; child undernutrition and adult obesity; environmental uncertainties due to climate change (e.g., floods, droughts, rising temperatures); and slow progress in improving water, sanitation, and hygiene. While governments have managed to increase spending during the height of the pandemic, for many countries, general government expenditures on health will take until 2026 to return to pre-pandemic levels. (For more on strategies for financing health outcomes, see the viewpoint on page 35.)⁸

Despite these ongoing problems, the pandemic has created a reset moment for Africa's health systems and an opening for leaders to reimagine—and then hopefully realize—a better future for health in Africa.

There are at least eight recommendations to shape the emergence of a brighter future of health in Africa.

✱ **Protect and increase investments in the health of women, adolescents, and youth.**

With a large and increasingly young population, Africa represents the future of the world. By 2050, 60 percent of Africa's 2.5 billion population will be under 25 years of age,⁹ potentially providing huge human capital and talent for its development and for the world. After decades of being left behind, African girls and women are rising, and the power and resilience of African women should not be underestimated. Mobilizing investments to ensure African children survive and thrive and women have access to quality reproductive and maternal health care as well as empowering girls and women through quality education and a conducive labor market will guarantee the future of Africa's health and prosperity. (See [Chapter 3](#) for strategies to empower African women and girls across these and other sectors.)

✱ **Tackle inequalities by being intentional with inclusion, especially for marginalized and vulnerable populations.**

With fast-growing populations in many countries, increasing mobility, urbanization, and consequent social dislocations, neglecting the health needs of the poor and excluded groups will negatively impact everyone. On the other hand, orienting health systems to tackle the needs of the most vulnerable is likely to strengthen societal bonds of trust and cohesion to improve resilience. Already, young leaders on the continent are emerging with new ideas, such as the notion of "radical inclusion" in [Sierra Leone](#).¹⁰ The nature of demand by citizens is becoming more sophisticated than in the past, requiring adaptive responses by governments, but it is important that all critical voices are included to build a better and stronger future.

✱ **Balance reactive health care with prevention, promotion, and wellness.**

Africa's "weak" health systems still can avoid the Lilliputian trajectories of the more advanced health systems. They can choose to reinvent the wheel. They can build community-based integrated health systems that promote health and well-being, rather than the potentially unsustainable path of focusing mainly on treating diseases. African countries can still balance the focus on the prevention of diseases¹¹ (e.g., good nutrition, environmental sanitation, and the promotion of health and wellbeing) with treatment of acute illnesses, which may require expensive technologies and medical interventions for a small group of people. A primary health care approach offers a good foundation for treating basic diseases, strengthening public health, and engaging communities to build trust and accountability. However, this policy shift still requires improved domestic and external mobilization and investments, including innovative financing approaches.

Mobilizing investments to ensure African children survive and thrive and women have access to quality reproductive and maternal health care as well as empowering girls and women through quality education and a conducive labor market will guarantee the future of Africa's health and prosperity.

8 Kurowski et al. "Health financing rifts mean growing risks for a global recovery." World Bank, 2021.

9 Kariba, Felix. "The Burgeoning Africa Youth Population: Potential or Challenge?." Cities Alliance, 2020.

10 The "radical inclusion" policy in Sierra Leone is allowing adolescent girls and women who get pregnant while in school to return to school and complete their education in safe environments, likely to reduce unsafe abortions, reduce mortality and empower the girls and women. "National Policy on Radical Inclusion in Schools." Ministry of Basic and Senior Secondary Education, Sierra Leone, 2021.

11 "Fiscal Sustainability of Health Systems: Bridging Health and Finance Perspectives." Organization for Economic Co-operation and Development, 2015.

Encouraging African entrepreneurs to unlock the market potential of the health sector will help both deepen the sector's resilience in the face of crises and create a form of insurance mechanism by ensuring a decentralized diversified manufacturing capacity for shocks.

- ✳ **Optimize the health value chains in appropriately regulated markets to encourage health manufacturing to sufficiently deliver commodities, pharmaceuticals, and equipment.**

The health sector is labor-intensive and can create quality jobs. Encouraging African entrepreneurs to unlock the market potential of the health sector will help both deepen the sector's resilience in the face of crises and create a form of insurance mechanism by ensuring a decentralized diversified manufacturing capacity for shocks such as the COVID-19 pandemic. Tech transfer is good, but harnessing Africa's own intellectual property is equally important.

- ✳ **Seize the opportunity of digital technology, data science, and innovations for step-change in productivity in the health sector.**

It can strengthen data governance on the African continent to accelerate technological diffusion and innovation. With its young population and already-demonstrated propensity to drive and adopt innovations, Africa can build a strong multidisciplinary health workforce. It can put its people and communities at the center of its health system, rather than the medical industry.

- ✳ **Build a pipeline for talent by connecting reforms to strengthen STEM education.**

With the need for health talent to drive Africa's biotech and life sciences industry, addressing employment needs for its youth is critical. Such developed talent will drive research and development to discover new ways of treating old diseases and connect Africa's biodiversity asset to address both old and new diseases. The future of the world may depend on it, as almost certainly there will be future infectious disease epidemics and pandemics, as well as the growing problem of noncommunicable diseases.

- ✳ **Rapidly implement the African Continental Free Trade Agreement as a catalyst to promote intra-African trade and economic integration, making progress towards the vision of Africa 2063.**

By orienting its trade in products and services, Africa will be able to harness tremendous energy, foster shared prosperity, and improve its population's health and resilience. By harnessing the African Continental Free Trade Agreement, along with the new Africa Medicines Agency, the continent can improve availability, affordability, and security of supplies critical for improved health, such as personal protective equipment, biologics, pharmaceuticals, and medical devices.

- ✳ **Encourage political participation, revitalize democratic governance, peacebuilding, and strengthened national and regional institutions.**

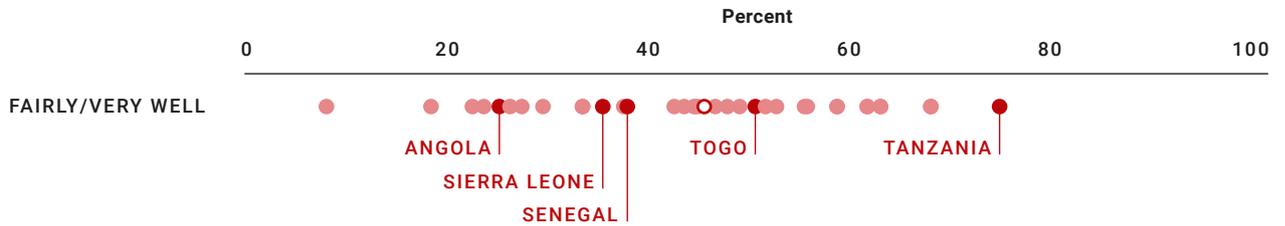
Such efforts should focus on the emancipation of the continent from a global system rooted in colonial and imperialist ideology. The next generation of leaders in politics, government, private sector, academia, civil society, and communities can emerge to change the narrative of Africa in the world.

Realizing a different, brighter, and more hopeful future for health in Africa is possible, even if it may require change from the present. The time is now for leaders to lift their gaze and start working towards that future.

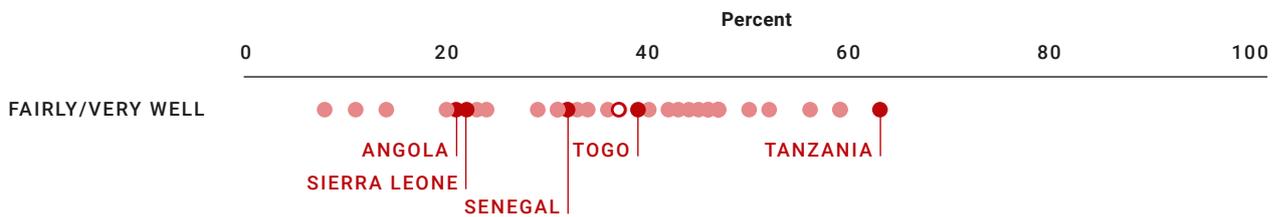
FIGURE 2.1. HOW WELL DOES THE GOVERNMENT PROVIDE ...

The perception of how well government provides basic health and water and sanitation services is divided among African nations. Respondents in relatively wealthier African nations, do not necessarily report better conditions than their less wealthy counterparts or the 34-country average. At the same time, respondents in a handful of less wealthy countries, such as Tanzania, rank their government’s health-related services highly.

... BASIC HEALTH SERVICES?



... WATER AND SANITATION SERVICES?



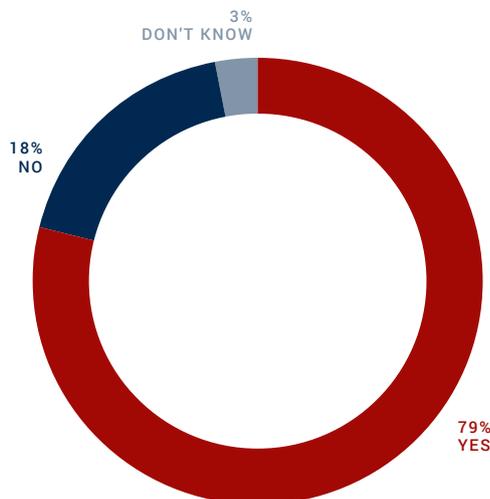
○ 34 COUNTRY AVERAGE

NOTE: The top figure show the share of respondents answering "well" or "fairly well" to the question, "How well does the government provide basic health services?" The bottom figure shows the share of respondents answering "well," "fairly well," "fairly badly," or "very badly" to the question, "How well does the government provide water and sanitation services?"
SOURCE: Afrobarometer. (2021). "Round 8 (2019/2021)."

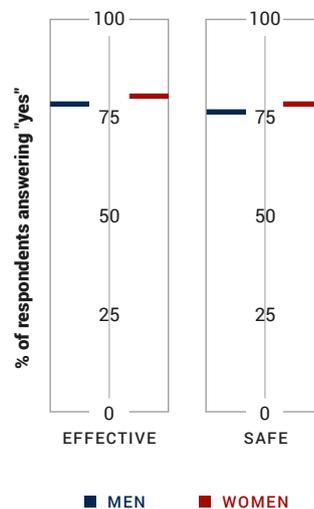
FIGURE 2.2. A SUPERMAJORITY OF AFRICANS INTEND TO TAKE THE VACCINE.

Despite reports of vaccine hesitancy in Africa, according to a 15-country study by the Africa CDC and the African Union, a wide majority of the citizens surveyed actually intend to take the vaccine once it becomes available. Moreover, over 75 percent of those surveyed believe that vaccines in general are effective and safe.

REPORTED WILLINGNESS TO ACCEPT A NEW COVID-19 VACCINE



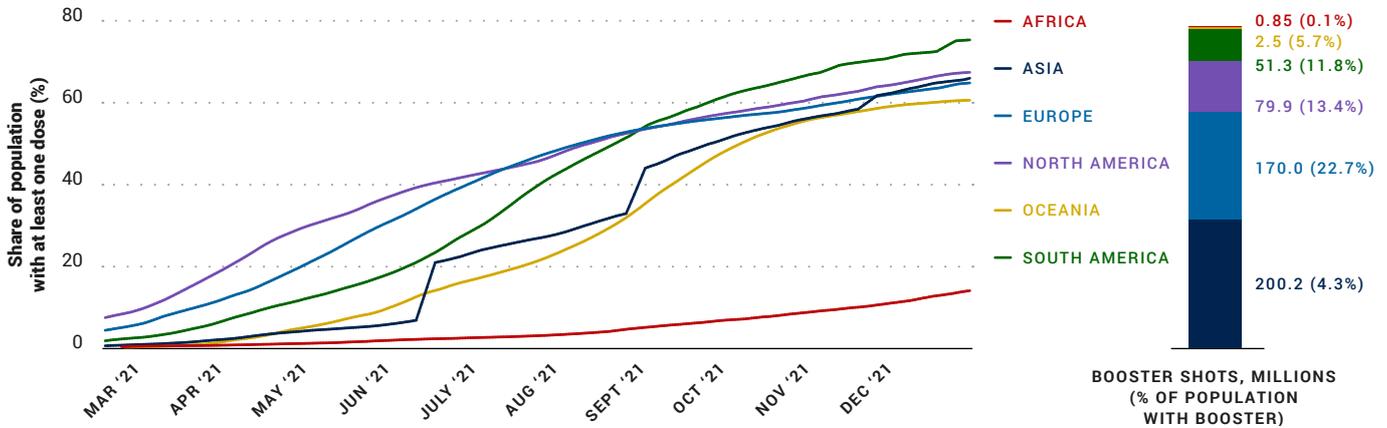
DO YOU THINK VACCINES IN GENERAL ARE SAFE OR EFFECTIVE?



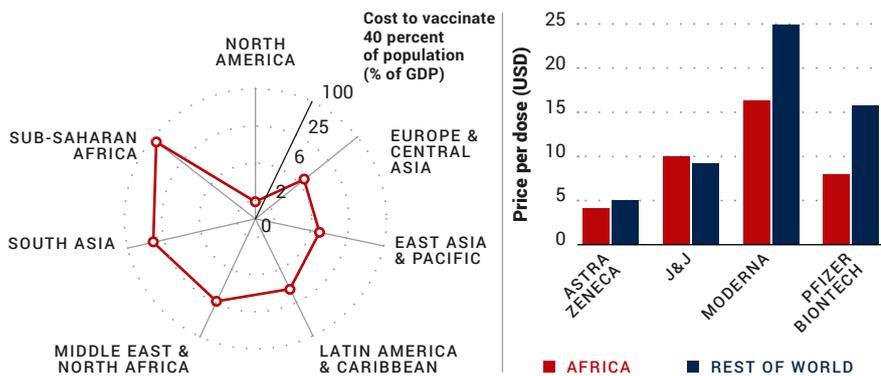
SOURCE: "COVID-19 Vaccine Perceptions: A 15-country study," Africa CDC and the African Union, 2021.

FIGURE 2.3. AFRICA'S COVID-19 VACCINATION STORY

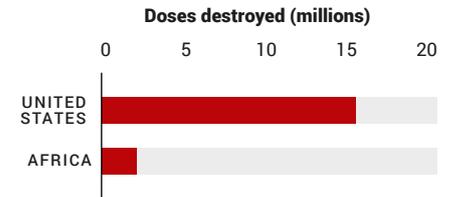
Africa has received very small share of global vaccines, but vaccination rates have accelerated in recent months. As of this writing, more than 14 percent of Africans have now received at least one dose, and almost one million Africans have received a booster shot.



While Africa tends to pay less per dose for most vaccines through COVAX, the cost is more burdensome relative to the rest of the world.



Donations of nearly expired vaccines have led to Africa destroying some of its vaccine supply. Vaccine destruction has been prevalent in many countries, including the United States, which has destroyed more than 15 million doses so far.



Half of the COVID-19 vaccines delivered to the continent have been donations, mostly through COVAX. Donations have constituted a higher share of doses in low-income countries, while two-thirds of vaccines in upper-middle- and high-income countries have been purchased through deals directly with pharmaceutical companies. Chinese companies (Sinopharm and Sinovac) made up nearly one-fifth (18.7 percent) of such deals. Overall, the COVAX facility has brokered more than 57 percent of all vaccine deals in Africa.

Vaccine	LOW-INCOME COUNTRIES					UPPER-MIDDLE AND HIGH-INCOME COUNTRIES				
	COVAX	COVAX DONATIONS	DEALS	BILATERAL DONATIONS	TOTAL	COVAX	COVAX DONATIONS	DEALS	BILATERAL DONATIONS	TOTAL
JOHNSON & JOHNSON		22.4%	7.5%		29.9%		0.3%	24.3%	0.1%	24.7%
MODERNA		3.4%		0.8%	4.1%					0.0%
OXFORD-ASTRAZENECA	8.3%	13.4%		3.9%	25.7%	1.2%	1.8%	0.2%	1.8%	5.0%
PFIZER-BIONTECH	1.2%	14.1%		0.9%	16.1%	2.9%	20.5%	31.4%		54.8%
SINOPHARM	10.0%		3.1%	6.0%	19.0%			7.4%	2.0%	9.4%
SINOVAC	3.3%		0.2%	1.6%	5.2%			1.2%	0.7%	1.9%
SPUTNIK V/LIGHT								3.8%	0.1%	3.9%
TOTAL	22.7%	53.3%	10.8%	13.1%	100%	4.1%	22.6%	68.7%	4.7%	100%

NOTE: Price per dose data does not include donations. Covaxin is not included in the vaccine distribution tables due to low frequency. "Deals" includes bilateral and multilateral (EU, AU/AVAT) supply deals.
SOURCES: Airfinity. (2021). "COVID-19 Vaccination Data." Airfinity. Hannah Ritchie et al. (2021). "Coronavirus Pandemic (COVID-19)." Published online at OurWorldInData.org. Data retrieved on December 29, 2021.
 UNDP. (2021). "Global Dashboard for Vaccine Equity." Data retrieved on October 20, 2021.
 United Nations Development Programme. CDC. (2021). Vaccine disposal data. Center for Disease Control and Prevention. Data retrieved on September 2, 2021.

Vaccine inequity: Ensuring Africa is not left out

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Approximately 1.2 billion Africans have not received a single dose of vaccine.

There is no greater test of moral solidarity and the world's ability to come together than this global health challenge.

The global roll-out of COVID-19 vaccines to date is neither inclusive nor adequately planned: Many countries are already administering boosters while the rest of the world is being left far behind. Despite the urgent need to increase vaccination, Africa has received too few vaccines from the global supply: As of this writing, out of more than 9 billion vaccines doses produced,¹ Africa has only received approximately 540 million (about 6 percent of all COVID vaccines, despite having 17 percent of the world's population) and administered 309 million doses.² Less than 11 percent of Africans are fully vaccinated.³

In other words, approximately 1.2 billion Africans have not received a single dose of vaccine and, at the current rate, much of Africa may not be vaccinated until 2023.⁴

The COVID-19 pandemic has exposed our continent's vulnerabilities in ensuring access to vital drugs, vaccines, and health technologies. More specifically, it has underscored the critical gap in vaccine manufacturing as a whole: Before COVID-19, Africa produced less than 1 percent of the vaccines that it consumed—importing over 99 percent—despite consuming over 25 percent of vaccines globally.⁵

Such vaccine inequality is not simply unjust; given the potential for dangerous mutations that could affect vaccine effectiveness, it is epidemiologically wrong. As a result, Africa may well become the COVID epicenter.

The issue is no longer one of supply but rather one of unequal distribution. Despite the acute vaccine supply shortage in Africa, global vaccine production has been increasing at a secure rate, around 1.5 billion doses per month. By December 2021, over 1.2 billion doses could be available for donation by the G7 alone.⁶ Western countries should agree to transfer their vast stockpile of unused vaccines to COVAX to ensure that the vaccines reach the places most in need. In addition, to ensure the best allocation and distribution of vaccines, COVAX should work with the African Vaccine Acquisition Task Team (AVATT), which has pooled resources to procure vaccines for its member states.

There is no greater test of moral solidarity and the world's ability to come together than this global health challenge. Moreover, the solution is not charity: Given the emergence and spread of variants, the pandemic will not be over until it is over everywhere. Africa cannot and must not be left out of the vaccination conversation. Delays in vaccinating everyone have an economic cost as well. A recent study from *The Economist* estimated that, among other regions, sub-Saharan Africa will register the highest economic losses (3 percent of GDP from 2022-2025) globally due to slow vaccination rates.⁷

1 Our World in Data. (2022). "COVID-19 Data Explorer." University of Oxford. Accessed on January 4, 2022.

2 Africa CDC (2022). "Africa CDC Vaccine Dashboard." Africa CDC. Accessed on January 4, 2022.

3 WHO. (2021). "Coronavirus (COVID-19) Dashboard." World Health Organization. Accessed on November 26, 2021. <https://covid19.who.int/>

4 Padma, T.V. "COVID vaccines to reach poorest countries in 2023 — despite recent pledges." *Nature*, Vol. 595, No. 7867, 2021.

5 Nkengasong, J. (2021). "Why Africa needs to manufacture its own vaccines." Gavi.

6 Prediction current as of this writing, for more, see: September 2021 snapshot COVID-19 data." Airfinity, 2021.

7 Salmon, K., "Africa's biggest economies will struggle in 2022." November 8, 2021. *The Economist*.

THE FUTURE OF AFRICA’S HEALTH SYSTEMS CAN BE BRIGHT

Africa accounts for 23 percent of the world’s overall disease burden yet only 1 percent of global consumption of healthcare goods and services, of which 44 percent is financed by government and the remainder is from out-of-pocket payments. This indicates that there is a significant health financing gap to treat the continent’s disease burden. (For more on strategies for financing Africa’s health sector, see the viewpoint on page 35.)⁸

The African pharmaceutical sector is expected to grow from \$19 billion in 2012 to \$66 billion by 2022—the fastest growing in the world; the health and wellness sector is projected to be worth around \$259 billion by 2030, with the potential to create over 16 million jobs.⁹ Already, pharmaceutical manufacturers have announced plans to create factories in the region—although challenges in infrastructure, regulation, and know-how, among others, may hinder those efforts. (For more on the future of vaccine manufacturing in Africa, see page 39.)

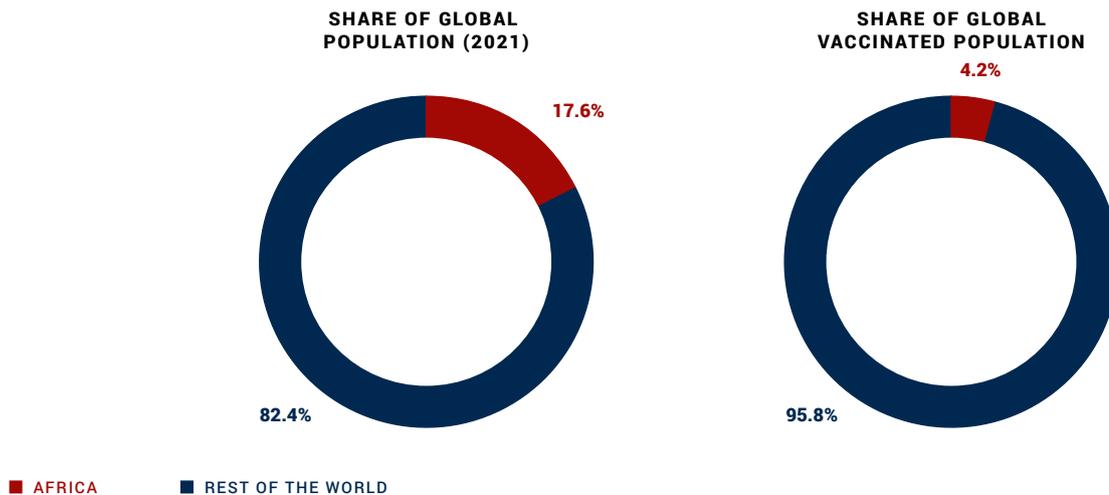
Given the emergence and spread of variants, the pandemic will not be over until it is over everywhere.

Given these complex challenges, the pandemic has also confirmed the integral role of a strong regulatory system in a well-functioning health ecosystem. The African Medicines Agency (AMA), launched in September 2021, is the second continental health agency after the Africa Centres for Disease Control and Prevention (Africa CDC), with the mandate of enhancing regulatory oversight across the continent and meeting the challenges of access to quality, safe, and efficacious medicines.

The AMA can take advantage of and build on the ongoing efforts towards regulatory harmonization and economic inclusion through other key Africa programs:

- ✦ **African Continental Free Trade Area**
Facilitates trade through simplification of regulation and minimization of red tape.

FIGURE 2.4. COVID-19 VACCINE ACCESS REMAINS DISPROPORTIONATELY LOW IN AFRICA



NOTE: Vaccination rates as of December 21, 2021.
SOURCE: "COVID-19 Vaccination Data." Airfinity, 2021.; "COVID-19 in Africa one year on: Impact and Prospects." Mo Ibrahim Foundation, 2021.

8 Ogbuonji, O. et al. (2019). "Closing Africa's health financing gap." The Brookings Institution.
 9 Sidibé, Michel. (2021). "Why the creation of the African Medicines Agency is an urgent and compelling requirement for Africa?" *Entrepreneur Afrique*.

- ✱ **Partnerships for African Vaccine Manufacturing (PAVM)**
Supports local manufacturing.
- ✱ **African Medicines Regulatory Harmonization (AMRH) and African Vaccine Regulatory Forum (AVREF)**
Both focus on medical products and regulation.

By partnering with these key programs, the AMA will be able to further strengthen continental research and development capacity, harmonize drug registration regulations, and help African countries comply with best practices and international standards.

These institutions, including AMA, do not exist in a vacuum. Some of the greatest strengths are when they work across institutions and sectors. And only in partnering together will they be able to safeguard the health security of Africa and the world as a whole.

Paying for the malaria vaccine: Will Africa take responsibility?

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The dependency of most malaria-endemic African countries on external financiers belies the political declarations of commitment.

OPPORTUNITY AND DEPENDENCY

Twelve decades after Ronald Ross won the Nobel Prize for his foundational work on understanding malaria transmission, the [World Health Organization recently recommended widespread use of the new RTS,S malaria vaccine among children in sub-Saharan Africa and other regions](#) with moderate to high transmission of *P. falciparum*, a deadly form of the malaria parasite. RTS,S achieves up to 40 percent reduction in malaria episodes—an important feat in absolute terms because more than 260,000 African children under the age of five die from malaria annually.¹

The landscape of fighting malaria in Africa has four dimensions. First is the **human** toll in the form of preventable illness, disability, and death—this dimension prompts commitments to action. Second is the **political** dimension, multiple statements of commitment to curbing malaria and achieving Universal Health Coverage. Without financing, though, political statements are mere platitudes. Indeed, **financing**, the third dimension, reflects the continent's enduring dependency on external financiers. For example, [a recent estimate](#) showed that, in low-income countries, development assistance for health (DAH) provided about 70 percent of total immunization spending in 2017. In 31 African countries, DAH provided more than 50 percent of total immunization spending that year.² The dependency of most malaria-endemic African countries on external financiers belies the political declarations of commitment. The fourth dimension, **technology**, has two main categories. One is prevention by killing or keeping at bay the vector—the *Anopheles* mosquito—through indoor residual spraying (IRS) and insecticide-treated nets (ITNs), as well as preventive treatment with medicines. The other is case management through diagnosis and treatment with medicines. The new malaria vaccine strengthens the suite of technologies, all of which remain important.

1 WHO. 2021. WHO recommends groundbreaking malaria vaccine for children at risk.

2 Kizeli G et al. 2021. Estimating total spending by source of funding on routine and supplementary immunization activities for low-income and middle-income countries, 2000-17: a financial modelling study.

THE EASY WRONG VERSUS THE CHALLENGING RIGHT

While such externally driven [financing] mechanisms might have short-term merit in some cases, the strategic reality is that they have enduring pernicious effects on Africa.

There are two main options for financing the next phase of malaria control and elimination in Africa. One is continued dependency on external financing, including for the new vaccine—from development banks, foundations, and grant financiers like the Global Fund to Fight AIDS, Tuberculosis and Malaria (for ITNs and medicines) and Gavi (potentially for the malaria vaccine). Indeed, Gavi has announced its decision to commit \$155.7 million to finance malaria vaccine introduction, procurement, and delivery for Gavi-eligible countries in sub-Saharan Africa in 2022-2025.³ While such externally driven mechanisms might have short-term merit in some cases, the strategic reality is that they have enduring pernicious effects on Africa. They unwittingly deepen and prolong the dependency of Africa on solutions designed outside the continent, dampen incentives for Africa to develop its own institutions, shift the loci of accountability from African leaders and capital cities to politicians and unelected influencers outside the continent, and absolve African leaders of their responsibilities. They also leave the continent vulnerable to the vagaries of geopolitics during crises, as evidenced by the extreme inequity of access to COVID-19 vaccines despite abundant supplies in the Global North. For these reasons, the path laid by Gavi, while familiar and easy, is also wrong because of its long-term implications for the prolonging of Africa's dependency on the Global North.⁴

It is time for a strategic rethink. The alternative and prudent path is to approach the vaccine as an opportunity for African countries to *finally* take financial responsibility for the continent's fight against malaria. Accomplishing such a tall task requires three key steps. First is that African countries lead and own the continent's plan of attack against malaria based on the technical expertise and political legitimacy of the Africa Centers for Disease Control and Prevention (Africa CDC). Second is that financing should primarily come from the domestic budgets of African countries. The burden of malaria in Africa is mostly predictable, and thus amenable to multi-year public expenditure frameworks. African countries would finance those domestic budgets first from their own general revenues, supplemented by *prudently managed* domestic and international borrowing that is *on budget and within their control*. Third, African countries would seek time-limited external grant financing to complement domestic budgets. They, not Gavi or any other entity outside the continent, would set the terms of engagement and execution for all malaria programs and technologies in Africa, including the vaccines. External financing would add to, but not substitute for, domestic financing from public budgets. External technical assistance would support African programs without setting or dominating the agenda from outside. That new path, though wise, would be challenging. It would upend the status quo of dependency and cause discomfort within and outside the continent.

If Africa cannot or will not take financial responsibility for a scourge as old, as pernicious, and as visible as malaria, what does independence really mean?

Yet, the case for this strategic change is compelling. Malaria afflicts most households on the continent. It has none of the stigma associated with sexually transmitted diseases, hence governments have no need to fear that their bold action would offend any religious or social constituency. The mosquito vector that transmits malaria is known and visible to the naked eye, so there is little mystery about what brings the disease to the people. If Africa cannot or will not take financial responsibility for a scourge as old, as pernicious, and as visible as malaria, what does independence really mean?

³ Gavi. 2021. Gavi Board approves funding to support malaria vaccine roll-out in sub-Saharan Africa.

⁴ Adeyi O. 2022. Global Health In Practice. Investing Amidst Pandemics, Denial of Evidence, and Neo-dependency. World Scientific Publishing. In Press.

Strategies for financing Africa's health sector

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Out-of-pocket (OOP) health spending in Africa remains excessively high compared to other continents—just one weakness in Africa's health systems that the COVID-19 pandemic has exposed.

Never before in the last half century has Africa's health care landscape seen so many changes and attracted so much interest. In fact, Africa's health care sector would be worth an estimated \$259 billion by 2030.¹ While these trends reveal a lucrative opportunity for the private sector, if not well-regulated, Africa's health care system could end up keeping more Africans below the poverty line. Thus, African countries have an opportunity to build on the health financing success of 2021 to strengthen the resilience of this sector and Africa's people.

Out-of-pocket (OOP) health spending in Africa remains excessively high compared to other continents—just one weakness in Africa's health systems that the COVID-19 pandemic has exposed. Indeed, despite the havoc the virus has wreaked, it has also provided the continent with opportunities to reshape its health infrastructure as well as its supply systems, urging a shift from donor and externally manufactured products to continental production systems leveraging opportunities created by the African Continental Free Trade Agreement.

COVID-19 has created not only a health crisis, but an economic contraction never experienced before with such speed. In addition, the COVID-induced increase in unemployment is causing private sector spending on health to decrease at the same time COVID is adding to the cost of health care—in a region where private health expenditure already exceeds 50 percent of total health expenditure in over 15 countries (Figure 2.6). The immediate challenge for many governments is how to supply affordable and reliable health care in a fiscally constrained environment.

Prior to the COVID pandemic, a number of suggestions for increasing public support for the health sector had been proposed, primarily through domestic resource mobilization. However, in the face of economic contraction, increasing government revenue in the short term is no longer feasible.

The immediate focus of international financial institutions, therefore, has been to support African economies to raise additional concessional resources. Over the course of the crisis, the G-20 provided three phased options for additional liquidity: Debt service suspension, special drawing rights, and an innovative financing approach to vaccine acquisition. Multilateral financial institutions also increased disbursement of new credits to countries to support additional health spending.

The G-20—building on a proposal from the African finance ministers and the Economic Commission for Africa (UNECA)—adopted the African proposal for a debt service suspension initiative (DSSI) as the first liquidity injection for low-income countries. The DSSI allowed countries to suspend debt payment obligations to creditors in 2020 and 2021 so that the governments could use the financial resources to respond to the global health crisis. These newly available resources were used to purchase personal protective equipment (PPE) and also support local production of PPE, which helped stand up some part of the economy.

In early 2021, the G-20 further approved the issuance of Special Drawing Rights (SDRs)—which had been called for by African finance ministers early in the pandemic—to the magnitude of \$650 billion, of which Africa received about 5 percent (worth around \$33.6

¹ Manlan, Carl. "This is the key to boosting economic growth in Africa." World Economic Forum, 2019.

The COVID-induced increase in unemployment is causing private sector spending on health to decrease at the same time COVID is adding to the cost of health care.

billion). These additional resources increased liquidity to countries to respond to both the health and the economic crises.

Relying on African institutions to finance and fight the pandemic has served Africa well throughout the crisis. As such, Africa has put in place a number of new institutions and innovative financing approaches to fund vaccine acquisition.

The first such institution is the African Medical Supplies Platform (AMSP), whose strength lies in its ability to pool demand for medical supplies in a transparent manner—thereby commanding lower market prices. Another important innovation was the creation of the African Vaccines Acquisition Trust (AVAT) by pooling SDRs from countries like Egypt, Nigeria, and Zimbabwe. It provided early resources for the African Export-Import Bank (Afreximbank)² to set up a facility for vaccine procurement. Under the leadership of African Union Special Envoy Strive Masiyiwa, and in collaboration with the African CDC led by Dr. John Nkengasong and UNECA, AVAT has been able to procure over 40 percent of Africa's COVID vaccine needs³ (which includes a 110 million dose purchase from Moderna brokered by the U.S.).⁴ With the support of a \$500 million donation from the Mastercard Foundation,⁵ the costs of vaccines under the AVAT mechanism are on par with those procured via COVAX. Indeed, in 2022, a major focus for leaders must be to administer procured vaccines: As of January 2022, less than 11 percent of Africa is fully vaccinated. (For more on vaccine equity, see the viewpoint on page 31.)

Afreximbank also developed the AVAT No-Fault Compensation Program for Participating Member States. This program, the first of its kind on the continent, provides no-fault lump-sum compensation in full and final settlement of any claims to individuals who have suffered a “serious adverse event” resulting in permanent impairment or death associated with a COVID-19 vaccine procured or distributed under the AVAT Framework within any of the participating member states.

The development of these innovative mechanisms means Africa can now go to the market to procure its own health commodities, empowering Africa to move from importing over 90 percent of its health needs to producing equipment and pharmaceuticals on the continent. This dynamic has already begun with countries like South Africa, Senegal, and Algeria increasing capacity and Rwanda, Kenya, Nigeria, and Morocco setting up new capacity for health sector commodity manufacturing.

FIGURE 2.5. GLOBAL HEALTH EXPENDITURES (% OF GDP)

COUNTRY GROUPS	HEALTH SPENDING (% OF GDP)		
	2000	2010	2019
HIGH-INCOME	6.4	7.6	8.3
UPPER-MIDDLE-INCOME	5.7	6.0	6.5
LOWER-MIDDLE-INCOME	4.7	4.3	5.0
LOWER-INCOME	5.5	6.4	6.0

NOTE: Country groups based on World Bank classification.

SOURCE: WHO Global expenditure on health 2021.

² “Africa Signs Historic Agreement with Johnson & Johnson for 400 Million Doses of COVID-19 Vaccines.” The African Export-Import Bank (Afreximbank), 2021.

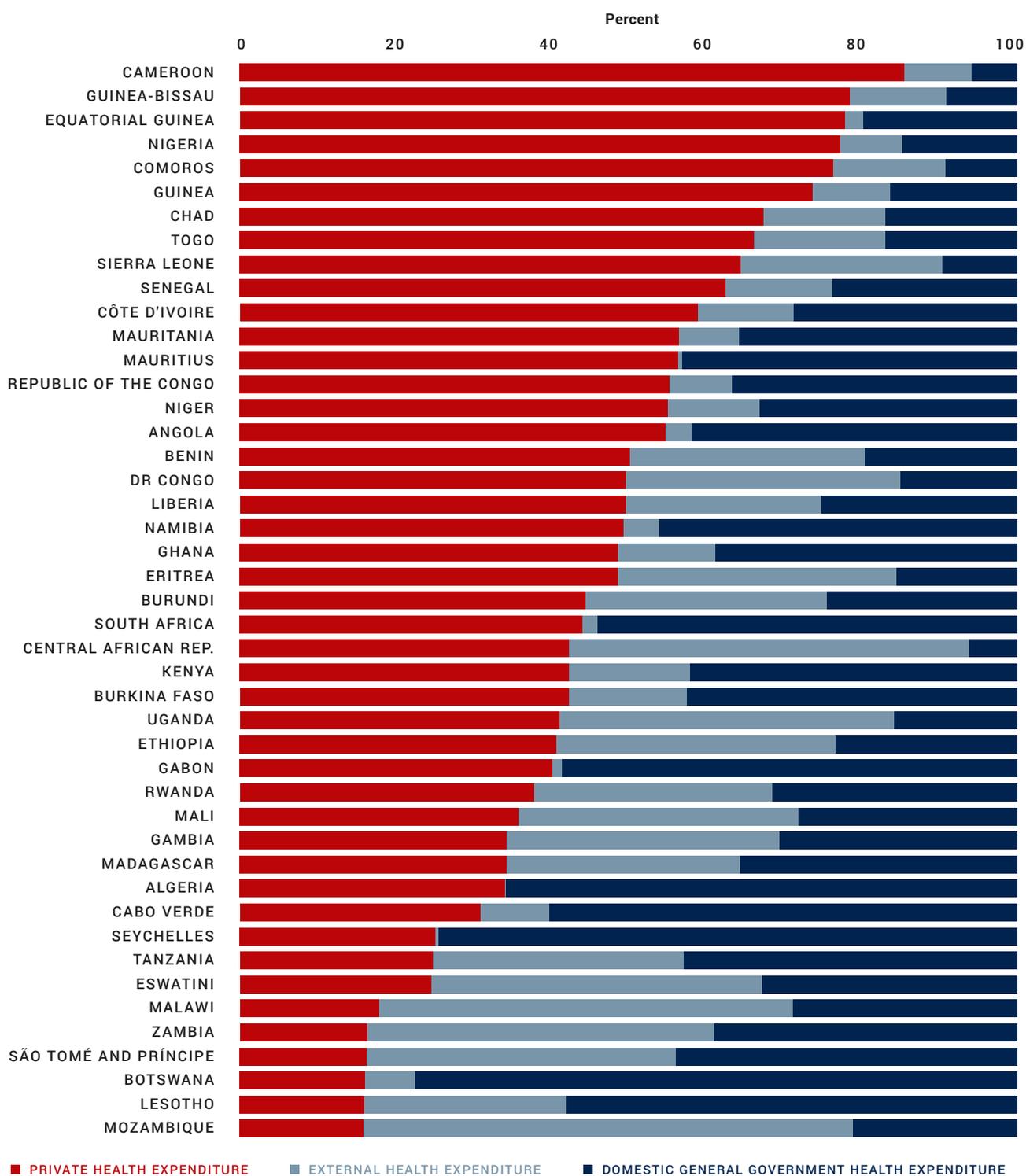
³ “J&J signs Covid-19 vaccine purchase agreement with AVAT.” Pharmaceutical Technology, 2021.

⁴ Jerving, Sara. “Moderna to supply the African Union with 110 million COVID-19 vaccines.” Devex, 2021.

⁵ Disclosure: The Mastercard Foundation supports AGI's work on youth employment.

FIGURE 2.6. STRATEGIES FOR FINANCING AFRICA'S HEALTH SECTOR

In 2019, nearly three-quarters of health spending in low-income countries was financed by a combination of out-of-pocket (OOP) spending and external aid. In these countries, the share of external aid rose from 16 percent in 2000 to 29 percent in 2019, while the share of government transfers declined. Lower-middle-income countries relied less on external aid and more on government transfers and social health insurance contributions, though OOP spending remained high. In these countries, social health insurance contributions rose slowly but remained a very small share of total health spending. In upper-middle-income countries, more than half of health spending was financed by government transfers and social health insurance contributions, and 9 percent was financed by voluntary health insurance contributions. High-income countries had the lowest share of OOP spending (21 percent) and the largest shares of spending from government transfers (48 percent) and social health insurance contributions (22 percent).



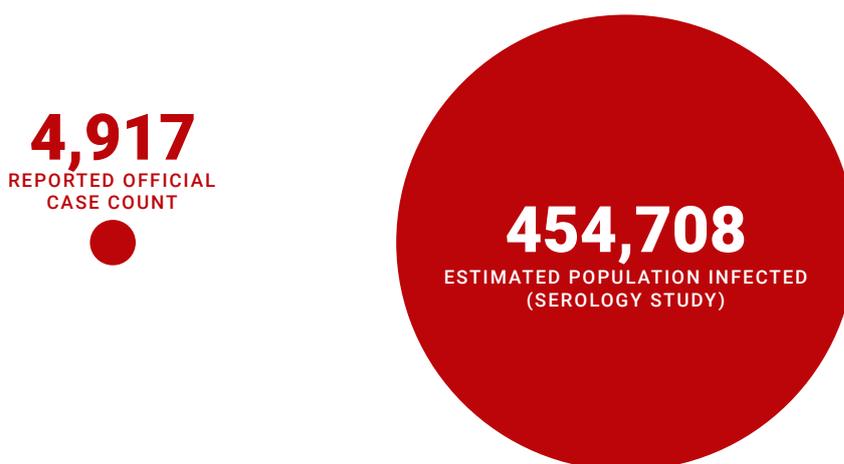
SOURCE: Authors' calculations based on WHO global health expenditure data.

With the COVID-19 pandemic, the need for closer collaboration between health and finance ministers became even more important. Indeed, inclusive, efficient, and effective health care financing needs both working together. There is now a call to create a Global Health and Finance Board⁶ to address fundamental problems of global governance for health, some of which were so clearly exposed by the (mis)management of the pandemic.

Africa is ahead of the game on this effort: Under the leadership of the African Union heads of state, Africa CDC, and UNECA, relevant ministers have held bi-monthly coordination meetings to align resources and delivery. This new mechanism could also be used post-pandemic to build and structure financing for more affordable and improved health care on the continent. The World Bank, the Mastercard Foundation, UNICEF, GAVI and others are already working through this mechanism to help address the biggest health challenge for Africa in 2022: vaccinations.

FIGURE 2.7. TESTING SCARCITY LIKELY MASKED EARLY COVID SPREAD IN AFRICA

Early in the pandemic, limited access to test kits, an important tool for indentifying the spread of the virus, hindered widespread testing for COVID-19 in sub-Saharan Africa. As a result, African governments narrowed the eligibility criteria for testing hoping to best utilize their scarce equipment, which also led to depressed case counts. In fact, serology studies, which can uncover a record of infection by detecting anti-bodies formed in response to the virus, later revealed that the spread of the virus was much larger than the official case count. In Zambia, as shown in the figure, a serology study indicated that COVID-19 was almost 100 times more prevalent than recorded by official case counts.



NOTE: The serology study tested more than 4,000 randomly sampled Zambians for active infection and antibodies over July 4 to July 27, 2020.

SOURCE: Mulenga et al. "Prevalence of SARS-CoV-2 in six districts in Zambia in July, 2020: a cross-sectional cluster sample survey." *Lancet Global Health*, Vol 9, 2021.

⁶ "G20 High Level Independent Panel on Financing the Global Commons for Pandemic Preparedness and Response" Financing the Global Commons for Pandemic Preparedness and Response, 2021.

The future of vaccine manufacturing in Africa

CHIDI VICTOR NWENKA

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Reminiscent of the 2009 H1N1 Influenza pandemic, the COVID-19 pandemic is perpetuating the stark reality of vaccine insecurity in Africa. Less than 1 percent of all vaccines used on the continent are locally produced—a statistic that reveals the region’s intense vulnerability and overdependence on foreign supplies. Compounding these challenges are other obstacles such as the high cost of vaccine development, vaccine market fragmentation, and need for building workforce capacity, to name a few. When these challenges are juxtaposed with the absence of a long-term mobilizing vision, paucity of political will to invest in public health goods and technologies, and absence of enabling policies to incentivize investment and maintenance of vaccine manufacturing infrastructure, the skepticism of a bright future for vaccine manufacturing in Africa appears justified.

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Although there are no silver bullets to fixing the future of vaccine manufacturing in Africa, much has changed since 2007 when [the Pharmaceutical Manufacturing Plan for Africa \(PMPA\)](#), an African Union-led tool for catalyzing local pharmaceutical production, was adopted.¹ Furthermore, in addition to several technological innovations reducing the cost of continental production, national governments and allied agencies are beginning to stake a claim on initiatives such as the launch of the African Continental Free Trade Area, the establishment of the African Medicines Agency, and the development of the Framework For Action (FFA) by the Partnership for African Vaccine Manufacturing (PAVM) of the Africa Centers for Disease Control.

Given increased collaboration among the bodies of the FFA, national pharmaceutical agencies, and independent, private companies, there is cause for productive optimism. Indeed, capacity building is occurring at various stages through technology transfer partnerships at existing, developing, and prospective manufacturing facilities as exemplified by Aspen in South Africa, Institut Pasteur in Morocco, and the government of Ghana, respectively. Installed-base scale-up efforts by Biovac in South Africa and first-of-its-kind vaccine production initiatives in Nigeria by Innovative Biotech, in collaboration with Merck, are also manifesting. At the international agency level, the World Health Organization has established a global mRNA technology training hub in Africa. The African Vaccine Manufacturing Initiative (AVMI) is providing leadership, building on its experience and expertise over more than 10 years of advocacy for local vaccine manufacturing in Africa.

So, the sun may yet shine on vaccine manufacturing in Africa. We have the galvanizing vision and the mobilizing strategies of the PAVM with the unprecedented engagement of all major stakeholders in Africa and beyond—including politicians and funding institutions. Fundamental elements critical to securing a bright future—and ensuring its sustainability—should focus on a long-term Africa-led multi-stakeholder agenda that allows for scientific potential actualization and local ownership, [as articulated in a three-point agenda in a 2014 paper on HIV vaccines](#).²

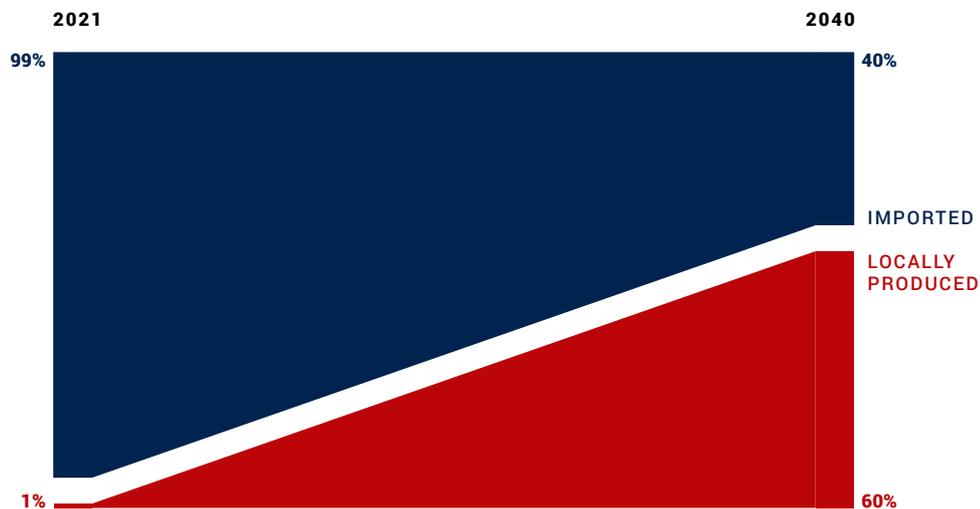
Less than 1 percent of all vaccines used on the continent are locally produced—a statistic that reveals the region’s intense vulnerability and overdependence on foreign supplies.

¹ Byaruhanga, J. (2020). The Pharmaceutical Manufacturing Plan for Africa. AUDA-NEPAD News.

² Nweneka, C. V. (2014). Taming the Monster: Need for Africa-initiated, Africa-led HIV Vaccine Research and Development Advocacy in Africa. *Journal of Vaccines & Vaccination*, 05(05).

FIGURE 2.8. THE NEXT STEP : AFRICA AIMS TO MANUFACTURE 60% OF ITS VACCINES BY 2040

Africa currently imports nearly all its routine vaccine supply. The 1 percent of vaccines Africa produces (roughly 12 million doses) are limited to downstream steps such as filling and finishing or labeling and packaging. Given that Africa represents a quarter of the global demand for vaccines, but only accounts for 0.1 percent of global vaccine production, the African Union and Africa CDC have outlined a plan to manufacture 60 percent of Africa's routine vaccinations by 2040.



SOURCE: "African Union and Africa CDC launches Partnerships for African Vaccine Manufacturing." Africa Center for Disease Control, 2021.; "COVID-19 in Africa one year on: Impact and Prospects." Mo Ibrahim Foundation, 2021.

- ✿ **Agenda 1**

Development of a long-term, focused, well-coordinated, Africa-initiated, Africa-led vaccine research and development (R&D) advocacy targeting the highest ministerial level in Africa, corporate bodies, African philanthropists, and all the major stakeholders.

- ✿ **Agenda 2**

Institution of deliberate strategies to address the limited vaccine pipelines such as diversifying the players on the field through the establishment of several vaccine related freedom to discover grants with very transparent and liberal eligibility criteria, and establishing regional biotechnology incubation centers in Africa to encourage small groups of scientists to develop their potentials.

- ✿ **Agenda 3**

Building genuine local ownership of vaccine projects through effective partnerships, effective communication, and enactment of policies to compel externally funded vaccine-related projects to demonstrate adequate local involvement at all stages of the project before granting final approval.

Quality vaccines are being produced in Africa; that effort now needs to expand. We have no choice but to do it ourselves.

Africa's vaccine production destiny must transform beyond the current "fill and finish" model to full end-to-end manufacturing and include vaccine research and development. (For more on health R&D in Africa, see the viewpoint on page 44.)

There is a promising future for vaccine manufacturing in Africa. Bottlenecks (e.g., weak investments in vaccine manufacturing by African governments; weak regulatory capacity for vaccine research, development, and production; low interest in vaccine production in Africa by global vaccine stakeholders; and uncertainties in the demands for Africa-made vaccines by African countries)³ that caused previous efforts to fail must be fixed. Current

³ Makenga, G., Bonoli, S., Montomoli, E., Carrier, T., & Auerbach, J. (2019). Vaccine Production in Africa: A Feasible Business Model for Capacity Building and Sustainable New Vaccine Introduction. *Frontiers in Public Health*, 7, 56.

and future opportunities must be exploited maximally through diverse partnerships and the creation of an enabling multi-centered vaccine development and manufacturing ecosystem in Africa. In the end, it is only Africans that can change the narrative for Africa. Quality vaccines are being produced in Africa; that effort now needs to expand. We have no choice but to do it ourselves.

Africa's just energy transition could boost health outcomes

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Transitioning some 900 million Africans from biomass fuels to more affordable and environmentally friendly options over the next year could help prevent the deaths of millions of Africans (particularly women and children), foster social stability, and unlock significant labor market productivity. Each year, air pollution caused by environmentally hazardous wood and coal cooking technologies results in respiratory illnesses, natal complications, heart disease, and premature deaths of children.¹ Globally, such pollution accounts for almost 60 percent of black carbon emissions, which amount to a gigaton of carbon dioxide annually.² Concerted efforts over the past decade have failed to make an appreciable dent in biofuel use across the continent—partly because most households are yet to have access to, or afford, viable options for clean technology. (For more on strategies for addressing the drivers and impacts of climate change, see [Chapter 4](#).)

Adopting less polluting cooking fuels across Africa will reduce the financial, environmental, and social costs imposed by frequent illnesses and untimely death that result from the use of biomass fuels. Research indicates that smoke inhalation from indoor and outdoor cooking with such polluting fuels causes between 1.6 million and 3 million deaths of African children every year.³ These poor health outcomes further impose a substantial socio-economic burden on families. Figure 2.9 illustrates how wood and charcoal provide cooking fuel for almost three-quarters of African households.

The impacts of these fuels are also felt on the local economy and labor force. On average, African women spend 20 hours a week collecting firewood and up to 4 hours a day cooking on traditional stoves. Adopting cleaner and more efficient cooking fuels will free this important segment of Africa's labor force up to engage in economic activity, thereby making households more likely to be able to afford cleaner fuels and technology. Furthermore, improved health outcomes will save households money and facilitate greater investment in human capital. Environmentally, biomass fuel is estimated to be responsible for the deforestation of 2 million hectares per year—twice the size of The Gambia.⁴

While African countries renewed their commitment to transitioning from polluting cooking fuels at the U.N. Climate Change Conference (COP26), they were resolute in their call for an affordable energy transition.⁵ African households must be able to afford alternative fuel sources—a fact highlighted by the COVID-19 pandemic, which pushed some 100 million Africans back into using wood and coal because they could no longer afford clean energy

African households must be able to afford alternative fuel sources—a fact highlighted by the COVID-19 pandemic, which pushed some 100 million Africans back into using wood and coal because they could no longer afford clean energy options.

1 Ibrahim, M. and Robinson, M. (2021). "Africa: Clean Cooking - Lifting the Lid on Dirty Cooking Fuels." AllAfrica.com.

2 World Bank. (2019). "Clean cooking: Why it matters." World Bank Group.

3 Thurber, M. and Moss, T. "12 reasons why gas should be part of Africa's clean energy future." World Economic Forum.

4 Collins, B. (2019). "Africa's \$40B Market for Cooking Fuel Is Being Cleaned Up: Q&A." Bloomberg.

5 UN. (2021). "Priorities for Africa at COP26 and Beyond." United Nations.

Affordability is an important variable in this context, as the highest death rates from cooking fuel pollution occurs in poorer African countries.

options.⁶ Affordability is an important variable in this context, as the highest death rates from cooking fuel pollution occur in poorer African countries. Furthermore, over the short to medium terms, the transition must be based on Africa's comparative advantage. A pivot to natural gas would meet these requirements.⁷

Recent research from the University of Liverpool suggests that attainable supply-side interventions, like reducing the distance to liquefied natural gas (LNG) retail points and improving access to affordable multi-burner stoves, could expand usage by up to 58 percent of households by 2030.⁸ Moreover, the combination of increasing incomes, a more tech-savvy population, and growing urbanization suggests a growing market for cleaner cooking solutions. Capital investments in this sector will not become "stranded assets" for two reasons. First, the quantitative and qualitative growth of domestic markets bodes well for profitability. Second, any investments would have been fully amortized by 2050. The transition away from biomass cooking fuels will enable the continent to invest in the technology and infrastructure that will facilitate the adoption of even cleaner fuel sources in the future.

Africa's just energy transition is an urgent imperative: It is no longer an option. African governments and their development partners must step up to provide the right incentives alongside an enabling regulatory ecosystem to expedite this transition. Through its Climate Promise, the United Nations Development Program (UNDP) is committed to working with governments and local communities to increase access to clean and affordable energy for 500 million Africans.⁹ Urgent attention must also be given to innovative financing mechanisms. Blended finance could help de-risk the capital required for longer-term investments in the infrastructure required to provide LNG access to households, particularly those in remote locations. Incentives should also be extended to local small- and medium-sized enterprises so that they can provide the technology and products to support Africa's just energy transition at the household level.

6 IEA. (2020). "World Energy Outlook 2020." International Energy Agency

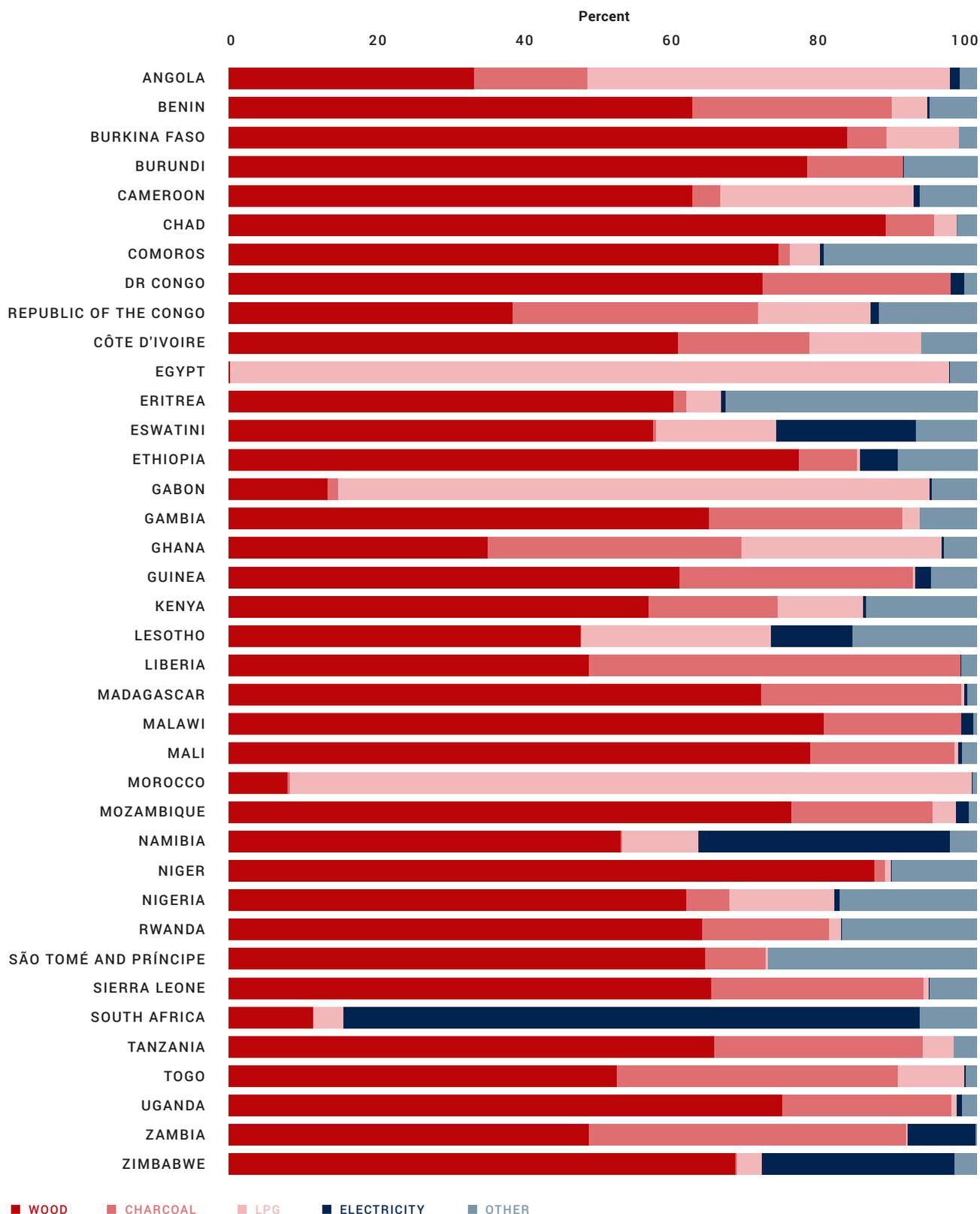
7 In fact, Africa is home to some 800 trillion cubic ft of known natural gas reserves, which can be utilized to initiate and expedite Africa's just energy transition.

8 Shupler, M., Mangeni, J., Tawiah, T. et al. (2021). "Modelling of supply and demand-side determinants of liquefied petroleum gas consumption in peri-urban Cameroon, Ghana and Kenya." Nature Energy.

9 UNDP. (2021). "Helping countries reach their climate goals." United Nations Development Programme.

FIGURE 2.9. SOURCES OF COOKING FUEL IN AFRICA, SELECT COUNTRIES

Africans use a variety of fuel sources for cooking, but their prevalence is markedly diverse across countries. Many countries in sub-Saharan Africa rely more heavily on wood and charcoal as their main cooking fuel than North Africa, although South Africa notably uses electricity more than any other sampled African country.



NOTE: LPG: Liquefied Petroleum Gas. LPG is most commonly a mixture of butane and propane.
SOURCE: World Bank (2021). Sustainable Energy for All (SE4ALL) database from WHO Global Household Energy database. World Bank Group.

What's next for R&D in health for Africa?

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Africa must realize that the future of the continent's economic growth and development is inextricably linked to R&D.

Africa is endowed with very rich biodiversity, among which include pathogens causing many of the infectious diseases afflicting the continent. Sadly, Africa has failed to use this as an opportunity to develop solutions (e.g., diagnostics, therapeutics, and vaccines) that could benefit the world. Although Africa presently produces less than 2 percent of the global research output, scientists on the continent have always demonstrated their capability to take charge when the opportunity calls and the resources abound. For instance, at the beginning of the COVID-19 pandemic, the African Center of Excellence for Genomics of Infectious Disease (ACEGID) at Redeemer's University in Ede, Nigeria, generated the first sequence of the SARS-CoV-2 on the continent at an unprecedented speed of 72 hours from sample receipt.

This success catalyzed the surge of genomic sequencing by scientists on the continent, whose data were effectively used to guide the public health response to the COVID-19 pandemic in Africa. Translational applications of these genomic sequences in Africa include the use of the gene editing technology to quickly develop a SARS-CoV-2 rapid diagnostic test (SHINE) as well as the development of COVID-19 DNA-based vaccine (DIOSYNVAX) at ACEGID in collaboration with the Broad Institute and University of Cambridge.

It is clear from the above examples that, in less than a decade, Africa has harnessed and localized genomic technology. However, its effective use and translational applications on the continent is limited and may not move beyond the current level of development. Many obstacles prevent the forward movement of the genomic capability demonstrated by African scientists including: 1) lack of political will; 2) lack of sustainable funding for research and development (R&D) by governments, regional funders, developmental organizations, or African private sector and philanthropists; 3) lack of local infrastructure to support R&D; 4) lack of local investment in the development and emergence of the biotechnology sector; and 5) lack of well-trained and skilled human resources. In addition, the political and academic ecosystems in Africa are not leveraging the rich and diverse resources available through its diaspora.

Africa must realize that the future of the continent's economic growth and development is inextricably linked to R&D. The continent needs to take advantage of the weaknesses exposed by COVID-19 pandemic to develop a well-articulated plan to accelerate translational R&D with a focus on diagnostics, therapeutics, and vaccines for infectious and non communicable diseases. The plan should be backed by national governments through pan-African political, health, and financial organizations with the help of the private sector. It will require leveraging the existing excellent genomic hubs in Africa, as well as the richness and the diversity of the African diaspora. More importantly, it will require long-term and sustainable investments in infrastructure development and human capacity building.

How strengthened political engagement can lead to improved health outcomes in Africa

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By developing evidence-based national medicines policies, African member states have demonstrated that they are prioritizing universal access to essential medicines and health products. Notably, 95 percent of African countries have developed policies and plans on medicines, over 90 percent on blood safety and 85 percent on traditional medicine. Such policies are vital for a robust and effective health infrastructure: For example, by developing essential health products lists, countries are better able to regulate and procure health products that contribute to patient safety and better quality of healthcare.

The strengthened political engagement has contributed to improved availability and affordability of some essential medicines, particularly for tuberculosis, HIV, and malaria. For example, in 2020, 76 percent of people living with HIV in Africa had access to antiretroviral drugs (ARVs). However, the overall availability of essential medicines in Africa remains low.¹ In particular, the availability of medicines for non-communicable disease medicines is only about 40 percent.

COVID-19 has exposed the extreme vulnerabilities of the global supply chain. African countries import between 70 and almost 100 percent of their medicines, vaccines, and other health products.² At the beginning of the pandemic, low-income countries were relegated to the back of the queue. Border closures and protective measures restricted exports, which led to a 40 percent increase in delays and disruptions.³ Prices of health products increased due to market inflation, leading to products being at least five times more expensive in volume than in Europe and North America. The variation in prices between countries adds to the complexity of the market: For example, the price of a cylinder of oxygen sufficient to treat an adult for a day varies from \$112 in Guinea to \$23 in Kenya.⁴ These prices are completely out of reach for most health facilities in Africa. In fact, in Nigeria, hospitals rank oxygen as one of the most expensive treatments.

The COVID-19 pandemic brought us back to reality, emphasizing the difficulties in maintaining a continuous supply of health products in Africa. However, to scale up local production, Africa will need to elevate regulatory standards, shape the market, and enhance the continent's negotiation capacity in the global pharmaceutical market. The African Medicines Agency is contributing to this agenda by providing a continental-wide harmonization of regulatory standards and processes; facilitating uptake of innovative technologies for emergency preparedness and response; coordinating joint safety monitoring and assessments of medical products especially complex molecules (e.g., vaccines and biotherapeutics); and providing advice on local pharma industry development in line with the Partnerships for African Vaccine Manufacturing (PAVM), the Pharmaceutical Manufacturing Plan for Africa (PMPA) in support of African Continental Free Trade Area (AfCFTA).

Strengthened political engagement has contributed to improved availability and affordability of some essential medicines, particularly for tuberculosis, HIV, and malaria.

¹ Mattke et al. "Improving Access to Medicines for Non-Communicable Diseases in the Developing World." RAND Corporation, 2011.

² World Health Organization. (forthcoming).

³ Ibid.

⁴ Ibid.

03

**AFRICAN WOMEN
AND GIRLS:
LEADING A
CONTINENT**

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The art of the pivot: African women as critical problem solvers in the 21st century

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The pivot is an art form that women leaders have perfected globally, making them critical problem solvers that are more responsive and effective during times of crisis.

While rebuilding a country previously engulfed in civil war for over 14 years, my administration oversaw, then, one of the deadliest health crises of the 21st century. I, Africa's first democratically elected woman president and Liberia's first elected president of the post-conflict period, had to pivot quickly in both attitude and action, as a means of responding to the Ebola outbreak of 2014. The outbreak posed a devastating threat to Liberia's people and to the gains we had made in recovery and development. Rather than falter, we leaned into the complex challenges the outbreak posed, crafting and embarking upon an approach that embraced the strategies called for by community health workers and ordinary people fighting to save their loved ones. During this period, we lost many lives but averted a national crisis and found an inclusive and sustainable path of hope. In most African countries, strengthening the national health structure requires investing in and prioritizing community health workers and systems. Local community health workers are crucial in times of crisis because of their proximity to those most impacted. Utilizing community leadership ensures communities feel empowered and share in the responsibility, creating genuinely inclusive and responsive approaches. Liberia's early success in addressing the COVID-19 pandemic relied on the same community health workers and leaders from the Ebola crisis. They were central in the dissemination of reliable information, coordination efforts across the country, building partnerships both internally and internationally, and leading their communities.

Women's leadership in Africa is not a new phenomenon. Throughout Africa's history, women were critical problem solvers, leading militaries during the precolonial period, as freedom fighters during independence movements, as transitional leaders during post-conflict periods, and as leaders during some of the worst economic, political, and health crises of the 21st century.¹ Moving forward, Africa must harness women's knowledge, skills, and talents at all levels of the problem-solving process, as a means of reclaiming the continent's future.

The pivot is an art form that women leaders have perfected globally, making them critical problem solvers that are more responsive and effective during times of crisis. In public leadership, effective pivoters engage in critical reflection and decisive decisionmaking as well as take on—simultaneously and seriously—a diversity of voices throughout the problem-solving process. Though pivoting requires a shift in direction or approach, the ultimate vision remains the same.

While shifting strategies during the COVID-19 pandemic, women leaders continued to prioritize lives and livelihoods.² Though not surprising to many of us in Africa, as my leadership journey highlights, women continue to be vital in crafting complex responses to complicated problems. Across the continent, women were/are at the frontlines as medical and health experts and community healthcare workers.

DESPITE THEIR LEADERSHIP, AFRICAN WOMEN REMAIN UNDERREPRESENTED IN OFFICIAL ROLES

Though women's leadership in certain countries has come under renewed focus, globally, women still only occupy 25.7 percent of the available parliamentary positions, 7.2 percent

1 Tripp, A. M. (2017). "Women and politics in Africa." Oxford Research Encyclopedia of African History.

2 UN Women. (2020). "COVID-19 and Women's Leadership: From an Effective Response to Building Back Better." UN Women. Policy Brief, 18.

African women's growing presence as public leaders is not confined to national institutions, and African women now hold leadership positions in the World Trade Organization, African Union, and United Nations, among others.

of head-of-state positions, 6.2 percent of head-of-government positions, and 21.3 percent of cabinet positions.³ In Africa, women occupy about 24 percent of parliamentary seats, significantly close to the global average. Unfortunately, only two subregions, Southern Africa and East Africa, largely account for Africa's high rates of women's representation, boasting 31 percent and 32.4 percent women's parliamentary representation, respectively.⁴ The other three subregions fall over 10 percentage points behind. In short, many African countries have come a long way, but the majority still fall far behind even the 1995 Beijing Platform for Action's diffident 30 percent and the African Union Agenda 2063 goal of 50 percent women's representation. (For more on enhancing women's participation in politics, please see the viewpoint on page 64.)

Notwithstanding the data, Africa is still a global leader in women's public leadership. Five African countries are in the top 20 nations for women's parliamentary representation, and, at 60 percent, Rwanda still leads the world in terms of women in parliament.⁵ Four African countries, each with over 45 percent women's representation in cabinets, are among the top 20 countries globally. Moreover, African women's growing presence as public leaders is not confined to national institutions, and African women now hold leadership positions in the World Trade Organization, African Union (AU), and United Nations, among others. More importantly, they directly contribute to and conduct regional and international efforts that address Africa's most pressing issues today: peace and security, gender justice, climate change, and technology and economic development.

PRESSING CONCERNS OF THE 21ST CENTURY

*** Peace and security**

Peace and security are of renewed importance in Africa, given the rise of militarism, extremism, assaults on democratic processes, and the global withdrawal from transnational cooperation and coordination. In fact, in 2021 alone, West Africa experienced three military coups. Importantly, history has shown us that often increased militarism leads to increased marginalization, particularly for women. Furthermore, the work of African women scholars has repeatedly called for us to conceive of security outside of simply borders and imagine the security of the individual.⁶ In this sense, we might raise essential questions about what security looks like for African women and how existing institutions can better involve the voices of women. Madame Bineta Diop, the African Union Special Envoy on Women, Peace, and Security (WPS) is working to raise and answer these questions. Under her leadership, the AU developed the Continental Results Framework for measuring and mapping the implementation of the WPS agenda.⁷ In addressing issues such as gender-based violence, economic insecurity, poverty, and education, we not only secure lives but can potentially better secure the state.

*** Gender justice**

Intrinsically tied to peace and security issues is *gender justice*. The language of gender justice activists in Africa is fundamental. They prioritize the development of a world where men and women are equals and strive to achieve a world that is also equitable. In a fair world, frameworks, resources, and laws are implemented and provided to ensure that women and girls have access to the necessary financial resources and tools that will close the gaps created by gender inequality and marginalization, directly transforming communities as a whole. The recent activism of Sudanese women in 2019 and 2020, which ushered in a new leadership, sheds light on the power of gender activism today in Africa.⁸ Their demands for reform extended far beyond equality, ensuring that the transitional government and constitution guaranteed 40 percent women's representation, expanded women's rights to travel alone, banned execution

3 UN Women. (2021). "Women in politics map: 2021." UN Women.

4 IPU Parline. (2021). "Global and regional averages of women in national parliaments." Inter-Parliamentary Union.

5 UN Women. (2021). "Women in politics map: 2021." UN Women.

6 AWDF. (2021). "Gender and Security in Africa: Primer 2 2016." African Women's Development Fund.

7 African Union. (2019). "Continental results framework for reporting and monitoring on the implementation of the Women, Peace and Security Agenda in Africa (2018 - 2028)." African Union.

8 Cooper, J. (2020). "Women lead in Sudan's clamour for good governance." African Renewal.

of children, and outlawed female genital cutting. Of course, we remain watchful as women have still not been afforded their rightful leadership places in Sudan. (For more on the efforts and success of this activism, see the viewpoint on page 54.)

* **Climate change**

Our ability to transform communities will depend on responding to one of the most pressing global issues: climate change. As some parts of Africa become hotter and drier, the agricultural sector and, in turn, economic livelihoods are directly affected. In Africa, agriculture, a climate-sensitive industry, provides for 70 percent of African livelihoods, 30 percent of the continent's GDP, 50 percent of the continent's export value, and 65 percent of the continent's labor force.⁹ African women account for a large share¹⁰ of the agricultural labor force, and they are far more likely to work in vulnerable employment, increasing their risk of livelihood insecurity.¹¹ To equitably address climate change, we must craft multi-stakeholder and multisectoral approaches that take women and girls' distinct vulnerabilities, capacities and leadership at the community and national levels seriously. We know that women lead the way in crafting equitable and sustainable solutions to climate change, transforming lives and livelihoods, increasing climate resistance, and improving overall well-being.¹² African women leaders are already taking the lead in responding to climate change. For instance, Mayor Yvonne Aki-Sawyer¹³ of Sierra Leone launched a three-year plan to develop Freetown that addresses environmental degradation, and Hindou Oumarou Ibrahim¹⁴ of Chad works to ensure that climate change adaptation plans include the voices of indigenous communities. (For Mayor Aki-Sawyer's viewpoint on urban policies for addressing the impacts of climate change, see page 81.)

* **Technology and economic growth**

Climate change's economic implications raise essential questions about how African countries might strengthen their economies in an age dominated by technology. By expanding access to digital technologies, African nations will empower the poor with access to information, job opportunities, and services that will improve their lives.¹⁵ With a growing youth population and an ever-expanding workforce, investments in technology and technological infrastructure lay the foundations for economic growth. Such investments and developments could improve access to inclusive financing, modernize the agricultural sector, and improve healthcare systems. Technology poses new opportunities and possibilities for women's inclusion and advancement. For example, in the agricultural sector, African women are utilizing technology and technological innovations to improve agricultural processes and, in turn, improve livelihoods.¹⁶ Women and girls cannot and should not be left behind. (See the viewpoint on page 56 for boosting opportunities for women and girls in STEM.)

It is not enough to recognize that African women and girls deserve rights by adopting new laws and frameworks; countries must ensure that these rights are a lived reality.

PIVOTING TOWARD THE FUTURE

To craft inclusive and equitable approaches to the issues raised, African women and girls must play a leading role. It is not enough to recognize that African women and girls deserve rights by adopting new laws and frameworks; countries must ensure that these rights are a lived reality. Economic, political, institutional, and social barriers persist throughout the continent, limiting women's abilities to reach high-level leadership positions.¹⁷ We might turn to countries like Rwanda, Uganda, and Senegal as examples of nations that have ensured their legal and political commitments to women's leadership and gender equality are reflected in practice.

9 Okonjo-Iweala, N. "Africa can play a leading role in the fight against climate change." Brookings Africa Growth Initiative. Chapter 4 of *Foresight Africa 2020*.

10 Palacios-Lopez A, Christiaensen L, Kilic T. (2017). "How much of the labor in African agriculture is provided by women?" *Food Policy*. 67:52-63.

11 AfDB. (2011). "Climate Change, Gender, and Development in Africa." African Development Bank. Vol. 1 Issue 1.

12 IUCN. (2015). "Gender and Climate Change." International Union for Conservation of Nature. Issues Brief.

13 UNEP. (2020). "Transforming Sierra Leone's Capital." United Nations Environmental Programme.

14 Lipton, G. "Hindou Oumarou Ibrahim urges more rights for indigenous people to benefit landscapes." *Landscape News*.

15 Ndung'u, N. and Signé, L. (2020). "The Fourth Industrial Revolution and digitization will transform Africa into a global powerhouse." Brookings Africa Growth Initiative." Chapter 5 of *Foresight Africa 2020*.

16 UN Women. (2016). "Technologies for Rural Women in Africa." UN Women. Policy Brief.

17 McKinsey. (2019). "The power of parity: Advancing women's equality in Africa." McKinsey Global Institute.

Given the existing barriers women experience and Africa's pressing critical priorities for ensuring sustainable development, I offer some advice on how we might collectively chart a future for Africa that includes Africa's most extraordinary pivoters for transformation: women.

✿ **Country leadership**

Country leadership must take proper legal action to ensure that gender equality and equity are a lived reality. They must also lead on building a social consensus that women's rights are essential to sustainable human development. Implementation of laws and legal frameworks must be built on both new attitudes and ending impunity for the violation of those rights.

✿ **Invest in women and girls**

Outside of ensuring legal protections and rights, we must invest in women and girls financially. When governments and international organizations provide targeted and sufficient funding, we ensure women and girls have access to quality education and training, feel economically empowered, and participate politically.

✿ **Political structure**

The political structure, expressly political parties, must open space for women in their organizations, ensuring that women have the platforms to access high-level appointed and competitive positions across national, regional, and international institutions.

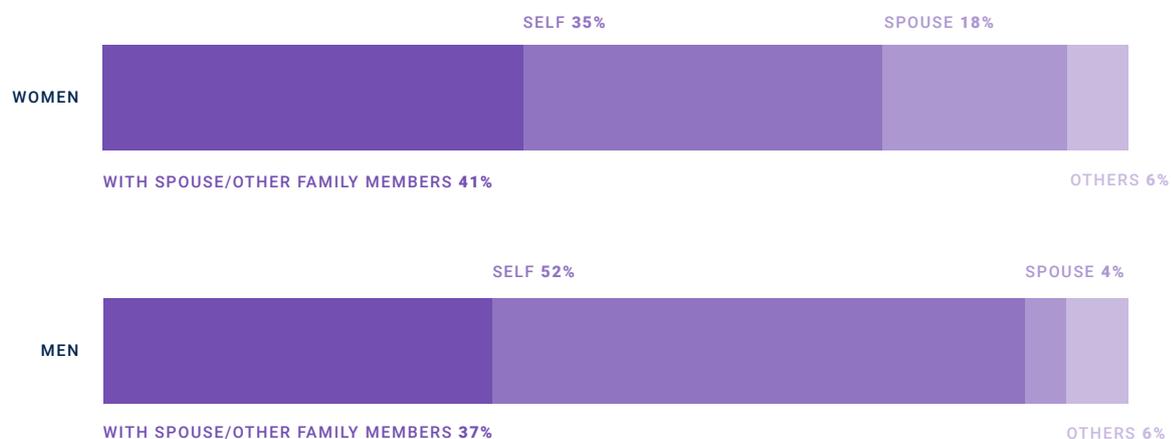
✿ **Women leaders must support other women**

Women leaders must support other women, making room for women when they can do so. As president of Liberia and as a leader at the United Nations Development Program, I appointed women to high-level positions, diversifying the organizational leadership structure within both institutions.

Tackling Africa's pressing issues and ensuring the continent's future success require engaging with and including women at all levels of leadership globally. Though there are many successes to celebrate, let us not allow this moment to pass without making concerted shifts in attitudes, policies, and implementation that harness African women's rich knowledge and experiences. This period calls for a collective **pivot** that ensures African nations succeed in the 21st century.

FIGURE 3.1. WHAT IS THE MAIN WAY THAT DECISIONS ARE MADE REGARDING FINANCIAL ASSETS?

Households across the world differ in how they manage their financial resources. Notably, an Afrobarometer survey found that men and women decide how to use money in consultation with each other and others at similar rates (41 percent with family and 6 percent with others). The major difference is that men report making more unilateral decisions.



NOTE: Respondents were asked: What is the main way that decisions are made about how to use any money that you have or earn, for example from a job, a business, selling things, or other activities?

SOURCE: "Gains and gaps: perceptions and experience of gender in Africa," Afrobarometer. 2019.

It is not yet Uhuru for the women of Uganda

WINNIE KIIZA

Former Leader of Opposition, Parliament of Uganda

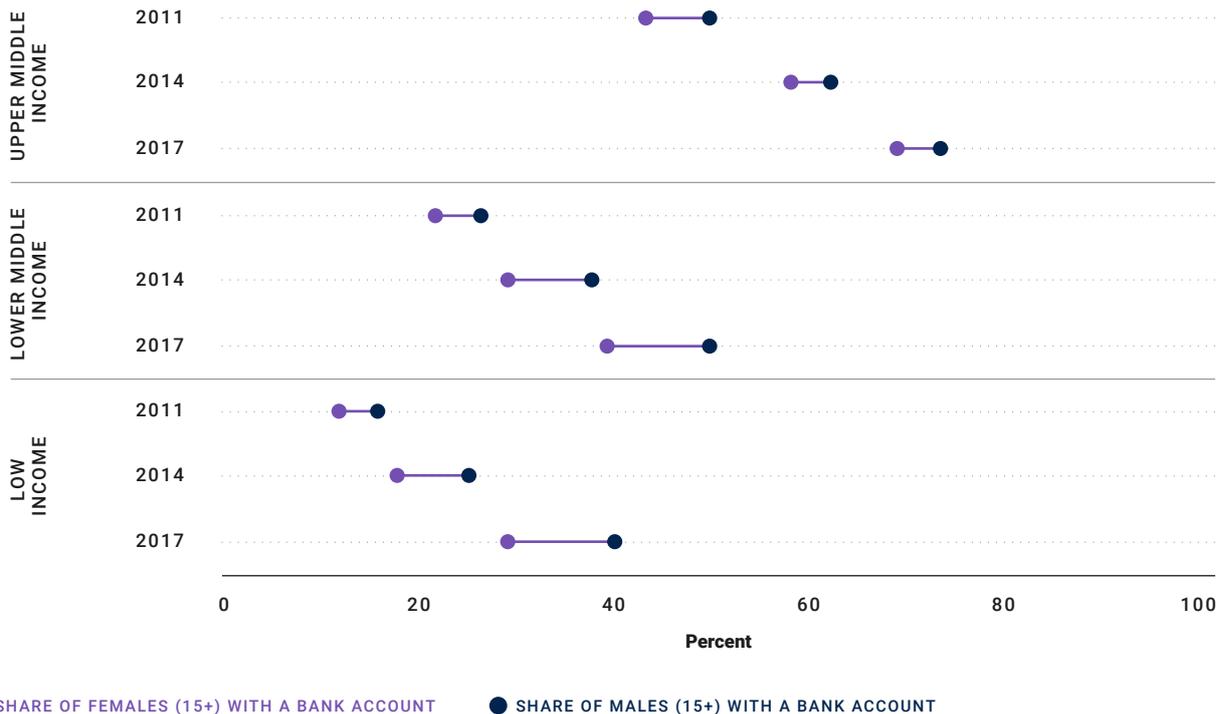
@WinnieKiiza

Women’s rights as human rights emerged as a global issue during the United Nations Decade for Women (1976-1985). Women across different geographic, cultural, religious, racial, and class backgrounds came together as part of a global movement and worked to improve the status of women. Over subsequent decades, women in different countries used various platforms to advocate for women’s recognition and rights.

In line with this movement, Uganda—with an approximate population of 45.74 million, 50.71 percent of whom are female—has, for over the past two decades, shown commitment towards achieving gender equality and women’s empowerment. The 1995 Constitution, on which all the country’s legislation is based, opposes laws and practices that violate women’s dignity. Importantly, its provisions aimed at protecting gender equality are based on international frameworks like The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)—a key international agreement on women’s human rights often described as an international bill of rights for women—and the Protocol to the African Charter on Human and People’s Rights on the Rights of Women in Africa (Maputo Protocol). CEDAW and the Maputo Protocol signal a successful

FIGURE 3.2. FEMALE BANK ACCOUNT OWNERSHIP IS GROWING, BUT SO IS THE GENDER GAP

Female bank account ownership is rising across sub-Saharan Africa. While the account ownership gap between men and women has been closing in upper-middle-income countries, the ownership gap in low- and lower-middle-income countries is widening.



SOURCE: "Global Findex Database 2017." World Bank Publications - Books, The World Bank Group, number 29510.

The COVID-19 pandemic has highlighted the government's inability to address women's rights in the "private" sphere.

mainstreaming of women's rights as human rights and impose the main obligation on member states to implement the frameworks.

Despite the positive steps that have been taken in Uganda to promote gender equality and women's empowerment, the position for women in Ugandan society is one of powerlessness influenced by a range of factors. These factors include cultural biases that unjustly stall women's career progression in public spaces, lack of qualifications and skills (given the already-marginalized position of women in education and training), and low self-confidence.

Furthermore, the COVID-19 pandemic has highlighted the government's inability to address women's rights in the "private" sphere (e.g., homes). Women and girls confined in their homes during COVID-19 lockdowns experienced increases in domestic violence, and about 90,000 girls under the age of 18 were reported pregnant in Uganda. Yet, private spheres are often thought to be beyond the purview of the State—exempt from governmental scrutiny and intervention. As a result, violence against women and girls that occur within families continue to remain hidden, where perpetrators of such human rights abuses typically enjoy impunity for their actions.

These biases and gaps impact women's ability to actively participate in public spaces and generate income and contribute to the economic growth as agents of development. It is not only women that feel the negative effects of failure to invest in women, their children's welfare and efforts to combat poverty and achieve economic growth are similarly affected. Therefore, the government—in an effort to make our communities inclusive, safe, resilient, and sustainable—should adequately invest in efforts to address these limitations and consider the following recommendations:

It is not only women that feel the negative effects of failure to invest in women, their children's welfare and efforts to combat poverty and achieve economic growth are similarly affected.

- * Fund grassroots organizations that build the capacity of women so they can participate, both individually and collectively, in social, economic, political, and public life.
- * Incorporate men and boys in trainings focused on supporting and promoting women and girls as leaders and decision makers.
- * Launch a hotline to provide free counselling and legal services for people experiencing gender-based violence.
- * Establish shelters for survivors of gender-based violence in all districts of Uganda and allocate sufficient resources to run the existing ones.
- * Prioritize awareness programs on how to ensure women and girls are safe at home and know where they can turn for help in their communities.
- * Develop gender-responsive education sector contingency plans and budgets, grounded in gender analyses of roles, risks, responsibilities, and social norms. These must consider mitigating care giving burdens, heightened risks of gender-based violence, and early pregnancy.

The women of Sudan will not accept setbacks

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Since the 2019 Sudanese Revolution that ousted the dictator Omar al-Bashir, the momentous role that women played in shaping the historic event has attracted considerable international attention. These women, who came to be known as “Kandakat” after powerful Nubian queens, have achieved critical acclaim. Their protests in front of the Army Central Command were extraordinary in the face of the systematic 30 years of suppression of their human rights. The Public Order Law that al-Bashir passed in 1996 was not only detrimental to ethnic minorities, but also to women who became ultimate targets of gender-based violence, public flogging, imprisonment, harassment, and confiscation of the property of those who toiled to eke out a living in the market. Although what the world has found to be an astonishing feat—Sudanese women’s role in the revolution—it is by no means new in the world of women’s rights activism. Their revolutionary zeal has, indeed, a long gestation period deeply steeped in history.

When the first Sudanese woman to be admitted in Kitchener Medical School, the formidable Khalda Zahir Soror Al-Sadat, and her schoolteacher friend, Fatima Talib, got together one afternoon in Omdurman, they felt it important to reach out to others in their neighborhood to establish a Sudanese woman’s union to agitate for the rights of women under British colonialism (1898-1956). Their idea gathered momentum as evidenced in an impressive gathering at the home of their compatriot Aziza Makki Osman Azraq. The effort came to fruition in 1952 with the founding of the Sudanese Women’s Union. Far from being an elitist, urban-based effort, the Union succeeded in including women of all regional, religious, ethnic, and socioeconomic backgrounds throughout the country. Along with significant milestones achieved since then such as the adoption of equal pay for equal work in 1953, the Union focused on a plethora of discriminatory practices often rationalized as revered traditions. They ended “Obedience Laws,” which forced a woman to return to her abusive partner and relinquish every right or entitlement due to her as a human being. These monumental struggles, however, were not without adversaries who mounted unjustified criticisms of the Union as foreign innovations that had no roots in Sudanese customs and traditions.

Despite the extraordinary struggle of Sudanese women and their unyielding search for gender justice, the challenges endure, the most prominent being the climate of impunity in the country.

Notwithstanding, the women of the Union ventured forth with prodigious efforts that mitigated some of the most inequitable acts meted at women in their flagship magazine *Sawt Al-Marr’a* (the Woman’s Voice). These women soon recognized that they were on the cusp of challenging oppression by locating allies and opinion leaders who could shatter the myths about their effort’s foreign roots. Indeed, one of the most critical accomplishments of the Union was its success in forging powerful alliances and solidarities across local, national, and international frontiers. At home, they organized workshops and community gatherings to further women’s agency in changing their own lives. Such a task warranted a conscious confrontation of prevailing gender ideologies that women accepted as dogma and deployed to their own detriment. Through extensive discussions with men and women, they took up cultural practices head-on and uncovered the political and legal contexts within which they operated. Despite the insurmountable obstacles imposed on the organization by military dictatorships, it managed to leave its mark on the Sudanese political landscape as it continues to do today to localize human rights principles in the Sudanese context underground. In this important historical context of gender activism in the country, it is not surprising to witness the extraordinary courage and fortitude of Sudanese women in protesting military rule. They resisted the systemic racism, classism, and sexism that engulfed the country from North to South, West to East. Nowhere has the impact of the prevailing political ideologies been so damaging than the tearing apart of the country and its entrapment in civil war and communal strife. Following independence, the political violence in South Sudan since 1955 culminated in

the region's secession in 2011. In 2003, Darfur witnessed atrocities that many observers described as genocide. These killing fields left the communities displaced, disseminated, and dead. In 2004, the International Commission of Inquiry confirmed the massive violations of International Human Rights and Humanitarian Law in Darfur. Although these conflicts have been devastating to the country at large, they have been particularly shattering for women and girls' lives. Gender-based violence and crimes against humanity—as evidenced by rape, as well as the destruction of property and lives—continued with impunity.

The Sudanese women's revolutionary fervor has, therefore, a long history. Gender-based violence and curtailment of women's mobility have inflamed women's desire for resistance and change. The most recent example is when General Abdel-Fatah Al-Burhan, the commander-in-chief and president of the Sovereign Council of the transitional government of Sudan, decided to oust the civilian government in October 25, 2021. Sudanese women from all socioeconomic backgrounds rose again. They joined rallies and civil disobedience organized by their local resistance committees and the Union of Sudanese Professionals. Time was of the essence when they jumped into action once more, propelled by the insidious military oppression that loomed threateningly over their lives. They rejected the coup d'état that represented a dangerous setback and would have exacerbated their suffering.

Despite the extraordinary struggle of Sudanese women and their unyielding search for gender justice, the challenges endure, the most prominent being the climate of impunity in the country. None of the perpetrators of political violence in the South or in Darfur have been held accountable. Not only were these perpetrators not held to account for waging war crimes and crimes against humanity, but they continue to do so as authority figures in the current regime. In the North, the families of the disappeared and summarily executed implored Prime Minister Abdulla Hamdok to intercede in the effort to locate the graves of their sons, fathers, and brothers. So far, these demands have been met with silence.

Despite these challenges to their struggle for gender equality and justice, the determination of Sudanese women to bring about a measure of fairness remains unshakeable. The continued participation of Sudanese women in the unfinished revolution is a major resource for hope. Today, their protests in the country are accompanied by others. Sudanese migrants and refugees all over the world joined in solidarity, and in so doing kept the plight of Sudanese people on the radar as a complex emergency that warrants immediate attention. The strong civil society associations in the country will benefit from systematic media coverage exposing the scale of violence in the country and supporting their plea for democracy and respect for human rights. International women's organizations also have an important role to play in strengthening the role of their local counterparts in Sudan. The quest for gender justice in the country will only succeed if women see justice being served.

Despite these challenges to their struggle for gender equality and justice, the determination of Sudanese women to bring about a measure of fairness remains unshakeable.

Making the future of African STEM female

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Without a huge investment in science, technology, engineering, and mathematics (STEM) education, Africa will not achieve the goals the African Union has laid out in her 2063 agenda. Indeed, given the complexity facing the developing world, economic growth, and improvements in the standard of living there will continue to rely on innovations and technological breakthroughs.

Moreover, such revolutions can only happen for Africa if there is active participation in STEM at all levels of education—especially for girls. Despite the fact that women comprise half the population, they are grossly underrepresented in STEM careers.¹ In sub-Saharan Africa, between a mere 18 to 31 percent of science researchers are women, compared to 49 percent in Southeast Europe and in the Caribbean; 44 percent in Central Asia and Latin America; and 37 percent in the Arab States.² In Nigeria specifically, women represent between 17 and 20 percent of science researchers. Notably, at the primary school-level, girls perform as well as or even better than boys globally according to the reports of PISA and TIMSS on mathematics and science performance; however, between only 3 and 7 percent of girls who attend higher education actually study STEM-related courses when they get there. More specifically, 3 percent of girls in higher education are enrolled in ICT, compared to 8 percent of boys. Similarly, 7 percent of girls enroll in engineering and construction courses compared with 22 percent of boys who enrolled for the same fields of study.³

WHY IS FEMALE PARTICIPATION IN STEM IMPORTANT?

Getting girls and women into STEM is not only a matter of human rights but also makes economic sense.⁴ Adopting diversity and gender inclusion in STEM is critical for increasing creativity, innovation, gender-sensitive perspective for products, and productivity, considering that women make up half of the world's population.⁵

Unfortunately, the COVID-19 pandemic has not only hindered overall STEM education, but particularly exacerbated the already-wide gender gap in those subjects. The switch to digital platforms hindered learning for those without access to such tools given the region's digital divide. Teachers also struggled with the use of technology for online lesson delivery, and often ended up just replicating their physical classrooms on online platforms. The impact on STEM education has been colossal given the loss of the requisite hands-on activities in such subjects. This is because for girls, the traditional mode of learning—without authentic learning experiences demystifying STEM concepts—has neither been effective nor motivating.⁶

1 "A lack of good education in STEM subjects is holding back African growth and depriving its youth of career opportunities." ACCA, 2018.

2 "One in three researchers is a woman." The United Nations Educational, Scientific and Cultural Organization, 2021.

3 "The Equality Equation: Advancing the Participation of Women and Girls in STEM." World Bank, 2020.

4 "Voice and Agency: Empowering women and girls for shared prosperity." World Bank, 2014.

5 "The Importance of Women in the Tech Industry." DeVry University, 2021.

6 Brodie, Karin. "Equipping Teachers for Inclusive Science Technology Engineering and Mathematics Methodologies for Sustainable Development." Gylg Foundation, 2019.

MORE GIRLS AND WOMEN INTO STEM! HOW?

Research has already identified specific strategies and tools for boosting girl child involvement in STEM. Such policies include:

- **Use role models.**

Girls between the ages of 8 and 16 learn better in a collaborative and non-competitive way.⁷ They can be inspired by connecting with female role models in STEM careers who can serve as both mentors and examples of success stories. Girls in 8th and 9th grade who are discovering their career interests and are at the very beginning of their career paths are influenced by role models who served as catalysts for young girls. Indeed, research shows that a role model approach can encourage and help young girls and women to excel in science.⁸

- **Create learning resources that portray the girl child in STEM, among others.**

Currently, most textbooks present a biased curriculum with content showcasing more male scientists, and only showing girls in non-STEM careers such as secretaries or only as nurses in the medical field. More demonstrated representation of women in STEM-related careers allows and encourages girls to envision themselves in such roles.^{9,10}

- **Encourage interest in STEM early in education.**

Early intervention is key to closing the gender gap in STEM as boys are encouraged very early to pursue careers in STEM while girls are not.¹¹ This problem is not unique to Africa. In addition, most current strategies for increasing STEM participation focus on

FIGURE 3.3. WOMEN IN AFRICA ARE INCREASINGLY REPRESENTED ON CORPORATE BOARDS

While corporate boards in Africa continue to add more women, representation remains below the world average.

WOMEN'S REPRESENTATION ON BOARDS IN SUB-SAHARAN AFRICA (2018)

24.3%

AFRICAN COMPANY BOARD SEATS
HELD BY WOMEN

24.5%

AFRICAN COMPANY BOARD CHAIRS
HELD BY WOMEN

27.0%

OF CORPORATE BOARD MEMBERS
WORLDWIDE ARE WOMEN

TOP INDUSTRIES WITH THE HIGHEST PERCENTAGE OF WOMEN ON BOARDS IN SUB-SAHARAN AFRICA (2018)



25.2%

ENERGY AND RESOURCES



24.5%

FINANCIAL SERVICES



24.3%

CONSUMER BUSINESS

NOTE: Data for sub-Saharan Africa includes 132 companies in Kenya, Nigeria, and South Africa.

SOURCE: Deloitte. "Data-driven change: Women in the boardroom – A global perspective." Sixth edition, 2018.

7 Ekine et al. "Improving Learning Opportunities and Outcomes for Girls in Africa." The Brookings Institution, 2013.

8 "Women in Science: Voices from Africa." The Network of African Science Academies, 2017.

9 Makarova et al. "The Gender Gap in STEM Fields: The Impact of the Gender Stereotype of Math and Science on Secondary Students' Career Aspirations." Frontiers in Education, vol. 4, no. 60, 2019.

10 Berwick, Carly. "Keeping Girls in STEM: 3 Barriers, 3 Solutions." Edutopia, George Lucas Educational Foundation, 2019.

11 "A Guide to Engaging Girls in Early STEM Learning." Winnie, 2021.

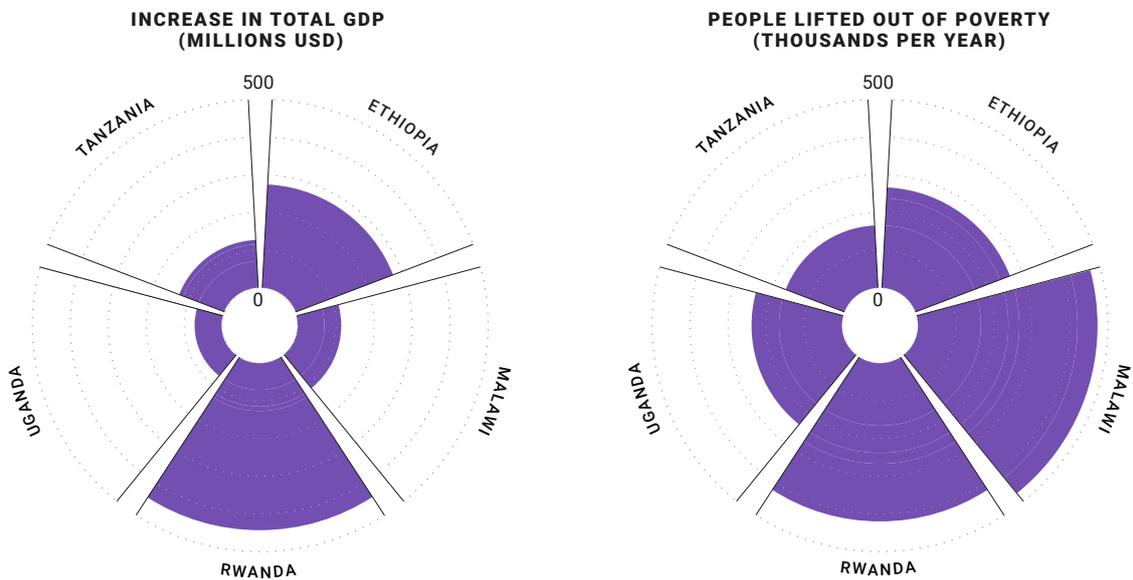
The STEM pipeline for girls is leaky, so efforts should be placed on the formative years where habits and traits are formed early so that girls can have a solid foundation in STEM.

higher education when girls are already lagging behind in this field or not represented at all. As girls progress through the school system, their numbers in STEM classes fall. In other words, the STEM pipeline for girls is leaky,¹² so efforts should be placed on the formative years where habits and traits are formed early so that girls can have a solid foundation in STEM.¹³

- ✱ **Ensure equal access to basic education.**
 Girls can only learn when they are in school. However, no country in Africa has achieved gender parity in both primary and secondary schools.¹⁴ Moreover, not only should girls have access to basic education, they must be able to access digital literacy—meaning the government must bridge the digital divide early in their education, during primary school. Moreover, the pandemic further magnified the digital divide that already existed. In fact, it actually enhanced stereotypes as more boys had access to technologies and girls were made to do more house chores during this time. Providing digital devices for every girl child should be a top priority for governments in the wake of COVID-19 and in case of future, similar epidemics.¹⁵
- ✱ **Better equip teachers.**
 African policymakers must prioritize building the capacity of teachers and STEM teachers in particular. They need to be intentionally equipped with strategies that encourage collaboration rather than competition, peer teaching, hands-on activities, mentoring by role models—whether online or in person.¹⁶ More specifically, teachers

FIGURE 3.4. THE CASCADING EFFECTS OF CLOSING THE GENDER GAP IN AGRICULTURE

The United Nations Entity for Gender Equality and the Empowerment of Women estimates that closing the gender gap in agriculture—i.e., providing women with the same access to productive resources as men—not only can contribute to increased agricultural production and food security for families, but economic growth and poverty reduction overall.



SOURCE: "The Cost of the Gender Gap in Agricultural Productivity," United Nations Women, World Bank, United Nations Development Program, and United Nations Development Program, Poverty Environment Initiative, 2018.

12 Dubois-Shaik, Farah and Fusulier, Bernard. "Academic Careers and Gender Inequality: Leaky Pipeline and Interrelated Phenomena in Seven European Countries." European Institute for Gender Equality, 2015.
 13 Ekine et al. "Improving Learning Opportunities and Outcomes for Girls in Africa." The Brookings Institution, 2013.
 14 "No country in sub-Saharan Africa has achieved gender parity in both primary and secondary education." The United Nations Educational, Scientific and Cultural Organization, 2015.
 15 Mlambo-Ngcuka, Phumzile and Albrechtsen, Anne-Birgitte. "Opinion: We cannot allow COVID-19 to reinforce the digital gender divide." Devex, 2020.
 16 "Factors which Contribute to or Inhibit Women in Science, Technology, Engineering, and Mathematics in Africa." The African Academy of Sciences, 2020.

need to be trained in using tools like learning packages, simulations, games, and storytelling to more effectively engage learners.¹⁷ These curriculum resources, including textbooks, should come with content that showcase females in various fields.

✱ **Support a shift in classroom dynamics.**

Finally, STEM education reforms should include a shift in classroom dynamics so that teachers can be gender responsive and gender sensitive.¹⁸ At the moment, teachers are too often prone to encourage boys more than girls in science classes and assign less-taxing roles to girls that are more domestic in nature, thus encouraging gender stereotypes.¹⁹

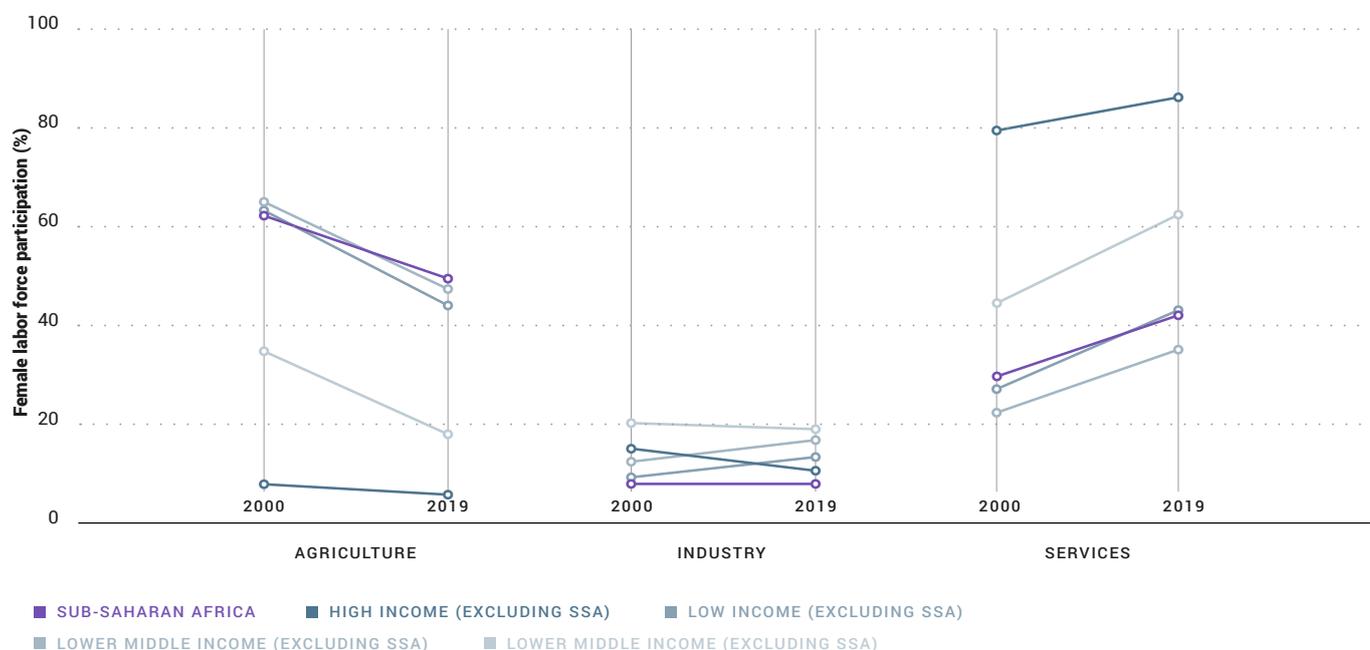
Innovative young thinkers and entrepreneurs emerging from Africa are not only changing the continent, but the world—but not nearly enough of them are women.

CONCLUSION

Innovative young thinkers and entrepreneurs emerging from Africa are not only changing the continent, but the world—but not nearly enough of them are women. Given the increased demand for STEM knowledge in a post-COVID world and education losses caused by the pandemic, support for girls in STEM education has never been more pressing. Indeed, the demographic makeup of girls and women in Africa must be intentionally harnessed to position Africa as the technology hub for the future.²⁰

FIGURE 3.5. FEMALE LABOR FORCE PARTICIPATION BY SECTOR DIFFERS MARKEDLY BETWEEN SUB-SAHARAN AFRICA AND THE REST OF THE WORLD

Women’s participation in the labor force looks very different in sub-Saharan Africa compared to the rest of the world more broadly. Although African women’s participation in industry and services has increased since 2010, they are still most often employed in the agricultural sector. In fact, in 2019, about female half of all workers in sub-Saharan Africa were still employed in agriculture.



SOURCE: World Bank. World Development Indicators. Labor force participation rate, female. 2021.

17 Kuchment, Anna. "To Attract More Girls to STEM, Bring More Storytelling to Science." Scientific American, 2013.
 18 "Training Tools for Curriculum Development: A Resource Pack for Gender-Responsive Stem Education." International Bureau of Education - United Nations Educational, Scientific and Cultural Organization, 2017.
 19 Ekine, Adefunke. "More Girls in STEM Means Improving STEM Teacher Training." Stanford Social Innovation Review, 2017.
 20 "STEM Education in Africa—the Past, Present, and Future." STEMpedia, 2019.

Strategies for advancing African women in academia

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Female students are more likely to enroll in graduate studies when they encounter successful women role models.

Despite the progress women in Africa have made in the professional sphere, they remain underrepresented in strategic and essential positions. In fact, in academia, the representation of women can be likened to a pyramid where very few women exist at the top and in key leadership positions, especially in Africa. Moreover, only six out of the 26 higher education institutions in South Africa—a country that houses many of Africa's top universities—are led by women. In Ghana, only 8 percent of professors from public universities are women.¹ More broadly, across sub-Saharan Africa, women constitute only 24 percent of academic staff and 2.5 percent of vice chancellors.² The African Evidence Research Database also indicates that, out of 2,510 African-led studies surveyed by the database, only 32 percent are led by women.³

Although institutional efforts to increase the representation of women in academia are increasing across the region, they tend to focus on increasing female enrollment in undergraduate studies rather than the hiring and retention of women in senior leadership positions. Obstacles such as structural barriers, traditional beliefs and norms, societal expectations, gender stereotypes, and the patriarchal nature of many African academic institutions make it challenging to make any significant progress. Moreover, the lack of female role models and mentors to guide young talented women through their academic careers exacerbates the gender gap: Female students are more likely to enroll in graduate studies when they encounter successful women role models.

In addition, the few existing women pushing academic frontiers through their research and leadership in Africa are held to higher standards, constantly scrutinized, barely recognized, receive lower pay and poorer evaluations, and are recommended less than their male counterparts. They are also excluded from the gendered informal decision-making process, which usually occurs through informal networks. The demanding role of women in the caregiving economy and in childrearing, coupled with excessive administrative burdens, further delays career progression. Female faculty and students also face sexual harassment, or, at the very least, are too often judged by their physical appearance rather than their intellectual capabilities, which further dissuades them from staying in academia.

African universities must first commit, develop, popularize, and be intentional about institutional inclusive gender policies such as affirmative action, adaptable work environments accommodating childcare, and sexual harassment policies to advance female representation to break the glass ceiling. This strategy requires a well-articulated mechanism to track, monitor, and evaluate the implementation process. In addition, academic institutions should implement gender sensitization initiatives, which are vital in reducing tensions between female and male colleagues.

Policies to make the environment safer and more open to opportunities must start even before young, academically minded women enter the labor market. Since the minimum requirement for most senior academic positions is a Ph.D., leaders must consider strategies to first increase the quantity and quality of women in post-graduate studies in Africa. Initiatives such as funding and research collaboration opportunities, institutional

1 "Demographics of African Faculty: A Pioneering Pilot in Ghana." Education Sub Saharan Africa, 2018.

2 "Women Leading." Education Sub Saharan Africa, 2020.

3 "African Education Research Database." Education Sub Saharan Africa, 2021.

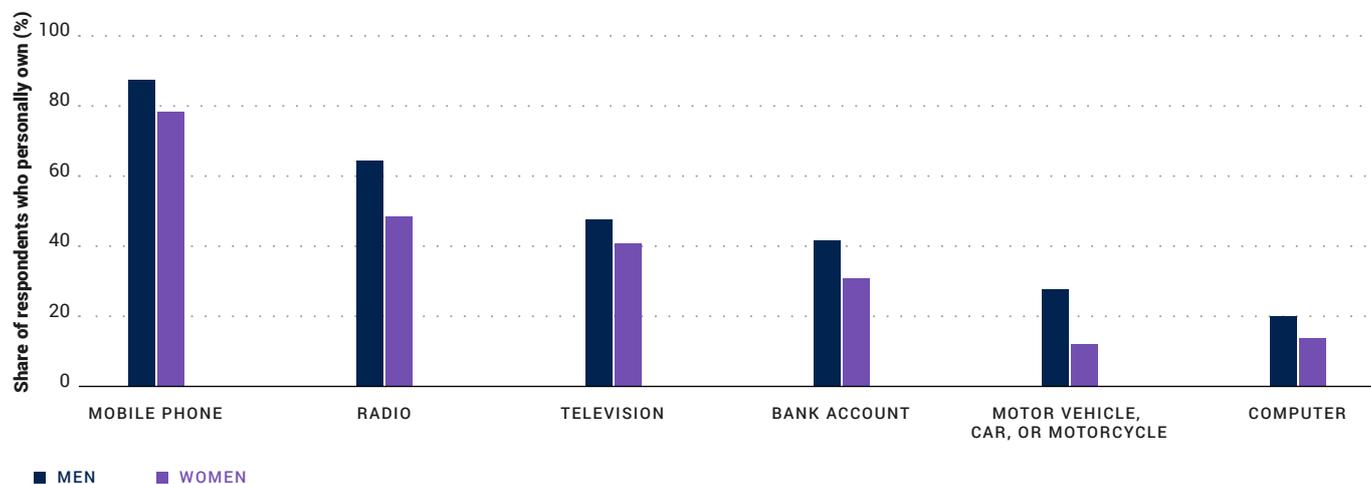
Policies to make the environment safer and more open to opportunities must start even before young, academically minded women enter the labor market.

capacity to run doctoral programs, and efficient supervisory processes are crucial to executing this strategy.

Given that representation matters, mentorship programs tailored for junior academic ranks and led by senior female faculty offer a tremendous motivational tool in the quest to attract more women. In addition, identifying and building alliances with both women and men who are passionate about the advancement of women is another way to avoid isolation and combat hostility. Finally, women should be offered equal pay as men, including all fringe benefits, to prevent them from pursuing better-paying jobs outside of academia. While implementing these strategies, university leaderships should facilitate the documentation and collection of gender-disaggregated data to help assess progress.

FIGURE 3.6. THE GENDER GAP IN ASSET OWNERSHIP PERSISTS

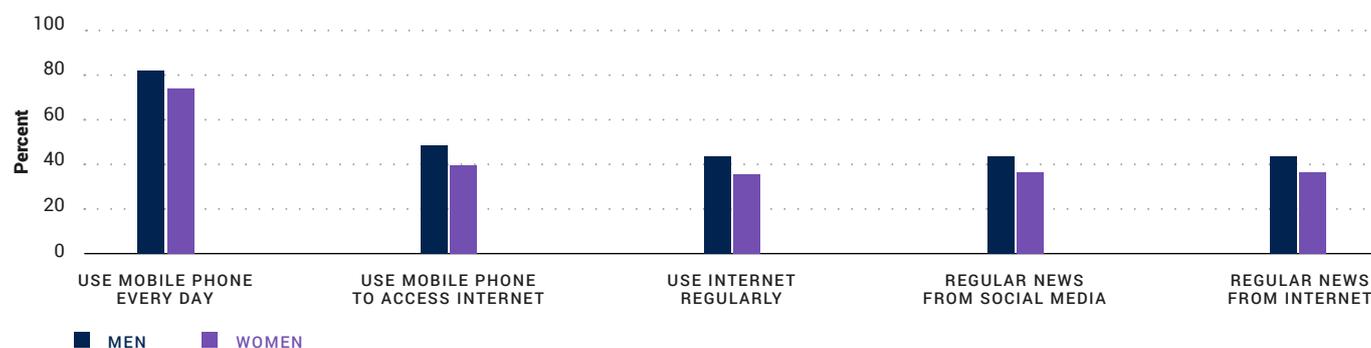
As Africa looks to rebuild after the COVID-19 pandemic, it is important to include women in its plan to boost economic growth. While studies show that asset ownership plays an important role in the economic empowerment of women, research shows they are still being left behind.



NOTE: Respondents were asked: Which of these things do you personally own?
SOURCE: "Gains and gaps: perceptions and experience of gender in Africa," Afrobarometer. 2019.

FIGURE 3.7. MEN IN AFRICA REPORT USING CERTAIN TECHNOLOGIES AT PERCENTAGES HIGHER THAN WOMEN

As technology becomes a more integrated part in the everyday lives of individuals, access to such tools is important for enabling men and women to harness the same opportunities.



NOTE: Respondents were asked: How often do you use a mobile phone? How often do you use a mobile phone to access the internet? How often do you access the internet? How often do you get news from social media? From the internet? The figure shows the share of respondents that answered "a few times a week" or "every day."
SOURCE: "Gains and gaps: perceptions and experience of gender in Africa," Afrobarometer. 2019.

Women and e-commerce in Africa: The \$15 billion opportunity

ALEXA ROSCOE

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[@AlexaRoscoe](#)

Given that Africa's internet economy could reach \$180 billion by 2025 alone, we at International Finance Corporation (IFC) were keen to examine whether e-commerce platforms support women entrepreneurs, or whether such tools remain stymied by women's low access to the internet, mobile phone, and other fundamental tools of the digital economy. Combining vendor surveys and performance data from one of Africa's largest e-commerce platforms, Jumia, we produced the first regional view into women's challenges and successes in e-commerce and found that closing gender gaps in this arena could add nearly \$15 billion to the value of Africa's e-commerce industry between 2025-2030 alone—putting billions in the hands of women entrepreneurs.¹

ANNE NJAMBI KABUGI

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WOMEN ARE ACTIVE PARTICIPANTS IN E-COMMERCE

Women own between one-third (in Côte d'Ivoire) and just over half (in Kenya and Nigeria) of companies on Jumia. Encouragingly, there are signs e-commerce is supporting women in overcoming gender barriers: For instance, such platforms offer an entry point for women in new and larger markets or high-profit, male-dominated sectors like electronics. Notably, however, the COVID-19 pandemic reversed or stunted many of these early successes: Women's sales fell by 7 percent;² over the same period, men's rose by an equal amount.

ENSURING THE DIGITAL ECONOMY IS AN INCLUSIVE ECONOMY

Both the private and the public sector can ensure women grow and thrive in Africa's still nascent e-commerce industry. Key opportunities for action include:

- * **Targeting women with fintech**

Just 7 percent of women-owned businesses³ received a loan through the Jumia platform upon startup. Fintech platforms should target women who are already less likely to have access to finance elsewhere, but who could use sales history on platforms to provide proof of income.

- * **Recruiting from social commerce**

Women vendors are more likely than men to use social commerce tools like WhatsApp—and this is where many women get their start selling online. Supporting women's transition to a platform with increased support can help them grow and formalize their business.

- * **Training, training, training**

Women are less likely than men to use advertising and other paid features that allow them to stand out in a crowded market. But they also value training more—even when their self-reported skills match or exceed men's. Platforms can recruit women by offering training on entrepreneurship and digital skills.

Disruptive technologies too often reinforce, rather than reduce, inequalities. However, prior to COVID-19, women were beginning to thrive online. Action now can reverse the pandemic's impacts and ensure that women entrepreneurs can lead the future of Africa's digital economy.

Prior to COVID-19, women were beginning to thrive online. Action now can reverse the pandemic's impacts and ensure that women entrepreneurs can lead the future of Africa's digital economy.

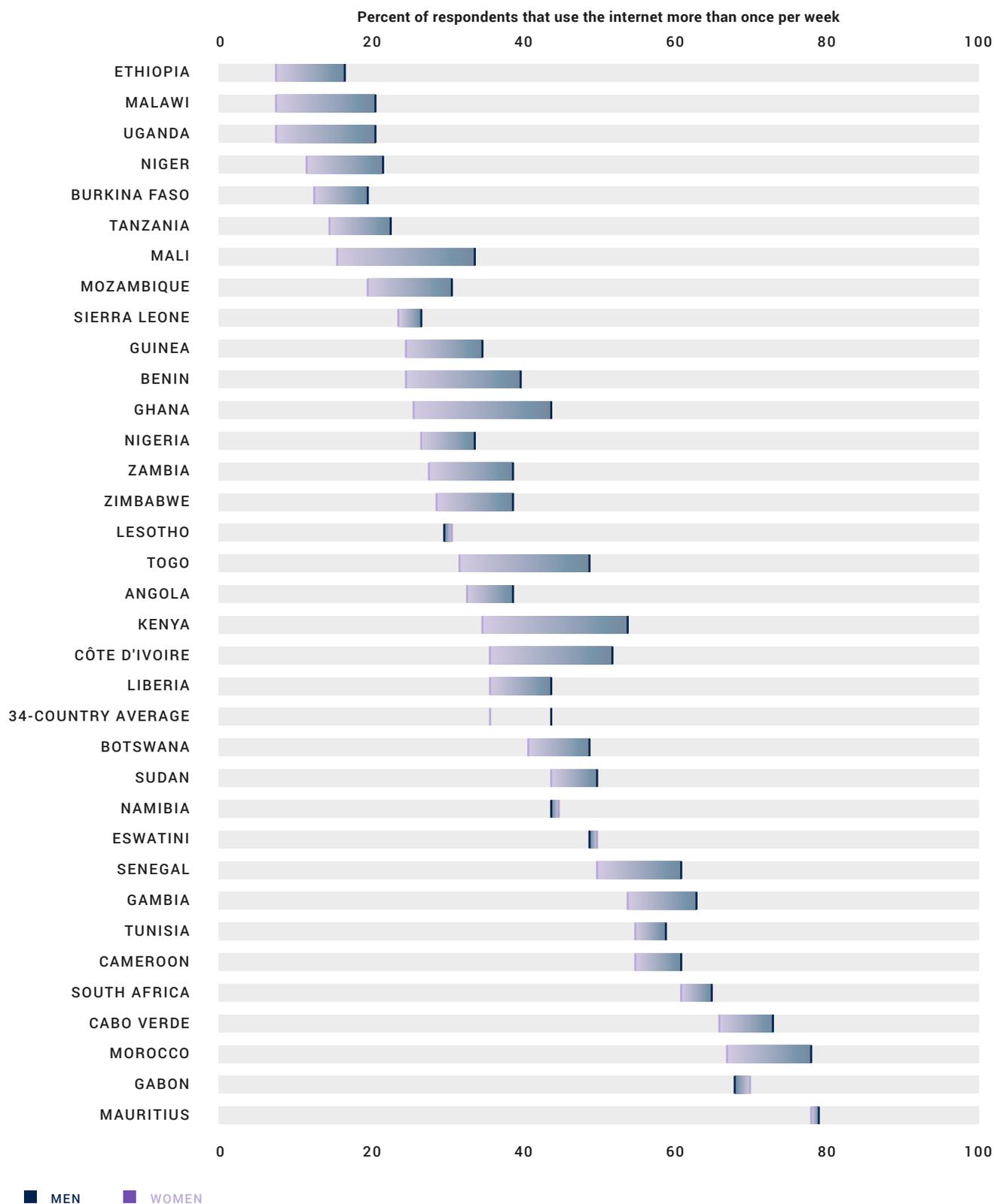
¹ "Women and e-commerce in Africa." International Finance Corporation, 2021.

² Ibid.

³ Ibid.

FIGURE 3.8. HOW OFTEN DO YOU USE THE INTERNET?

While there is an average 8 percentage-point gap in regular internet use between genders, women in some countries (e.g., Gabon and Namibia) report using the internet more regularly than men.



NOTE: Respondents were asked: How often do you use the Internet?

SOURCE: "Gains and gaps: perceptions and experience of gender in Africa," Afrobarometer. 2019.

Priorities for advancing women's equal political leadership in the coming year

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Women's equal participation in government is central to democracy and achieving sustainable development and egalitarian societies. While the struggle to redress the marginalization of women in leadership positions show a measure of success, this progress has been slow and uneven since 1995. Gender disparity persists in access to political leadership across local governments, national parliaments, and executive institutions of power—despite and in violation of an array of global, regional, and national laws that invest women with rights to equal political participation and representation as citizens. Women also face significant disparities within political parties, who serve as the gatekeepers to women's political access and competitiveness. For example, in Africa, 24 percent of national parliamentarians¹ and 21 percent of local government leaders are women. The continent also ranks far below the global average of 20 percent for women ministers in national cabinet positions.

Arguments for women's equal leadership participation in politics have highlighted its intrinsic value and instrumental justifications. Its fundamental goal—articulated within claims of democratic justice, equity and human rights—is expressed in the multiple international agreements, regional frameworks, and national laws driven by women's movements and feminists' mobilizations. The instrumental rationale centers on arguments of the policy-responsiveness of political representatives towards those they represent. Specifically, it supports the expectations that women's presence in political leadership will lead to inclusive decisions that reflect the needs and interests of a broader population, including women and girls. In effect, women's political leadership results in optimal governance outcomes for most of society.

While there is no shortage of intelligent, ambitious, and capable African women potential leaders, multiple obstacles hinder women's leadership aspirations and candidacy. These barriers are determined by contextual factors that combine formal and informal rules, institutions and other structural elements in unique ways to limit women's access to power as they shape opportunities and incentives for actors and actions.

Although unwritten, informal rules string together expectations from culture, religion, and social structures to exert powerful constraints on women's political agency alongside formal institutions. These structural and cultural barriers, including those of tradition, impose significant limitations on women's access to resources, and place high demands on their time as gender roles increase their responsibility of care in the home, thus creating vast resource and time deficits that benefit men and curtail opportunities of entry and electoral victory for women.

Women's equal participation is also impeded by conscious and unconscious biases, discriminatory attitudes and norms, and mobility limitations due to threats of (political) violence that continue to pose obstacles to meaningful leadership participation of women within state institutions.

Records of previous and ongoing interventions provide evidence of numerous effective strategies for advancing women's political participation across the region. Thus, I suggest four key policy areas decisionmakers might prioritize for promoting gender equality in political leadership, particularly in the coming year.

1 IPU Parline. (2021). "Global and regional averages of women in national parliaments." Inter-Parliamentary Union.

While there is no shortage of intelligent, ambitious, and capable African women potential leaders, multiple obstacles hinder women's leadership aspirations and candidacy.

Promoting a conducive and gender-inclusive society constitutes an important variable in the tension between positive changes in women's leadership participation and persistent sexist attitudes.

The starting point must be the transformation of formal, political institutions through constitutional amendments, legal reforms, and targeted affirmative action programs, including but not limited to legislated sex quotas, reservations, and party mandates when combined with adequate safeguards. Political parties must be key targets for transformation as they are central to women's political access and competitiveness. Their provision, or not, of a fair playing ground directly impacts women's access to appointed and elected positions in government.

Second, capacity-building interventions for women political leaders within established women parliamentary caucuses provide women leaders with skills and knowledge for effectiveness and success. Meaningful (substantive) representation from women leaders, or the perception thereof, reinforces role-modeling effects and meets voters' demand for performance accountability, which increases public's positive attitude and support for women's political leadership. Training should focus on key actors—gatekeepers and influencers, leadership models and networks, and understanding strategic influence and effective forms of social action for change.

Third, interventions towards promoting social mobilization and collective action contributes to changes in the nature of the state and expands space for women's inclusion. While these changes can be progressive, they could also advance a conservative agenda like religious and ethnicity-based civil society mobilizations. Policy entrepreneurs and implementers should be vigilant, therefore, in ensuring that, when mobilized, these coalitions and movements are not hijacked and used to promote myriad agendas that mask closet anti-gender propositions, including traditional notions of women's subjecthood that limits their opportunities for political leadership.

Finally, promoting a conducive and gender-inclusive society constitutes an important variable in the tension between positive changes in women's leadership participation and persistent sexist attitudes. Gender norms and behaviors have shaped women's experience in running for and holding political offices. For those women who are elected, norms also shape their leadership experience, including how they are perceived and treated by the public and by fellow political actors. Inequalities emanating from social discrimination are reflected in informal rules, which require more deep-seated structural reconfiguration. Interventions that aim to correct these norms can become catalysts for change. In the long term, exposure to female leadership can also alter social norms. While norms and social attitudes change in modest increments over long periods, interventions targeting traditional and regressive gender norms have been known to promote conducive and gender-inclusive societies.

The relationship between political change and social change is complex. Political change is nothing if there is no social change in the way men perceive women, and political change might be inaccessible without social change. As such, ensuring social change can guarantee political change, including equal women's political representation across formal bodies of the state.

As we contemplate the new year, we don't start from nothing; we have lessons on which to build. In fact, the COVID-19 pandemic highlighted two simultaneous and contrasting patterns in its impact on gender equality in general and specifically, women's political leadership. On the one hand, it spotlighted the fragility of progress on gender equality, evidenced in the stunning reversal of gains made over decades in just two years. On the other hand, it highlighted that inclusive politics provides a template for effective governance while women's equal political participation offers pathways for policy change by establishing stronger social nets and systems for more resilient societies. The future is equal.

04

**CLIMATE
CHANGE:
TACKLING
A GLOBAL
CHALLENGE**

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From COP26 (Glasgow) to COP27 (Sharm el-Sheikh, Egypt): What to expect at Africa's COP

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Despite progress towards the shared goal of addressing climate change, COP26 did not sufficiently put the world on track to successfully tackle the problem. The outcomes especially fell short of what Africans had hoped for. On the positive side, [the Glasgow Accord kept the "1.5°C warming goal alive,"](#) and countries have been asked to come to COP27, to be held in Sharm el Sheikh, Egypt, with more ambitious Nationally Determined Contribution (NDCs).¹ A new agreement on global carbon trading was achieved, adding a much-needed tool to the fight against climate change. Negotiators reached other significant agreements² in Glasgow, notably 65 countries committed to phasing out coal power, more than 100 countries agreed to slash methane emissions, and 130 countries—representing over 90 percent of the world's forests—pledged to end deforestation by 2030.

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On the other hand, [developed countries failed](#) to reach the [\\$100 billion annual funds promised in Paris](#) to developing countries for climate action by 2020.^{3,4} The current NDCs are estimated to reach [a warming trajectory of 2.4°C—almost an entire degree above the goal.](#) The discussion on climate "loss and damage"—what damage is caused by climate change and which parties should pay for it—made some modest progress, and the Glasgow Accord called to start a dialogue to discuss funding arrangements. Such an announcement is a major step given that many major powers had previously opposed even using the words "loss and damage" in climate-related negotiations.

The evident lack of urgency contrasts sharply with the projections from the [Sixth Assessment of the Intergovernmental Panel on Climate Change \(IPCC\)](#) for Africa.⁵ Life-threatening temperatures above 40°C (104°F) are projected to increase by 10 to 140 days a year, depending on the scenario and region. The continent will see drier conditions in most regions, with more droughts but also more flooding. With the rise in sea level (as much as 0.9 meters by 2100 under high-warming scenarios) and more frequent flooding, a current 1-in-100 year flood event will become 1-in-10 or -20 years by 2050, and 1-in-5 years to annually by 2100, even under moderate warming. With rapidly growing cities in low-lying coastal areas in Africa, the damage to property and livelihoods more generally, exacerbated by climate change, will be compounded. In other words, under the projected warming trajectory of 2.4°C, the impacts of climate change could make many parts of Africa uninhabitable. Policy change, financial transfers, and decisive and transformational mitigation measures by the largest-emitting countries are critical. The narrative is clear and remains consistent: Africa's historical and current emissions of greenhouse gases are minimal; still, the region will suffer some of climate change's most severe consequences if not adequately addressed.

Even if the world remains under 1.5°C warming, Africa will need to adapt to the new reality of a rapidly changing climate.

Even if the world remains under 1.5°C warming, Africa will need to adapt to the new reality of a rapidly changing climate. Thankfully, COP26 did result in some positive steps regarding climate adaptation. The developed world recognized the need to increase funding for adaptation support: The Glasgow Accord "urges developed country Parties to at least double their collective provision of climate finance for adaptation to developing

1 "The Glasgow Climate Pact—Key Outcomes from COP26." United Nations Framework Convention on Climate Change, 2021.

2 COP26: Together for our planet | United Nations

3 OECD (2021), Climate Finance Provided and Mobilised by Developed Countries: Aggregate Trends Updated with 2019 Data, Climate Finance and the USD 100 Billion Goal, OECD Publishing, Paris.

4 CPI (2021) Global Landscape of Climate Finance 2021 Barbara Buchner, Baysa Naran, Pedro de Aragão Fernandes, Rajashree Padmanabhi, Paul Rosane, Matthew Solomon, Sean Stout, Costanza Strinati, Rowena Tolentino, Githungo Wakaba, Yaxin Zhu, Jake Connolly, Chavi Meattle and Sandra Guzmán

5 "Temperatures." Climate Action Tracker, 2021.

Africa has great opportunities to help the world fight climate change but cannot do it alone.

Africa absolutely cannot afford a 2.4°C warmer world: At that level of warming, adaptation measures in many parts of the continent may not be technically feasible or financially viable.

country Parties from 2019 levels by 2025.” Africa was already moving toward a similar goal: The African Development Bank and the Global Center of Adaptation launched [a \\$25 billion program to finance accelerated adaptation in the region](#) earlier in the year.⁶

Africa has great opportunities to help the world fight climate change but cannot do it alone. The protection and sustainable management of its forest and marine resources can provide essential carbon sinks. In fact, the Congo Basin—the world’s second-largest rainforest and [which absorbs 1.2 billion tons of CO₂ each year](#)⁷—also has vital mineral reserves needed for the clean industries that underpin the net-zero commitments of countries worldwide. The energy, transport, and urban infrastructure that is yet to be built in Africa over the next two decades will either lock the region into a high-emission economic development trajectory or support the global climate goals if adequate additional resources to finance the extra costs of decarbonization are provided at the level and speed needed.

COP27—the “Africa COP”—is a unique opportunity to accelerate progress in climate action and mobilize the partnerships needed for Africa’s rapid, inclusive, green, and resilient development. However, Africa’s policymakers should not be passive recipients of what “others” can do for Africa in COP27. Africans should be well prepared and organized. They should have a unified, active, and consistent voice about the dire consequences of climate change for the continent and the urgency to take action.

First and foremost, the world needs to show at COP27 that progress and firm commitments—not only pledges—are moving the needle towards the 1.5°C warming level. As noted above, Africa absolutely cannot afford a 2.4°C warmer world: At that level of warming, adaptation measures in many parts of the continent may not be technically feasible or financially viable. This point highlights the importance of the other significant opportunity presented by COP27: Leaders must further raise the level of action, speed, and ambition toward climate adaptation, especially for Africa and vulnerable countries in other regions.

As leaders and negotiators descend on Sharm el-Sheikh in 2022, they should focus on four distinct opportunities for decisive, urgent climate action. First, OECD countries and international financial institutions must increase their levels of concessional and private funding for adaptation, including a larger proportion of grants, rapidly and significantly. Second, leaders should increase their focus on the development and scaled-up rollout of adaptation technologies. Climate mitigation technologies receive most of the funding, attention, and support compared to adaptation technologies. At COP27, global leaders must push for a greater balance with adaptation technologies, including the localization and scaling-up of existing African solutions, including multi-hazard early warning systems combining earth observing systems and artificial intelligence with locally trusted communication channels in Africa. Importantly, the scaling up of climate-smart agriculture technologies and practices can tackle the malnutrition and stunting challenge of the region through more productive and resilient food systems. (See page 75 for a discussion on climate change’s implications for Africa’s food systems.) At the same time, climate-smart agricultural technologies can help store carbon in the soil and reduce the pressure on land-use change by improving efficiency and reducing food waste.

Third, Africa needs a decisive push to build capacity in climate change action, not only in ministries of the environment but throughout society. The engineers and urban planners need to incorporate climate considerations in designing and constructing Africa’s infrastructure. African farmers need the best data and knowledge to make informed decisions to increase productivity in the face of a rapidly changing climate that is already impacting their crops. Low-income urban households and rural communities need to know what actions to take to better protect their lives and livelihoods against more frequent and intense climate shocks.

6 “Africa Adaptation Acceleration Program.” African Development Bank, 2021.

7 Megevand et al. “Deforestation Trends in the Congo Basin: Reconciling Economic Growth and Forest Protection.” The World Bank, 2013.

The landmark African Continental Free Trade Agreement can provide the foundation for early agreements on free trade of agricultural products that can balance losses caused by climate shocks.

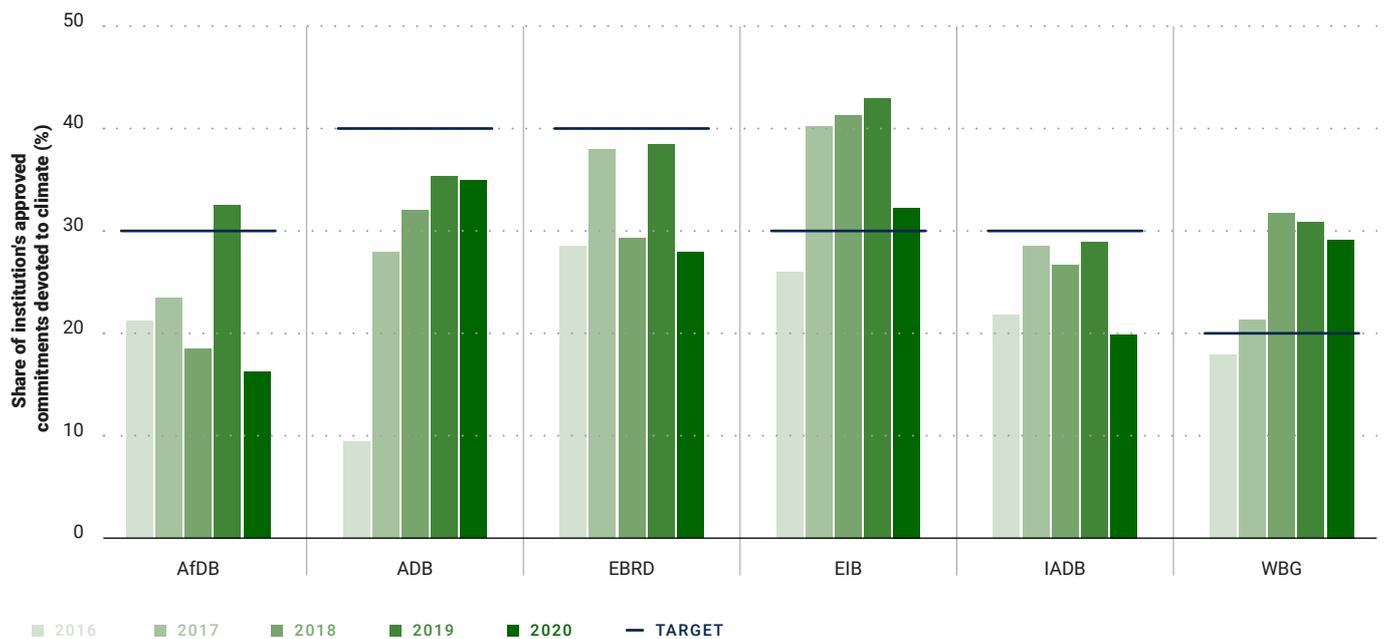
Fourth, leaders must pursue the win-win opportunity of rapidly deploying the global carbon market, while helping Africa enter this market, especially with programs that straddle both climate mitigation and adaptation. Nature-based solutions, energy access programs, and blue and green economy platforms can push forward the enhanced resilience of the region while supporting global emission reduction goals.

At the same time, Africa cannot wait. It must use all its tools to mainstream adaptation in its development path. With the pandemic still causing economic and livelihood damages in every corner of the continent, this task will be harder than ever. Still, low-cost, high-return adaptation measures should be prioritized. These range from land use and simple early warning systems to infrastructure maintenance that can reduce flood damage and protection of environmental assets that protect lives and livelihoods. Importantly, the landmark African Continental Free Trade Agreement can provide the foundation for early agreements on free trade of agricultural products that can balance losses caused by climate shocks.

At Sharm el-Sheikh, at the Africa COP, the world must take advantage of the opportunity to fulfill its responsibility together with Africa. A prosperous future of hundreds of millions of Africans will depend on the decisions and actions taken at COP27. A green and resilient path for Africa’s development cannot wait.

FIGURE 4.1. ACTUAL CLIMATE FINANCE CONTINUES TO FALL SHORT OF TARGETS

As Africa continues to bear the burden of the world’s climate crisis, the need for climate financing has grown. Despite stated targets, commitments from the multilateral development banks towards climate finance continue to fall short.



NOTE: ABD = Asian Development Bank; AfDB = African Development Bank; EBRD = European Bank for Reconstruction and Development; EIB = European Investment Bank; IADB = Inter-American Development Bank; WBG = World Bank Group
SOURCE: "2020 Joint Report on Multilateral Development Bank's Climate Finance." World Resources Institute. 2020.

Climate migration—deepening our solution

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Gender norms leave women without adequate tools or the capacity to adapt to climate change, as well as impede their ability to leverage migration for risk reduction.

Migration linked to climate change—often presented as a devastating picture of the plight and flight of vulnerable Africans—is becoming a daily feature on the 24-hour news. While these graphic images are worth a thousand words, they are far removed from the complexity of the factors at play. The narrative often precludes a focus on long-lasting sustainable solutions.

Sub-Saharan Africa has always been a region with high levels of mobility. For example, the Sahel pastoralists were the “original climate adaptors,” migrating seasonally with their herds for water and pastureland. But with the effects of climate change—e.g., increased water scarcity, reduced pasture availability, and shifts in harvesting seasons—**migration patterns have been disrupted**, causing frequent tensions between farmers and pastoralists. Moreover, gender norms leave women without adequate tools or the capacity to adapt to climate change, as well as impede their ability to leverage migration for risk reduction. Furthermore, the growth and development needs of the youth—already facing a dearth of good jobs—are harmed by additional challenges created by the changing climate. Across Africa, more than half the 375 million young people entering the job market in the next 15 years will be living in rural areas. Without a focus on climate-smart productive jobs in the rural economy, youth will increasingly migrate to urban areas, as current climate-sensitive livelihoods become increasingly untenable due to crop productivity losses and water stress on pastoral and other livelihoods. Policies to address such obstacles already exist: As an example, investment in a solar-powered Kilishi (a highly demanded local meat delicacy) factory in northern Nigeria enabled a shift from use of firewood to cleaner meat drier domes and fuel-efficient kilns, conserving forests and bringing prosperity to the local community, while creating employment opportunities for the youth who would have otherwise migrated to cities in other states. The project has successfully attracted youth back from Abuja, the capital city, where they were performing menial jobs with low wages.

Migration and displacement numbers have been rising in recent years. In Mali, for example, climate change is compounding tensions surrounding land use and access to natural resources by changing where and when rain falls, where food and fodder can be grown, and where people can live. The World Meteorological Organization’s (WMO) *State of the Climate in Africa 2020* report notes that the East and Horn of Africa region saw 1.2 million new disaster-related displacements, largely caused by floods, storms, and droughts.¹ The convergence of the COVID-19 pandemic with the locust outbreak in East Africa in 2020 amplified the impacts on poverty and food insecurity there. The interaction of these factors with the fragility and conflict in the Horn of Africa highlights the increasingly complex and interconnected drivers of mobility and immobility, with direct and devastating impacts on livelihoods. The urgency to understand how these issues will unfold in the future is critical.

The World Bank’s 2021 *Groundswell* report, which covers all six of the Bank regions, unpacks the complexity of the climate-migration-development nexus and shows how climate change is a potent driver of internal climate migration.² The authors find that, as a consequence of slow-onset climate factors and in the absence of concrete climate and development action, **216 million people** in those regions could be compelled to migrate

1 WMO. (2021). “State of the Climate in Africa 2020.” World Meteorological Organization, WMO- No. 1275.

2 Clement, V. et al. 2021. “Groundswell Part 2: Acting on Internal Climate Migration.” World Bank, Washington, DC. World Bank. License: CC BY 3.0 IGO.

within their countries by 2050. In addition, the poorest and those in the most vulnerable areas will be disproportionately impacted, with the strong possibility that sub-Saharan Africa sees the highest number of internal climate migrants—at an estimated **86 million by 2050**. Countries will see an emergence of climate migration hotspots as early as 2030, and inaction could see these hotspots expand and intensify.

The scale and trajectory of climate-induced migration means that policymakers cannot address one crisis at a time, in an ex-post fashion. Rather, we need **bold, transformative, and foresighted action** on two critical fronts.

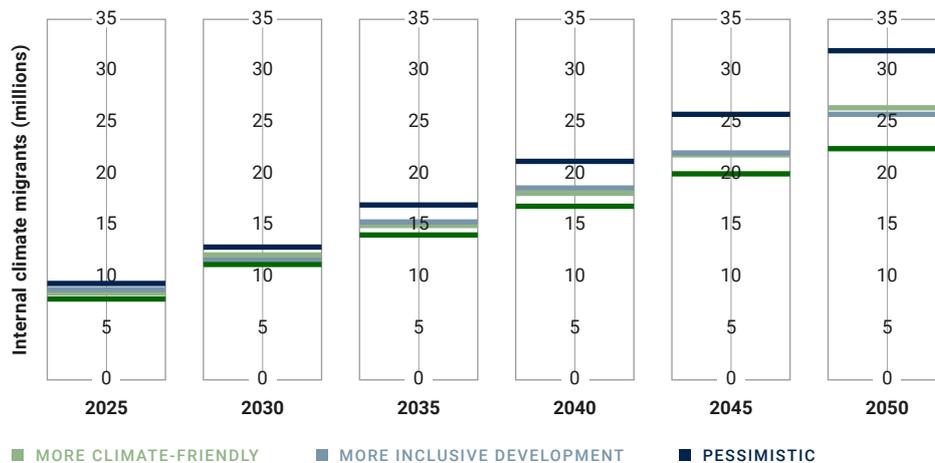
The scale and trajectory of climate-induced migration means that policymakers cannot address one crisis at a time, in an ex-post fashion.

- * First and foremost, fulfilling the global responsibility to **cut greenhouse gas emissions is critical to reducing the scale and reach of climate impacts** on water availability, crop and ecosystem productivity, sea-level rise and storm surges, and labor productivity—all of which can trigger migration decisionmaking.
- * Second, policymakers can usher the economies of affected countries **towards green and resilient pathways by pursuing far-sighted action** to avert distress-driven migration and harness climate-induced migration to foster economic and demographic transitions. Such policies require investments in human capital to support the next generation in productive and sustainable climate-smart jobs.

The World Bank’s Corporate Climate Action Plan and the road map in the Next Generation Africa Climate Business Plan provide platforms for such action. We are not starting from zero. For example, the Great Green Wall (GGW) initiative is a coordinated effort across the Sahel-Saharan region to restore and sustainably manage land, water, and other natural resources, addressing both the damage of the natural environment as well as poverty. By 2030, the GGW initiative aims to restore 100 million hectares of degraded land, sequester 250 million tons of carbon, and create 10 million jobs in rural areas. The World Bank has committed \$5.6 billion between 2020 and 2025 to support the 11 countries that are part of the GGW.³ The World Bank is already implementing projects totaling nearly \$4.1 billion and is moving to scale.

FIGURE 4.2. PROJECTED INTERNAL CLIMATE MIGRATION, LAKE VICTORIA BASIN, 2025-2050

The World Bank predicts that the Lake Victoria Basin will be hit hard by the impacts of climate change, potentially displacing over 30 million people by 2050.



NOTE: The World Bank’s projection are based on combinations of two Shared Socioeconomic Pathways—SSP2 (moderate development) and SSP4 (unequal development)—and two Representative Concentration Pathways—RCP2.6 (low emissions) and RCP8.5 (high emissions). See the *Groundswell Africa* report for more details.
SOURCE: “Groundswell Africa: Internal Climate Migration in Lake Victoria Basin Countries,” World Bank. 2021.

3 UNCCD. (2021). “Great Green Wall Event at COP26.” United Nations Convention to Combat Desertification.

Addressing Africa's dual challenges: Climate change and electricity access

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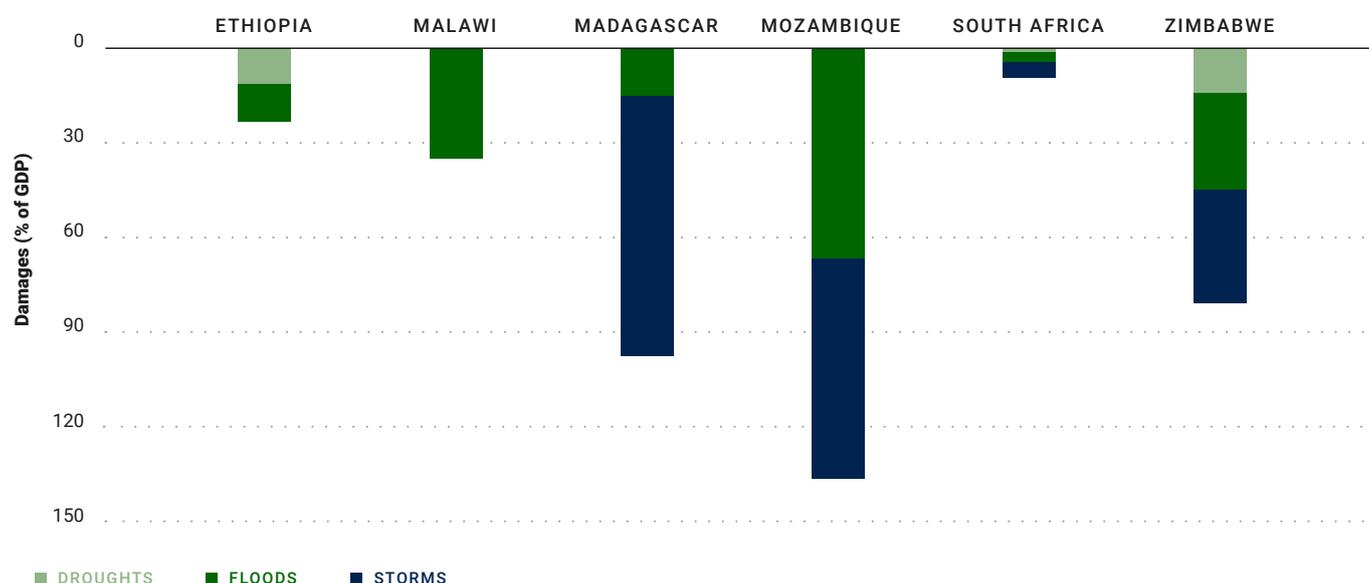
As leaders agreed late last year at the U.N. Climate Change Conference (COP26) in Glasgow, if the world fails to come together to mitigate the impending impacts of climate change, Africa will grapple with drought, rising sea levels, potential conflicts over water access, and increasingly frequent severe weather events, among other possible natural disasters.

The global response to climate change must incorporate the historic emissions context. As has been widely noted, China, Europe, and the United States bear the most responsibility for greenhouse gas emissions. Prioritizing the transition to renewables and imposing higher emission reduction requirements on the EU, U.S., and China will ease the burden on those nations that still need a variety of power generation methods to increase energy access.

Not only does Africa bear the least responsibility for greenhouse gas emissions, but the forests of the Congo Basin (second only to the Amazon) are vital to absorbing the CO₂ emitted from other continents. Keeping the lungs of the world intact must be more valuable than cutting them down. Maintaining these natural resources is essential to combatting global climate change and requires external support to properly value and incentivize their preservation.

FIGURE 4.3. ANNUAL ECONOMIC IMPACTS OF NATURAL DISASTERS, SELECT COUNTRIES, 2000–2018

Between 2010 and 2018, climate change-related extreme weather events have resulted in significant economic costs for a number of countries in sub-Saharan Africa. Experts estimate that such events will only get more frequent and intense without immediate climate action.



SOURCE: "Regional Economic Outlook: Adapting to Climate Change in Sub-Saharan Africa." International Monetary Fund, 2020.

Our prosperity and peace are incumbent on powering our economic development and creating enough gainful employment opportunities for our growing population. That is not something that can be done in the dark.

The global transition to renewable energy will mean exponentially scaling up the production of batteries, electric vehicles, and other renewable energy systems, which depend on Africa's natural resources.

Another big challenge is the lack of access to electricity. Today nearly 600 million of the 1.2 billion Africans lack access to electric power.¹ In sub-Saharan Africa, 12 million new people enter the workforce every year.² Our prosperity and peace are incumbent on powering our economic development and creating enough gainful employment opportunities for our growing population. That is not something that can be done in the dark. Without achieving universal access to electricity, we will be vulnerable to underdevelopment, high unemployment, a migration crisis, and instability. Given the close interplay of these challenges as well as their threat to the overall region, we must find a way to solve both if our continent is to realize a peaceful and prosperous future. (For more on the relationship between climate and migration, see the viewpoint on page 71.)

To narrow the energy access gap as quickly as possible, Africa must employ a variety of power sources already utilized by the U.S., EU, and China while simultaneously phasing out coal. Such a shift requires mobilizing development financing to support natural gas, hydro, and geothermal projects, as well as wind and solar energy.

Importantly, the double standard for those nations in the Global North with universal energy access was on full display at COP 26. For example, EU climate chief Frans Timmermans said, “[The European Union] will have to also invest in natural gas infrastructure. As long as we do it with an eye of only doing this for a period, then I think this is a justified investment.”³ The EU and U.S., who control significant voting stakes in the largest international financial institutions (IFIs), then led a pledge by 20 countries to stop financing gas projects abroad.⁴ Without support from IFIs, African nations will be unable to build and maintain the infrastructure required to utilize our natural gas. This sharp contrast in words and actions sends the message that natural gas is considered a bridge to renewables in the Global North—where access to electricity is secure—while natural gas is an unnecessary luxury to Africans who still do not have access to reliable electricity.

Finally, African nations must capitalize on the green economic revolution. The global transition to renewable energy will mean exponentially scaling up the production of batteries, electric vehicles, and other renewable energy systems, which depend on Africa's natural resources. For example, the Democratic Republic of the Congo accounts for 70 percent of the world's cobalt, the mineral vital to battery production.⁵ With the demand for cobalt expected to at least double by 2030, it is unfathomable that the miners, who provide the world with the material essential to the energy transition, return to homes without electricity. We need to leverage our control over such markets to elevate working conditions, move beyond raw material exports toward manufacturing and processing capacity, and capture greater portions of green energy supply chains. We cannot afford to repeat the mistakes of past economic revolutions.

1 IEA. (2020). SDG7: Data and Projections, IEA, Paris.

2 Zeufack, A. G., Calderon, C., Kubota, M., Korman, V., Cantu Canales, C., & Kabundi, A. N. (2021). Africa's Pulse, No. 24, October 2021. Washington, DC: World Bank.

3 Ainger, J. and Krukowska, E. (2021). “EU's Climate Chief Signals Natural Gas Will Be Included in Green Transition.” Bloomberg.

4 Abnett, K. and Jessop, S. (2021). “U.S., Canada among 20 countries to commit to stop financing fossil fuels abroad.” Reuters.

5 Campbell, J. (2020). “Why Cobalt Mining in the DRC Needs Urgent Attention.” Council on Foreign Relations.

The urgency and benefits of climate adaptation for Africa's agriculture and food security

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Food and nutrition security in Africa is off track: In 2020, more than one in five people in Africa faced hunger—more than double the proportion of hungry people in any other region. In fact, the continent remains a net food importer at an annual cost of \$43 billion.¹

Food security in Africa demands urgent and serious attention. Climate change is already stalling progress by interacting with multiple other stressors and shocks, including inequality, degrading natural resources, conflict, and the COVID-19 pandemic.

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A 3°C warming trajectory will cause catastrophic disruption to African food systems within the next 30 years. In fact, under a 3°C warming scenario, Africa is expected to lose up to 30 percent of current growing areas for maize and banana and 60 percent for beans by 2050. Many more millions of Africans will suffer from hunger. By 2050, the 282 million of Africa's population who are undernourished today is expected to rise to 350 million.² A 1.5°C trajectory provides more options for adaptation of African food systems, but still demands urgent action. Current national pledges put the world on a 2.4°C trajectory even if they are fully achieved.

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WE NEED A WHOLE FOOD SYSTEM APPROACH

Leading adaptation options for food systems are well-defined and build on evidence and experience, including in Africa. Among these options, the priorities for public sector investment in Africa are fivefold: Research and extension, land restoration, water management, infrastructure, and climate information services. Some of the adaptation practices have long-term African experience to build on (e.g., landscape management, agroforestry), while others are newer areas of endeavor on the continent or globally (e.g., fiscal measures, co-benefits of mitigation finance).

Notably, a modern approach to climate adaptation needs to move beyond purely agricultural solutions into whole food system approaches. Problems with agricultural production can be addressed not only through on-farm solutions, but also through entire value chains and through policy incentives for consumers and food businesses.

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THE COSTS OF FAILURE

Financing adaptation to climate change in the agriculture and food system in Africa will be more cost-effective than financing increasingly frequent and severe crisis response, disaster relief, and recovery pathways. In fact, the costs for adaptation action in Africa are about \$15 billion (0.93 percent of regional GDP).³ This number is a fraction of the cost of inaction, which could rise to more than \$201 billion (12 percent of GDP). There will also be significant regional variations in the cost of inaction. For instance, West and East Africa could lose up to about 15 percent, and Southern Africa up to about 10 percent of their GDPs by 2050 if adaptation measures are not taken.

1 Balineau, G., Bauer, A., Kessler, M., and Madariaga, N. (2021). Food Systems in Africa: Rethinking the Role of Markets. World Bank, Washington, D.C.

2 Nelson, G.C. et al. (2010). "Food security, farming, and climate change to 2050: Scenarios, results, policy options." International Food Policy Research Institute (IFPRI), Washington D.C.

3 Based on a synthesis of existing studies, as found in the Global Center on Adaptation's State and Trends in Adaptation 2021 report.

Agriculture and food are the leading sectors for synergies across development and climate action, delivering simultaneously on the Sustainable Development Goals, national growth and food security goals, and climate adaptation and mitigation.

The agricultural financing gap in many African countries surpasses government budgets and available donor funding. Climate finance flows from multilateral development banks to the agriculture sector in Africa increased from \$433 million in 2015 to \$2 billion in 2018 and then declined to just over \$1 billion in 2020.⁴ Moreover, the financing gap for climate adaptation is at risk of widening in the future due to fiscal drain on resources from the COVID-19 pandemic. Low-income countries are especially hard-hit as they bear a disproportionate weight of climate disasters. (For more on climate financing for Africa, see page 78.)

Agriculture and food are the leading sectors for synergies across development and climate action, delivering simultaneously on the Sustainable Development Goals, national growth and food security goals, and climate adaptation and mitigation. The time to act on adaptation action in agriculture and food systems is now.

⁴ Data compiled from the MDB joint reports on climate finance by African Development Bank (AfDB), the Asian Development Bank (ADB), the Asian Infrastructure Investment Bank (AIIB), the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Inter-American Development Bank Group (IDBG), the Islamic Development Bank (IsDB) and the World Bank Group (WBG).

Managing existential risk and climate resilience: The case of Nigeria

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The impact of climate change on Nigeria's environmental and socioeconomic systems is compounding the country's fragility risks. Extreme weather patterns—fiercer, longer dry seasons and shorter, more intense rainy seasons—are exacerbating challenges confronting local communities. Extensive cultivation and overgrazing have been compounded by desertification, rendering large swaths of land in northern Nigeria unproductive. Unpredictable and higher-intensity rainfall in southern Nigeria is resulting in a loss of crops and the displacement of communities. Depleting environmental resources in every part of the country pose a serious food security challenge in the face of a rapidly growing population. In fact, the [2021 Notre Dame Global Adaptation Index](#) ranks Nigeria as the 53rd most-vulnerable country and the 6th least-ready country in the world to adapt to climate change.¹

As a result, growing desperation over food supply is driving resource conflicts across Nigeria. In short, farmer/herder violence over the past decade has worsened and disrupted business operations across the country. Urgent action is needed to improve food and economic resilience to prevent deeper crises.

The COVID-19 pandemic compounded Nigeria's food security and inequality challenges. Although spared the worst of the public health impact, the nation's lockdown, imposed to contain spread of the virus, disrupted food production and hit household incomes hard. In fact, only [50 percent of agricultural workers in Nigeria](#) were able to work through April and May 2020—two critical months during the planting season for Nigeria's predominantly rain-fed agriculture.² By August 2020, an estimated 70 percent of households in Nigeria

¹ ND-GAIN. (2021). ND-GAIN Country Index. Notre Dame Global Adaption Initiative.

² National Bureau of Statistics; World Bank. (2020). "COVID-19 Impact Monitoring : Nigeria, Round 4." World Bank, Washington, DC. © World Bank. License: CC BY 3.0 IGO.

Poor governance and stakeholder engagement remain the greatest challenges to climate resilience in Nigeria.

Although Nigeria has 2.6 percent of the world's population, it is only responsible for 0.26 percent of global emissions.

reported medium to severe food insecurity. Over 67 percent reported that their total income decreased compared to August 2019.

Poor governance and stakeholder engagement remain the greatest challenges to climate resilience in Nigeria. Although awareness and understanding of the impacts of climate change are growing among key stakeholders, the government has been unable to galvanize effective collective action for mitigation and resilience.

POLICY RECOMMENDATIONS

The underlying pressures that are compounding Nigeria's climate resilience situation can only be eased over the long term. But collective effort must start now.

The National Adaptation Plan (NAP) published by the Federal Ministry of Environment in June 2020 articulates a framework for different sectors of the economy to work together to address Nigeria's climate challenges. It proposes a sectoral governance approach and defines specific roles and responsibilities for private sector, civil society, and national and subnational governments. It also seeks to align other existing economic, national development, and climate resilience policies with the country's climate goals.

Reducing food and nutrition vulnerability while enhancing environmental resilience is perhaps Nigeria's most critical climate adaptation objective. The National Agricultural Resilience Framework (NARF) provides an excellent policy platform to achieve this goal. The National Livestock Transformation Plan (NLTP) can also help address farmer-herder conflict by creating mutually beneficial relationships and reducing the need for harmful competition between these two critical stakeholder groups.

Although Nigeria has 2.6 percent of the world's population, it is only responsible for 0.26 percent of global emissions. Importantly, though, reducing emissions in the energy sector can protect Nigeria's rapidly depleting tree cover and improve the quality of life for millions of citizens.³ Indeed, the National Energy Transition Plan announced by President Muhammadu Buhari at COP26 in Glasgow promises to improve energy access to over 25 million Nigerian homes while reducing dependence on fuel wood.⁴

Developing and announcing these policies represent a good start, but the government needs to translate its published objectives into diligent action. The Nigerian Federal Government must deepen consensus around its Nationally Determined Commitments and galvanize implementation programs that are inclusive of women, youth, and marginalized communities. These groups have significant roles to play in decreasing population pressure, reducing energy poverty, and improving productivity of food value chains.

In the end, Nigeria will require the assistance of the international community to successfully manage its climate fragility risks. With a population projected to balloon to 400 million by 2050, the stakes are high not only for Nigeria, but for the continent and rest of the world.

³ Muntean, M. (2018). "Fossil CO2 emissions of all world countries - 2018 Report." Publications Office of the European Union, Luxembourg, 2018, doi:10.2760/83904, JRC113738.

⁴ Bel, S. et al. (2021). "New commitments at UN energy summit a major stride towards affordable and clean energy, but much work ahead to halve energy access gap by 2025." SE for ALL.

The criticality of climate finance for Africa

AMAR BHATTACHARYA

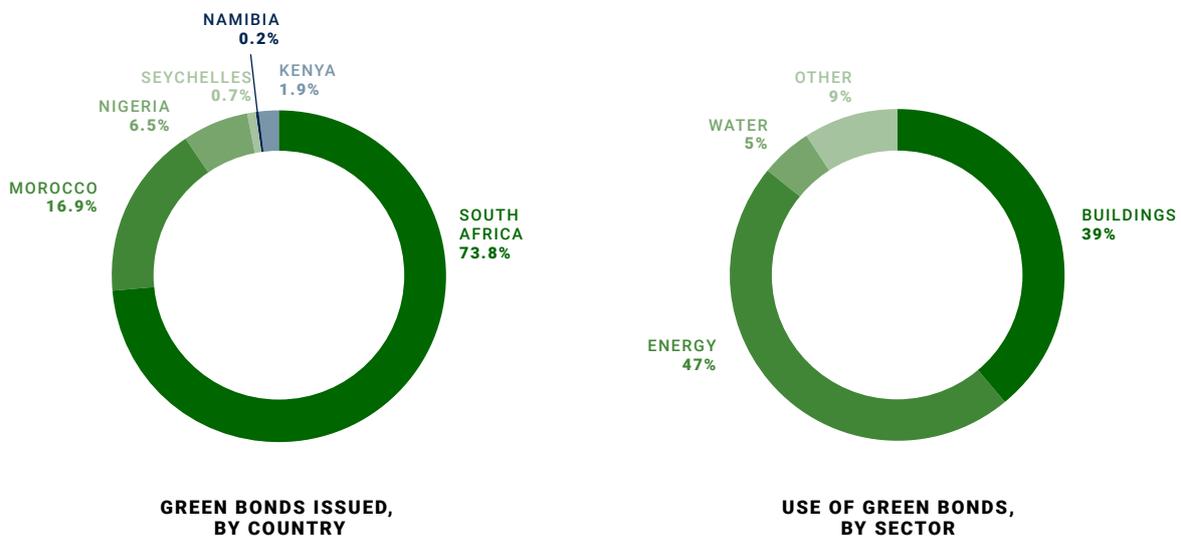
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Climate finance will be critical for enabling Africa to adapt to the growing impacts of climate change and to ensure that its future development path is consistent with the goal of limiting global warming to no more than 1.5°C. Africa has contributed little to global emissions so far, but it is already being disproportionately affected by the impacts of climate change. How Africa develops will also be critical to future emissions given that its energy use is projected to grow rapidly to meet its development needs, with its share of the world’s population projected to increase from 17 percent to 40 percent by 2100, even as the world population increases from 7.9 billion to almost 11 billion by the end of the century.

A low-carbon, climate-resilient path offers Africa the opportunity to avoid the mistakes of the past and seize the opportunity to leapfrog to a better form of growth that can deliver on both its development and climate goals. It will require, however, a major ramp-up in the scale and quality of investments in three critical areas: energy transitions and related investments in sustainable infrastructure; investments in climate change adaptation and resilience;

FIGURE 4.4. HOW ARE GREEN BONDS BEING USED IN AFRICA?

Within Africa, the distribution of the funds raised by green bond issuance has been overwhelmingly concentrated in South Africa, which accounts for approximately three-fourths of the continent’s market share. Together with Morocco and Nigeria, these three countries comprise more than 97 percent of Africa’s unilateral green bond issuance. The use of this climate-oriented funding is primarily concentrated in energy and buildings, which together make up 86 percent of the sectors financed by green bonds.



SOURCE: George Marbuah, Stockholm Sustainable Finance Centre, "Scoping the Sustainable Finance Landscape in Africa: The Case of Green Bonds," 2020.

and restoration of natural capital (through agriculture, food and land use practices) and biodiversity. All three areas are important for the continent although relative needs will vary by country. Altogether, Africa will need to invest around \$200 billion per year by 2025 and close to \$400 billion per year by 2030 on these priorities.

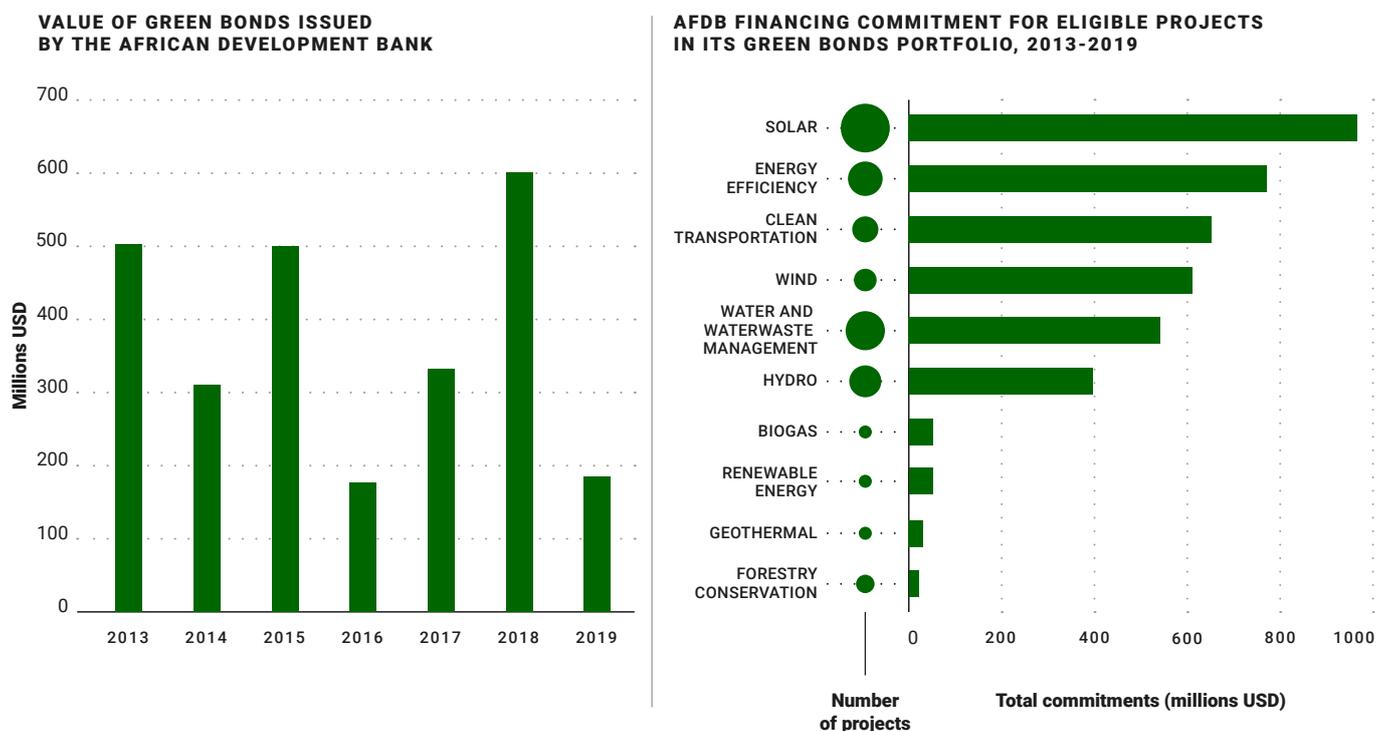
In order to meet the scale and urgency of the challenge, Africa must be prepared to do its part. It must put in place robust institutional structures to set ambitious Nationally Determined Contributions and translate them into tangible investment programs and pipelines of projects. Country platforms, such as the one that South Africa launched for its just energy transition at COP26, can be adopted by other countries to give impetus to scaling up transformative investments. Africa must also make concerted efforts to boost domestic resource mobilization to ensure the long-term sustainability of the necessary investments.

Africa will also not be able to finance the scale of the investments needed without a dramatic step up in international effort.

But Africa will also not be able to finance the scale of the investments needed without a dramatic step up in international effort. A starting point must be to tackle Africa's debt constraints. From a climate perspective, debt-for-climate and debt-for-nature swaps could be part of the overall solution. Africa will also need a major scaling up of both international public and private finance. To date, only \$80 billion of the \$100 billion per annum commitment by developed countries for developing countries by 2020 has been met; of this, only around \$20 billion was provided to Africa over 2016-2019. Given the scale of needs, the Africa Group of Negotiators has called for \$1.3 trillion a year in climate finance to be made available from 2025.

FIGURE 4.5. GREEN BOND FINANCING BY THE AFDB

Access to finance is a major challenge for Africa to combat climate change. Green bonds offer a novel sustainable financing tool to fund climate change mitigation and adaptation related projects. Green bond issuances by the African Development Bank (AfDB) are most heavily concentrated in projects related to solar, wind, energy efficiency, and clean transportation. Since 2013, the AfDB has raised more than 4 billion USD with green bonds.



NOTE: Data for 2017 differs from what the AfDB has reported on its green bond issuance for the year. See Marbuah (2020) for details.

NOTE: Data includes multinational projects that are not specific to any one country.

SOURCE: George Marbuah, Stockholm Sustainable Finance Centre. "Scoping the Sustainable Finance Landscape in Africa: The Case of Green Bonds." 2020.

COP27, as Africa's COP, provides an opportune moment to go beyond the \$100 billion through an immediate acceleration in the delivery of climate finance and setting a roadmap for an ambitious post-2025 target.

Concessional finance from bilateral donors remains the most critical component of climate finance for Africa given its fiscal constraints and large needs for adaptation and resilience, as well as nature and biodiversity. It is also critical for scaling up other pools of climate finance, including the multilateral climate funds and the multilateral development banks (MDBs), and ultimately leveraging the much larger sums of private finance that will be needed. Consequently, bilateral finance must be doubled by 2025 from its 2018 level, with a higher proportion of grants and a higher share for Africa. Africa will also need much higher levels of support from development finance institutions, from both concessional and market-based windows. The successful replenishment of IDA has provided a good base, but ambitious replenishments are also called for the African Development Fund and concessional climate funds including the Global Environment Facility and the Climate Investment Funds. Additional concessional support from the recycling of Special Drawing Rights (SDRs), including the proposal to establish a Resilience and Sustainability Trust in the IMF, as well as from philanthropic sources. Africa should also be enabled to access the market-based windows of the MDBs for revenue-generating investments given the magnitude of the financing requirements. Private investment and private finance can also play a much bigger role than in the past, but this will require risk mitigation at scale by development financing institutions (DFIs) given that only four countries in Africa are investment grade and that 56 percent of African countries with a credit rating have suffered downgrades since the COVID-19 pandemic.

As Africa seeks to build back better from the pandemic and embark on the transformation of its economies to a low-carbon, climate-resilient future, it must be assured of effective and timely support. COP27, as Africa's COP, provides an opportune moment to go beyond the \$100 billion through an immediate acceleration in the delivery of climate finance and setting a roadmap for an ambitious post-2025 target. Without such ambition, Africa will not meet its climate and development ambitions, and the world will fail in meeting its collective climate goals.

The view from Freetown, Sierra Leone

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Leone

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**We cannot choose
to prioritize
adaptation over
mitigation, or vice
versa, when it
comes to tackling
climate change.**

Freetown's unique topography—its communities extend from the coastline up into its surrounding mountains—exposes it more acutely than other African cities to the risks of a changing climate. At the same time, the city is increasingly shaped by the impacts of climate change.

Take the issue of extreme heat: This phenomenon poses a direct challenge to water access in the dry season, particularly to inhabitants of the 74 informal settlements in which up to 40 percent of Freetown's occupants live. Beyond water access, this extreme heat significantly worsens air quality in the city, especially in conjunction with vehicle emissions and open dumping. This deterioration in air quality then poses health risks to residents, such as respiratory infections.

I give this example to make the point that we cannot choose to prioritize adaptation over mitigation, or vice versa, when it comes to tackling climate change. We must address both. While Freetown, like the African continent as a whole, is not a big emitter of greenhouse gases, there are still opportunities to further reduce our emissions. For instance, my administration is introducing a mass transit cable car system that will be more climate-friendly and green than existing city transport options.

Under the #FreetownTheTreetown initiative, we are planting one million new trees. This initiative is an example of an approach that delivers both mitigation—in that planting trees can create a carbon sink to offset emissions—and adaptation—as increasing tree cover reduces the impacts of extreme heat and the risk of landslides.

LOCAL AFRICAN GOVERNMENTS SHOULD BE EMPOWERED TO DO MORE

In Freetown, land-use planning and building permit powers that should have been devolved to district structures remain in the hands of central government—a situation that contributes significantly to poor urban management and increased risk of environmental damage. Reforms on the city level can have indirect effects for the country—and the world. However, for this to succeed, local leaders must be brought more substantively into the conversation, listened to, funded, and supported to act decisively. Nation-state organizations like the African Union can do more to create platforms for city-level authorities to contribute to wider conversations about climate change.

Similarly, leaders should work to unlock climate financing at the city and local levels, as going through national governments to access funds is a time-consuming process. For now, the bulk of funding is available only to national governments, which inhibits efforts to deliver fast solutions to tackle this existential threat in not just Freetown, but in many cities.

05

**TECHNOLOGICAL
INNOVATIONS:
CREATING AND
HARNESSING
TOOLS FOR
IMPROVED
LIVELIHOODS**

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Harnessing technology and innovation for a better future in Africa: Policy priorities for enabling the 'Africa we want'

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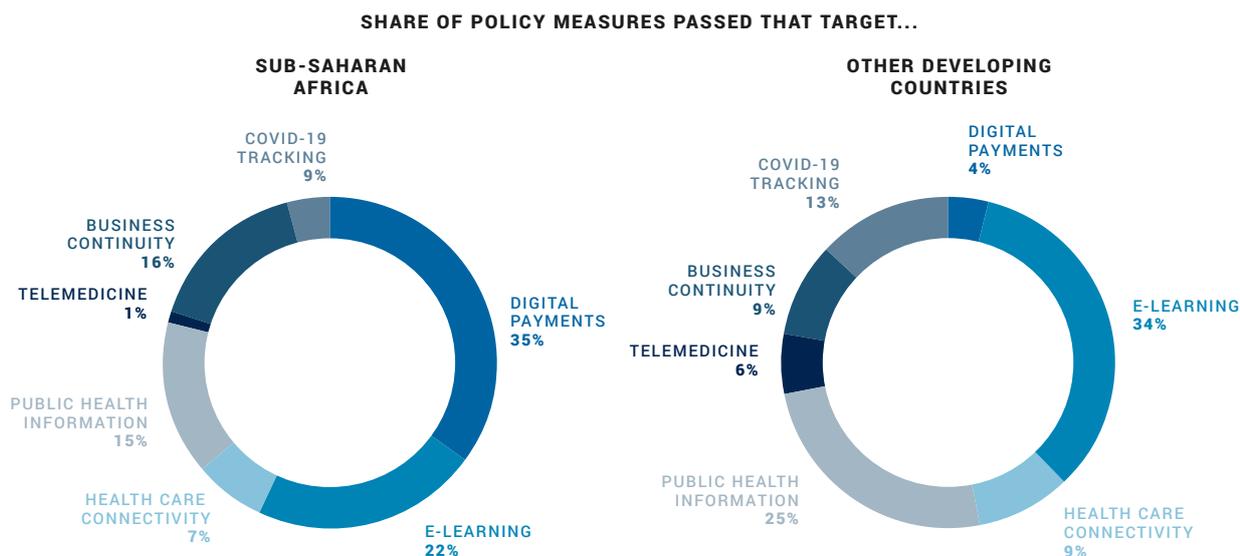
@landrysigne

The COVID-19 crisis has changed how the world functions, bringing to light many limitations of existing systems and showing the need to reimagine the role of informational technology as a tool for economic growth. Indeed, the pandemic has accelerated the velocity and effectiveness of technology innovation, adoption, policy, and regulation. Although Sub-Saharan Africa's has benefited from the acceleration of technological uptake across sectors, such as health care or economic transformation, the region still grapples with gaps in critical areas, including in human capacity and infrastructure.

Importantly, the unique global policy momentum that has led to unlocking barriers to technology and innovation during the pandemic provides further evidence that governments can play a key policy role not only in enabling technological innovation, but in supporting its diverse uptake and use. In fact, during the pandemic, African governments looked to enact policies specifically to boost technological innovation and uptake (Figure 5.2).

FIGURE 5.1. GOVERNMENT SERVICES SHIFTED TO THE DIGITAL SPACE IN REPOSE TO COVID-19

The COVID-19 pandemic forced many governments to shift their services to the digital space. As shown in the figure below, African government responses differed largely from other developing regions, particularly with digital payments. In both cases, e-learning also expanded.



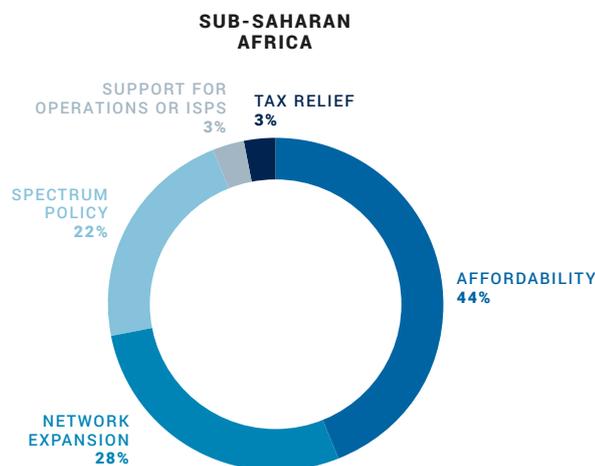
NOTE: According to the World Bank, this database is non-exhaustive, based on measures reported in news and specialized publications. The figures reported use information from the database accessed on February 15. Sub-Saharan Africa includes Angola, Benin, Botswana, Burkina Faso, Cabo Verde, Cameroon, the Central African Republic, the Democratic Republic of Congo, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Somalia, South Africa, Sudan, Tanzania, The Gambia, Togo, Uganda, Zambia, and Zimbabwe. Developing countries outside the region comprise 46 countries in East Asia and the Pacific (9), Europe and Central Asia (9), Latin America and the Caribbean (12), the Middle East and North Africa (11), and South Asia (5).

SOURCE: "Covid-19 And The Future Of Work In Africa: Emerging Trends In Digital Technology Adoption." World Bank, 2021.

FIGURE 5.2. SUB-SAHARAN AFRICA'S POLICIES TO BOOST DIGITAL INFRASTRUCTURE IN RESPONSE TO COVID-19

Throughout the pandemic, sub-Saharan African governments enacted a number of policies to both support citizen livelihoods and boost the economic recovery. As part of this effort, in response to COVID-19, governments in sub-Saharan African countries enacted 60 digital infrastructure measures aimed at boosting technological innovation, with the majority focused on increasing access to digital tools.

SHARE OF POLICY MEASURES PASSED THAT TARGET...



NOTE: The figure represents 129 COVID-19 policy measures in selected sub-Saharan African countries.

SOURCE: "Covid-19 And The Future Of Work In Africa: Emerging Trends In Digital Technology Adoption." World Bank, 2021.

POLICY RECOMMENDATIONS

To make the most of technology and innovation, African governments must exploit the momentum of innovations already occurring across the continent and remove the barriers to growth and development that remain. I posit seven priorities for policymakers looking to enable and harness the future of technology for a prosperous continent.

* Invest directly in information and communications technology (ICT) and infrastructure development.

Internet expansion will be key to long-term innovation and adoption of more advanced technology, from the Internet of Things to artificial intelligence and beyond. While the ICT and mobile sectors have grown in recent years, millions in Africa still lack connectivity. Gaps in internet access prevent citizens from accessing the full scope of internet services; slow economic growth; limit Africa's potential to trade and interact with the world; and lead to inaccurate, biased data collection. If African countries want to advance technologies like electricity and broadband, they must first have better access to physical and digital infrastructure.

Moreover, policymakers must not overlook traditional infrastructure, as it is necessary for African countries to attract greater amounts of venture capital and investment. The completion of major energy and transportation projects—such as the Grand Ethiopian Renaissance Dam, the North-South Rail and Road Corridor in Southern Africa, and South Africa's Jasper Solar Farm—will be a key step signaling Africa's modernization to firms and investors from around the globe.

Collectively through multi-stakeholder partnerships, African countries must rapidly harness inclusive and sustainable digitalization to help build more equitable societies. African countries can do so by seeking to improve their infrastructure and make faster progress by courting regional and international partners rather than by working alone. African countries can learn from Morocco, whose robust infrastructure development has succeeded, in part, by incorporating multiple public and private sector partners under regional initiatives: For example, the country's [high-speed rail project](#) was built by

The unique global policy momentum that has led to unlocking barriers to technology and innovation during the pandemic provides further evidence that governments can play a key policy role not only in enabling technological innovation, but in supporting its diverse uptake and use.

Productive, inclusive growth in the context of automation requires that technology complements, not substitutes, workers.

French engineering company Alstom and received joint funding from France, Kuwait, Saudi Arabia, and Abu Dhabi.¹

✱ **Modernize and expand access to education, learning, and skills.**

Productive, inclusive growth in the context of automation requires that technology complements, not substitutes, workers. However, to do so, those workers and entrepreneurs must be equipped with diverse, relevant skills for the rapidly changing global economy. The literacy of Africa's workforce should be increased in a range of soft and hard skills to be flexible and dynamic: Public and private institutions should partner with universities to develop effective continuing and executive education programs. Digital literacy skills can be enhanced by the development of future-ready curricula that creates a culture that encourages lifelong learning. African states should also create or accelerate the development of engineering and business schools as well as technical vocational colleges to support industrial growth and create models of training based on the changing needs of the private sector. Additionally, African countries should integrate emerging technologies into education more systematically to improve learning outcomes through adaptive and collaborative learning platforms, distance learning, increased availability of learning materials, and dissemination of advanced pedagogies.

✱ **Increase the capacity of research institutions to participate in research and development activities and protect intellectual property.**

Research and development (R&D) investments, including in the public and private sector and universities, have positive effects on economic growth by encouraging the development of new knowledge, techniques, and technologies that improve productivity.² Currently, South America and Africa combined are responsible for less than 5 percent of the total global R&D spent, despite having more than 20 percent of the world's population.³ Indeed, Africa itself falls short of the 1.7 percent R&D global average, with many African countries only investing 0.42 percent of their total GDP.⁴ To improve participation in R&D, governments can provide incentives to research organizations (such as by allowing companies to commercially exploit technology developments arising from government-funded research); build pools of researchers and innovators by providing scholarships and investing in human capital and education; increase the capacity of research institutions to undertake quality research by providing funding; and encourage diaspora scientists, engineers, and innovators to return. (For more on strategies for boosting African health R&D capacity, see page 44.) Governments should protect intellectual property (IP) rights to stimulate the generation of new innovations and technologies. Such interventions can take the form of patents, copyrights, design rights, trademarks, and similar policies for protecting trade secrets.⁵

✱ **Steer investment toward high-productivity and labor-intensive industries.**

In the context of accelerated technology and innovation developments, countries need to take proactive measures to identify and exploit comparative advantages in the new industrial niches presented by the latest technology. Prioritizing the growth of labor-intensive industries is particularly important for ensuring employment among Africa's growing youth population. Another key step will be fostering competition between firms by reducing barriers to entry. For example, the Moroccan government's work to create networks of innovators in key industries, support research in advanced technologies, coordinate the efforts of the public and private sectors in innovation, and provide information for foreign investors can serve as a model for African countries exploring ways to encourage productive investment in new technologies. In line with successful examples seen in countries like Mauritius and Rwanda, countries can also establish science parks and technology hubs to encourage innovation. Another successful example is the creation of the Smart Africa Alliance, a collaboration between Smart

1 Wood, Johnny. 2018. "Morocco will soon unveil Africa's first high-speed rail link." World Economic Forum.

2 Yazgan, Sekip and Omer Yalcinkaya. 2018. "The Effects of Research and Development (R&D) Investments on Sustainable Economic Growth: Evidence from OECD Countries (1996-2015)." Review of Economic Perspectives 18, no. 1: 3-23.

3 Heney Paul. 2020. Global R&D investments unabated in spending growth. R&D World.

4 The Conversation. 2021. African countries must muscle up their support and fill massive R&D gap.

5 World Intellectual Property Organization (WIPO). 2021. "Innovation and intellectual property."

Africa, the Digital Impact Alliance, and the Kenyan government to create a framework used for developing and achieving a digital economy.⁶

✱ **Expand and support intra-regional trade and investment, as they accelerate industrial development and create a larger market for innovations.**

Lowering trade barriers within Africa can spur industrial growth and innovation, as it enables African countries to compete globally with the advanced economies that have historically dominated technological revolutions. The African Continental Free Trade Area (AfCFTA) represents a key stepping stone towards building a robust, competitive market for goods across Africa. Further cooperation among African states using existing multilateral arrangements such as the African Union and African Development Bank is a vital way for African states to pool their resources efficiently and reduce regional deficits in trade and infrastructure. The East African Northern Corridor Agreement, for example, could serve as a model for larger agreements extending into North and sub-Saharan Africa incorporating ICT integration and other infrastructure development.⁷ Technology, innovation, and entrepreneurship will be the accelerators in these projects. Additionally, regional organizations should create frameworks to help address youth unemployment challenges around the continent to help other expansion areas.

✱ **Create institutions to manage technological disruption, encourage innovation, and ensure security.**

Policies to support innovation and protect citizens are only as good as the institutions that enforce them. As such, leaders should set up agile institutions empowered to work across ministries. These institutions can also help ensure that consumers are protected from practices such as overpricing, poor quality, and privacy violations and can foster a fair and competitive ICT market. These institutions can also serve as catalysts for industrial policies, which may include tariffs, subsidies, incentives to businesses, infrastructure investments, and other measures aimed at improving the competitiveness of domestic firms and promoting innovation and structural transformation.⁸ Importantly, with digital innovation comes risks threatening privacy and security worldwide, so domestic policies and international cooperation can play a critical role in creating a more inclusive future. Thus, establishing a data privacy act and a national cybersecurity plan as well as identifying and addressing regulatory gaps related to new technologies can mitigate some of the risks presented by the technology and innovation revolution. (See the viewpoints on pages 92 and 100 for discussions on strategies for protecting consumer data by the private sector and policymakers, respectively.)

✱ **Ultimately, develop and successfully implement inclusive comprehensive national and continental strategies for harnessing technology and innovation for a better future in Africa, building on the recommendations presented above.**

Inclusive prosperity requires diverse stakeholders—including firms, government agencies, nonprofits, and individuals of various backgrounds—to check against organizational and group biases.⁹ Moreover, coordinated strategies facilitate policy coherence and equal implementation. Here, continental institutions (e.g., the African Union and its specialized agencies) can play a central role in balancing the interests of potential winners and losers.

Africa must improve its infrastructure and prepare its young workforce for new technologies to avoid asymmetric growth between it and the rest of the world.

In conclusion, to make the most out of technology and innovation, African governments and entrepreneurs should move proactively, anticipate disruptive innovations and their implications, build capacity and the conducive environment to unlock their potential, recognize new niches for industries, leverage uniquely African advantages, invest in their youth and entrepreneurial populations, and collaborate across stakeholders to achieve sustainable, inclusive growth. Given considerable gaps in infrastructure and R&D output, Africa must improve its infrastructure and prepare its young workforce for new technologies to avoid asymmetric growth between it and the rest of the world. The future of Africa depends on success in this endeavor.

6 Nyakanini Grace, Sayinzoga Maurice, Gates Nicholas, Almqvist Erik, Erkan Kutay. 2020. "Unlocking the Digital Economy in Africa: Benchmarking the Digital Transformation Journey." Dial-Smart Africa.

7 Meads, David. 2017. "Here's how Africa can take advantage of the Fourth Industrial Revolution." World Economic Forum.

8 UNCTAD and UNIDO. 2011. "Economic Development in Africa Report 2011."

9 Schwab, Klaus and Nicholas Davis. 2018. Shaping the Fourth Industrial Revolution. Cologny/Geneva: World Economic Forum.

Boosting the AfCFTA: The role of the Pan-African Payment and Settlement System

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Imagine an Africa without boundaries—an African continent where commerce takes place freely between states, and goods and services are exchanged for value without the constraint of complex and often expensive customs procedures and tariffs.

This burgeoning, free-flowing mosaic of information, goods, and capital would certainly reshape the economies of African countries, encouraging African governments to rethink their policies, minimize trade costs, empower their workers, and take advantage of new opportunities.

I like to think that this Africa is the one envisioned by the African Union in the African Continental Free Trade Agreement (AfCFTA). A pact, which, if fully implemented, would connect approximately 1.3 billion people across 55 countries with a combined GDP of \$3.4 trillion.

In 2020, the World Bank found that the enforcement of AfCFTA has the potential of increasing African exports by \$560 billion while boosting Africa's income by \$450 billion by 2035.¹ Notably, it also reads, "out of the \$450 billion, \$292 billion would come from stronger trade facilitation—measures to reduce red tape, simplify customs procedures and make it easier for African businesses to integrate into global supply chains."

One such measure includes the development of a centralized payment and settlement infrastructure to support trade in this new arrangement—now led by Africa Export-Import Bank (Afreximbank) in partnership with the AfCFTA Secretariat and dubbed the Pan-African Payment and Settlement System (PAPSS). With PAPSS, payment facilitators—whether banks or emerging fintech ventures across Africa—will be able to plug in to make secure and instant payments on behalf of their customers.

It is said that, while money is the lifeblood of an economy, a well-implemented payment infrastructure is its circulatory system.

FULLY REALIZED, WHAT COULD THE IMPLEMENTATION OF AFCFTA AND PAPSS LOOK LIKE?

It is said that, while money is the lifeblood of an economy, a well-implemented payment infrastructure is its circulatory system. The implementation of PAPSS is, therefore, critical to facilitating the smooth operation of a continent-wide marketplace and offers benefits to important stakeholders in the African private sector:

* For African businesses:

Businesses across Africa will enjoy the benefit of receiving and making payments instantly, which will increase trust and trade volumes, and free up time previously lost while waiting to confirm payments. For instance, if a fashion house in Accra were to purchase kikoy fabric from a small fabric manufacturer in Kenya, it would be able to pay for the fabric instantly and in its own local currency. The fabric manufacturer in Kenya would receive payment instantly into its bank account, in its local currency, thereby skirting currently common delays in customs and tax procedures—freeing up time to respond quickly to the order from Accra.

* For African commercial banks:

For banks involved in payment clearing and settlement, the successful implementation of PAPSS means a decrease in liquidity requirements for settlements as well as their

¹ "The African Continental Free Trade Area: Economic and Distributional Effects." World Bank, 2020.

own payments. Consequently, there will be fewer constraints on the funds they hold for settlements, freeing up more money for other value-added services and initiatives. More importantly, these banks would have a reduced need to source for scarce hard currencies to support transactions between two African markets.

✱ **For policymakers:**

Streamlining value exchange procedures aside, the successful implementation of PAPSS could help trace informal small-scale cross-border trade—an important aspect of African economies that is rarely fully captured and reported in official trade statistics. As a result, these common transactions are often not taken into consideration by policymakers and foreign investors when making decisions, which leads to financial exclusion and underestimation of the export potential of African countries

✱ **Last-mile users:**

Some of the world's fastest-growing and groundbreaking fintechs can be found across Africa, especially in Egypt, Nigeria, Kenya, South Africa, and beyond. These fintechs provide last-mile access to thousands of people and small businesses that ordinarily cannot be reached by formal banking structures. Just imagine the far-reaching economic impact of PAPSS when the clients of fintechs and those of the commercial banks across Africa are connected to a common and instant payment rail.

Notwithstanding, if the devastating international trade disruptions brought about by the COVID-19 pandemic have taught us anything as a continent, it should be that investing in regional trade is vital for helping African countries absorb future economic shocks as well as for enhancing long-term sustainable economic growth and development.

While ultimately, the onus falls on African governments to fully implement the AfCFTA, PAPSS is positioned to help spur and fast track this implementation. This gives me hope that Africa's future, even in a post-COVID-19 world, is headed in a positive direction—a path that is paved with innovation, financial inclusion, prosperity, and economic policy reform.

Africa needs smarter investment in digital infrastructure: Strategies for enticing the private sector

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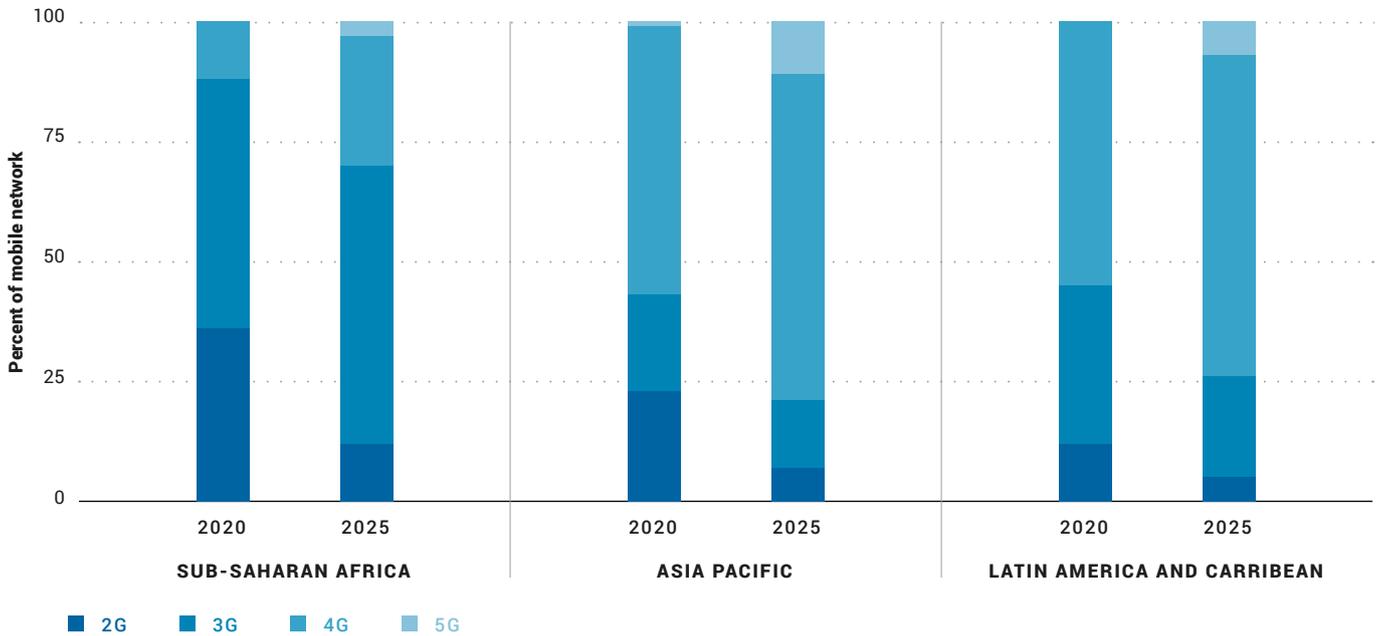
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Weak infrastructure is widely accepted as a fundamental limitation to growth in Africa.¹ Governments in the region struggle to meet the basic needs of residents, including access to food, education, health, and livelihoods, much less invest in critical, reusable infrastructure that could provide long-term solutions to social problems.

Philanthropy alone will not lead to the sustainable infrastructure and employment needed to secure long-term health and financial security for individuals and economic prosperity for all African nations. Yet, the development community tends to focus on funding shortfalls, calling for increased official development assistance (ODA), increased government spending despite Africa's rising budget deficit problem, and calling for the private sector to "collaborate," "partner," and "step up"—often euphemisms for donations.

¹ "Africa's Infrastructure: Great Potential but Little Impact on Inclusive Growth." *African Development Bank*, 2018. World Bank "Green, Resilient, and Inclusive Digital Infrastructure in Africa." *World Bank*, 2021.

FIGURE 5.3. MOBILE TECHNOLOGY IN SUB-SAHARAN AFRICA IS SLOWLY SHIFTING AWAY FROM 2G
 Currently, mobile networks in sub-Saharan Africa rely much more on older 2G and 3G network technology than other developing regions. By 2025, however, the use of 2G technology sub-Saharan Africa's network is estimated to drop significantly.



NOTE: Data for Asia Pacific includes Southeast Asia and excludes China, Hong Kong, Macao and Taiwan. Data for Latin American and the Caribbean includes Mexico. See "The Mobile Economy 2021." GSMA, 2021 for a detailed list.
SOURCE: "The Mobile Economy 2021." GSMA, 2021.

We would be better served as a global community to entice, encourage, and de-risk private sector engagement in the infrastructure challenge by channeling existing ODA, private philanthropy, and government resources towards creating an enabling environment for the private sector to innovate, deliver, and employ.

Instead, we should focus on the operational, legal, and commercial barriers to deploying sustainable infrastructure, and how we can invest more wisely to overcome those challenges. We need sustainable commercial models that enable service delivery and provide employment at scale.

By design, private sector solutions must be commercially sustainable in order to deliver at scale and long-term. We would be better served as a global community to entice, encourage, and de-risk private sector engagement in the infrastructure challenge by channeling existing ODA, private philanthropy, and government resources towards creating an enabling environment for the private sector to innovate, deliver, and employ.

One such example, where I have experience, is digital infrastructure. Digital infrastructure is not only a means to deliver aid and other critical services, but also enables commerce and, thus, the means for economic growth. Digital inclusion, particularly in the wake of the COVID-19 pandemic, has proven critical for filling gaps in physical infrastructure that leave the most rural and marginalized communities behind.

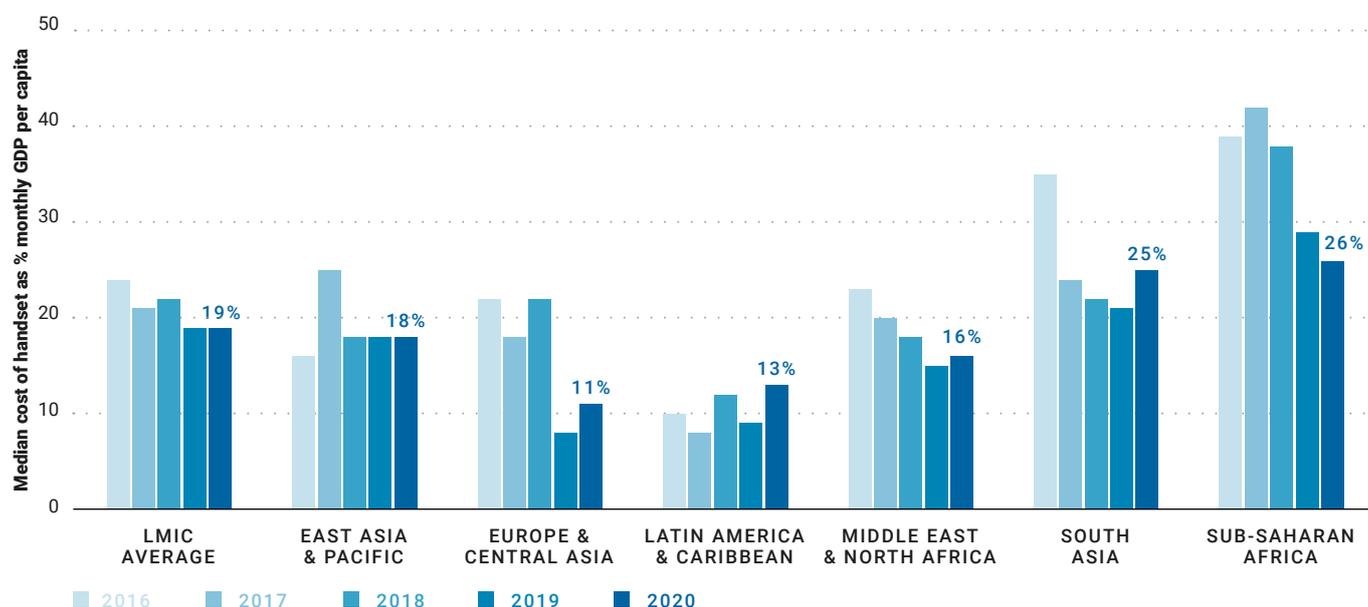
Developing and managing secure digital solutions requires extensive knowledge across issues like data privacy and security, interoperability standards, franchise management, biometric tokenization, device security, and more. This knowledge resides with the private sector companies that are investing billions to continually innovate, to prevent fraud, and to prevent bad actors from accessing personal data.

However, four fundamental challenges to private sector engagement in fragile contexts persist:

- * There is too much reliance on sub-standard, expensive products.**
 Too often multilateral institutions, governments, and donors spend billions on technologies, including internally-developed systems, which do not meet the highest standards of data privacy and security, putting the personal data of millions of users at risk. These are typically well-meaning yet misguided efforts to promote local innovation, or occur because public sector institutions believe they are saving money by developing

FIGURE 5.4. MOBILE PHONES ARE MORE AFFORDABLE IN SUB-SAHARAN AFRICA NOW, BUT STILL REMAIN THE MOST EXPENSIVE

Although internet-enabled mobile phones have become more affordable in Africa and throughout the developing world, entry-level mobile phones remain relatively more expensive in sub-Saharan Africa than any other low- and middle-income country region. Despite the lingering high cost of internet-enabled mobile phones in sub-Saharan Africa, their cost, as a percentage of monthly GDP per capita, has decreased one-third since 2016.



SOURCE: "The state of mobile internet connectivity: 2021." GSMA, 2021.

in-house. For example, U.N. agencies have internally built data platforms that collect sensitive data, like religion, use beneficiaries' data without informed consent, and may not meet best-in-class security standards.² Yet, private sector companies already have secure, interoperable digital infrastructures with data privacy by design that can be rapidly deployed in fragile, offline contexts. The UN could benefit from leveraging the innovation of the private sector, which has the potential to be quicker, less expensive, more scalable, and more secure than solutions developed in the public sector alone.

What if private sector capabilities were leveraged as they existed, and funding redirected to incentivize and de-risk private sector innovation for the gaps?

- **There are too few entities at the last-mile servicing rural communities.**

Companies such as mine have built data secure ways for banks, AgTechs, healthcare providers, and the like to deliver services to rural communities. However, we struggle to find entities with large agent networks to service and provide cash management capabilities at the last mile. Agent networks are critical for enabling rural commerce, and they provide high-value jobs. **What if donors and NGOs redirected funds towards building a last-mile capability that both local and global businesses could leverage?**

- **Sustainable commercial models are lacking.**

Today, requests for proposals (RFPs) are the primary commercial tool for governments, NGOs, and U.N. agencies to contract with the private sector. Yet the RFP is a blunt and poorly fashioned tool in digital areas where agencies do not know what they need, and multilateral institutions often preclude necessary upfront discussions with suppliers to avoid any appearance of impropriety. Moreover, qualifying processes are often market-by-market with a market potential of only a few thousand beneficiaries. This state of affairs precludes most large-scale actors from responding, as the opportunities are not commercially viable, and local actors often lack the capacity to respond to complex

2 Parker, Ben. "Audit exposes UN food agency's poor data-handling." The New Humanitarian, 2018.

So much more can be done with existing aid flows to build sustainable infrastructure and create employment—if private investment is incentivized.

RFPs that are not written in the local language. **What if private sector experts worked in concert with governments and development actors to develop a best-in-class solution architecture that private sector actors were paid to execute at an overall lower cost?**

✱ **The regulatory landscape for digital transactions in emerging markets is nascent, murky, and complex.**

Operating in these environments is unattractive to private sector companies that need to navigate limited yet rapidly evolving policies on data security and privacy, Know-Your-Customer (KYC) laws, and more. What's more, many governments are enacting on-soil regulations in ill-conceived attempts at data security, even though replicating systems in small markets adds significant cost to an already low/no profit economic model. Still worse, many supranational humanitarian and development actors actively collect and store sensitive data on laptops and other manners vulnerable to attack.

What if governments partnered with the private sector to develop regulations that created an enabling environment for innovation and deployment, while ensuring individual protections? (For a discussion on the future of data governance in Africa, see the viewpoints on pages [92](#) and [100](#).)

Helping communities across Africa access the critical services they need would benefit the entire world. So much more can be done with existing aid flows to build sustainable infrastructure and create employment—if private investment is incentivized. We need to create an efficient and effective model to deploy the private sector resources we have now—and in the digital age that must begin with the construction of a more effective digital infrastructure that can leverage the capabilities of private industry.

The private sector must do its part on data governance in Africa

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The last decade has seen an acceleration in the digitization of many aspects of our lives including financial services, commerce, education, and healthcare. Data gathering and exchange have accelerated alongside this swift uptake of digital engagement, and data has become the new essential commodity—with Africa as the next frontier. However, this rapid change brings along questions of data governance and privacy, especially as the implementation of the African Continental Free Trade Area (AfCFTA) moves forward. As the tech sector waits for regulators to catch up, individual companies can do more to protect consumers on their own.

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THE NEW OIL

Observing the commoditization of data as well as its attendant opportunities and challenges in Africa, it is hard to ignore that the analogy of data as the “new oil” is a powerful and prescient one. The commercialization of this resource can unlock considerable value for the continent in sectors critical for the development of thriving and connected economies. However, commercialization must be approached responsibly, as we have seen in the case of oil: If the exploitation of a resource is not well planned, unintended consequences—typically burdening the most vulnerable in our societies—arise.

OPPORTUNITIES FOR THE PRIVATE SECTOR TO STEP UP

Technology businesses should not wait to be the recipients of policy. As subject matter experts in the complex value networks and core infrastructure (e.g., cloud computing) that underpin their business model, they need to act quickly.

For robust data protection on the continent, policymakers and the private sector must work together to create and implement feasible regulations and best practices.

For robust data protection on the continent, policymakers and the private sector must work together to create and implement feasible regulations and best practices. Given the private sector's experience navigating the relevant technical issues in this complex space, tech companies' role in data governance should be twofold: 1) inform proposed policies and 2) create and implement their own high standards. Such actions should include:

- * Establish a self-regulating organization (SRO) to improve data policy relevance and enforcement.**

Bottom-up innovations from startups and civil society networks are building tools and forging a collective voice to address data inequality, constructing a new social contract between the tech industry and citizens.¹ In Southeast Asia, for example, the [Indonesia FinTech Association](#) serves as an SRO that works in close collaboration with the [Financial Authority](#) to define and enforce good data governance practices.

- * Implement proportional risk and accountability frameworks.**

The onus is on organizations to enforce data protection frameworks to build trust with all stakeholders.² Importantly, requirements must be robust while also being within reach. The accountability-based approach towards data protection requires organizations to tailor policies that consider the business needs and the risk environment. This type of engagement across public, private, and even social sectors not only can lead to better data protections for customers but also the development of standardized frameworks and approaches to increase the [efficiency of doing business](#).³

- * Invest in consumer education.**

As individuals, we make decisions on our data based on trade-offs: How much privacy do I give up in return for a service that is valuable to me? However, this data could be used for other purposes, often without the consent of consumers. Therefore, consumer education on the different ways that their data is being used is essential. While funding for such education is usually borne by government, multilaterals, and foundations for digital public good, we are [seeing the private sector stepping up](#) to join force.⁴

- * Build safeguards against digital harms.**

Data can improve the lives of the poor; however, it can also open back doors that can harm individuals, businesses, and societies. To address this tension between the helpful and harmful potential of data, [the World Bank's World Development Report 2021: Data for Better Lives](#)⁵ calls for a new social contract that enables the use and reuse of data to create economic and social value, ensures equitable access to that value, and fosters

Challenges from Disinformation and Digital Harm - The World Economic Forum paper, [Pathway to Digital Justice](#), focuses on the victim's perspective concerning digital harm. Digital harm can happen to anyone and is particularly challenging when the harm is online and across multiple jurisdictions. What is the redressability for the victim of digital harm? The harm goes beyond an individual victim; it could have a silencing effect on women and minority groups, shutting them out from participation in society.

1 Omidyar Network. "The push for fairness, equity, and safeguards in the data economy." Medium, 2021.

2 According to Mr. Yeong Zee Kin, Singapore Deputy Commissioner, Personal Data Protection Commission, "Organizational accountability goes beyond being answerable to regulators. It is to win the trust of all the organizations' stakeholders including its consumers."

3 One example is the "Data Sharing Handbook"—a joint project between the Association of Banks in Singapore and the Singapore Monetary Authority, which has made safe data sharing possible between banks and fintechs.

4 "Helping equip South Africans with digital skills needed for economic recovery." Microsoft, 2020.

5 "World Development Report 2021: DATA FOR BETTER LIVES." World Bank, 2021.

The potent mix of digital technology and data can only offer an improved and sustainable future for the continent if there is a cohesive plan of action for infrastructure, governance, and regulation.

trust that data will not be misused in harmful ways. Responsible artificial intelligence (AI) is a movement that ensure data-intensive AI systems are ethical and fair.⁶

✱ **Break data silos and empowering consumer with choices.**

It is important that the interests of consumers are protected. Moreover, value must be shared fairly between businesses and consumers, which necessitates proactively addressing issues such as data silos or complex consent artefacts that unfairly disadvantage consumers or competitors. Big Tech (Apple, Facebook, Google, Microsoft and Twitter) formed the Data Transfer Project for an “open-source, service-to-service data portability platform such that consumers could easily move their data between online service providers whenever they want.”⁷

The potent mix of digital technology and data can only offer an improved and sustainable future for the continent if there is a cohesive plan of action for infrastructure, governance, and regulation. Africa needs a growth-oriented governance approach; such an approach will nurture business innovation and ensure that benefits are distributed fairly, while also maximizing protections and minimizing harms for customers. The private sector should not wait for regulators to protect consumer data in Africa. It needs to start now.

⁶ “Data fairness: A new social contract for the 21st century economy.” MIT Technology Review, 2021.

⁷ “About us.” Data Transfer Project, 2021.

Africa and the future of digital diplomacy

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Digital diplomacy¹ refers to the broad use of technology, particularly the internet and other information and communication technologies (ICTs)-based innovations, in the conduct of diplomacy. With new technology providing access to instant information and interactive online communication, the use of these tools by diplomats and government officials is becoming widespread. In fact, the internet has three fundamental impacts on diplomatic relations: First, it multiplies and amplifies the number of voices and interests involved in international policymaking. Second, it accelerates and frees the dissemination of information—accurate or not—about any issue or event. Third, it enables traditional diplomatic services to be delivered faster and more cost effectively.²

The COVID-19 pandemic has further revealed the great extent to which the modern world depends on technology and digital tools. Like every other aspect of life, diplomacy also had to go “digital,” with many activities transferred online due to pandemic-related gathering restrictions. Zoom, Google Meet, and other such platforms became important platforms for global decision-making gatherings, diplomatic meetings, and conferences as travels became impossible or infeasible. In many ways, the pandemic’s disruptive element has helped unleash new forms of virtual decision-making processes.

During this disruptive time, African countries have embraced digital diplomacy through these virtual processes. For example, despite the pandemic, African governments, the

¹ Adesina, Olubukola S. “The Nigerians in Diaspora Commission (NIDCOM): An example of digital diplomacy in practice.” Africa Portal, 2020.

² Westcott, Nicholas. “Digital Diplomacy: The Impact of the Internet on International Relations.” Oxford Internet Institute Working Paper, 2009.

African Union (AU), and non-governmental organizations have held several virtual peace and security conferences, bringing together thousands of African stakeholders.³ In May 2020, the AU successfully hosted a “Silencing the Guns” online conference, which was spread over three weeks. Participants attended both physically and virtually, contributing to the debate and making new connections. African leaders—e.g., AU Chairman President Cyril Ramaphosa of South Africa—have been holding online meetings with stakeholders since the beginning of the pandemic. These online discussions have not only reduced the costs of bringing together key stakeholders, they have also enabled faster decision making, as more participants, who may not have attended ordinarily for various reasons, are available for negotiations.

However, these successes do not necessarily imply that virtual meetings should replace the tradition of face-to-face interactions. Instead, they should be complementary. Physical meetings are important because negotiations often take place on the sidelines of international gatherings, through impromptu discussions between global leaders at tea or lunch breaks, or a chance encounter in the corridor or rest room and so on. Also, physical meetings provide an opportunity for participants to observe and interpret body language and emotions of the parties, which may help in decision making. Thus, hybrid format of physical interactions and online meetings seem to be the best approach for diplomatic engagements. Meetings should be held physically as they become more focused on decision making and high-level representation, such as issues that demand high level of secrecy, involve conflict situations, or complex negotiations.

At the same time, social media platforms—including Twitter, Facebook, WhatsApp, and Instagram—have proven to be powerful instruments for influencing the public, especially in terms of enhancing a country’s image, among many other uses. For example, many African leaders, ministries of foreign affairs (MFAs), and other related agencies operate social media accounts, especially Twitter and Facebook. Notably, Nigeria’s President Muhammadu Buhari is the most followed African leader with more than 5 million followers on Facebook, Instagram, and Twitter combined.⁴ He is followed by Ghana’s President Nana Akufo-Addo and Rwanda’s President Paul Kagame with more than 4 million followers on all three social networks combined. Kenya’s President Uhuru Kenyatta was the most followed African leader with more than 7 million followers on Facebook, Instagram, and Twitter combined until he deactivated his accounts in March 2019, which according to him was due to the constant insults and name-calling that flooded his timeline.⁵ Furthermore, at the height of the COVID-19 pandemic, social media platforms helped many MFAs and agencies to maintain ties with some of their country’s citizens abroad and to provide them with valuable consular assistance.⁶

Social media platforms... have proven to be powerful instruments for influencing the public, especially in terms of enhancing a country’s image, among many other uses.

Digital diplomacy, however, faces a number of challenges in Africa, including poor ICT infrastructure (e.g., reliable and affordable internet and power). Top leaders have also shown distrust of the internet, with several African governments (e.g., Uganda, Tanzania, Zimbabwe, Togo, Burundi, Chad, Mali, and Guinea) controversially shutting down or restricting access to the internet and social media platforms. The Nigerian government also placed a ban on Twitter on June 4, 2021, two days after the company deleted a tweet by President Buhari that threatened to punish regional secessionists, which Twitter said violated its rules.⁷

These obstacles hold Africa’s digital diplomacy back. In essence, as a supplement to traditional diplomacy, African countries need to embrace the full potential of digital diplomacy in order to advance their foreign policy goals, extend international reach, and influence foreign audiences in the cyber space. Importantly, African countries should leverage their position in the global diplomatic arena with the use of social media. By being active on the social media platforms, MFAs can accelerate the dissemination of accurate information and enable traditional diplomatic services to be delivered faster and more cost effectively. Moreover, they can amplify the voices and interests of their countries in the international community, thereby boosting the countries’ image and furthering their goals.

3 Carvalho, Gustavo De. “Africa Must Unmute its Mic as E-Diplomacy Takes Root.” Institute for Security Studies, 2020.

4 “Africa.” Twiplomacy, 2021.

5 Kejitan, Vincent. “Uhuru: Why I Deactivated My Twitter Account.” Standard Media, 2020.

6 Adesina, Olubukola S. “The Nigerians in Diaspora Commission (NIDCOM): An example of digital diplomacy in practice.” Africa Portal, 2020.

7 “Muhammadu Buhari: Twitter deletes Nigerian leader’s ‘civil war’ post.” British Broadcasting Corporation News, 2021.

The role of cryptocurrencies in sub-Saharan Africa

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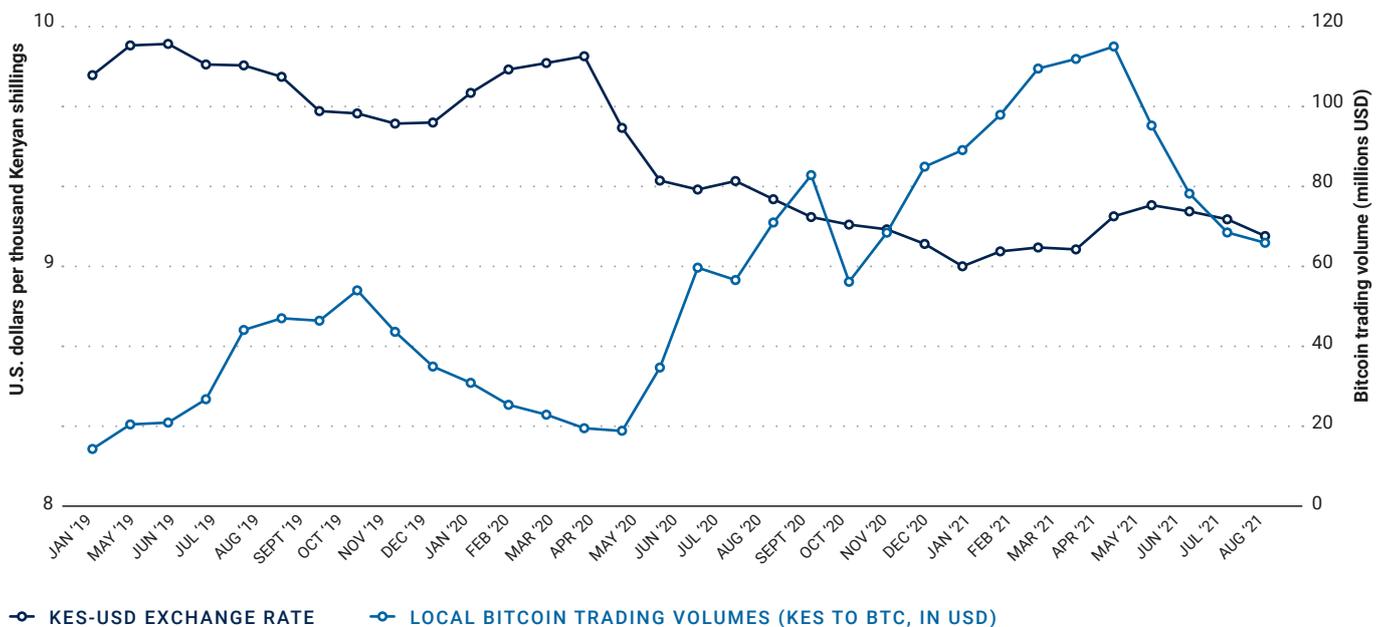
@bantigito

Although the African continent¹ receives only 2 percent of the global value of all cryptocurrencies, their rapid growth will transform financing in an increasingly digital and urban sub-Saharan Africa. In fact, a recent report by Chainalysis, a blockchain data platform, found that between July 2020 and June 2021, Africans received \$105.6 billion worth of cryptocurrency payments—an increase of 1200 percent from the year before. Notably, Chainalysis ranks Kenya, South Africa, and Nigeria among the top-10 countries for cryptocurrency use.^{2,3}

Because cryptocurrency platforms bypass traditional banking services by introducing decentralized peer-to-peer lending services, they can help level the economic playing field and expand finance options to underserved customer markets. Indeed, cryptocurrencies are well-positioned to address a number of economic challenges in the region, from

FIGURE 5.5. CRYPTOCURRENCY AS A HEDGE AGAINST CURRENCY DEVALUATION: EVIDENCE FROM KENYA

Evidence from Kenya suggests that, early in the COVID-19 pandemic, the trading volume of bitcoin in Kenya and the value of the Kenyan shilling were negatively correlated. In other words, as the price of the Kenyan shilling fell, Kenyans sold their shillings and purchased bitcoins.

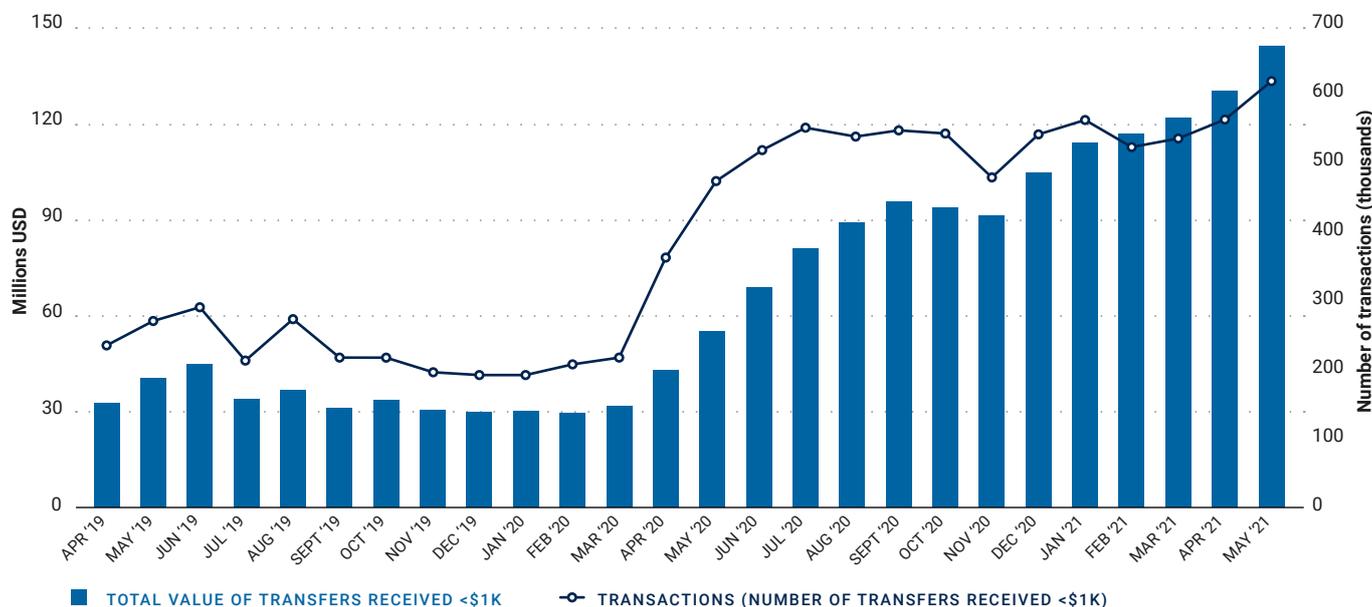


SOURCE: "2021 Geography of Cryptocurrency Report." Chainalysis, 2021.

1 Not including Egypt.
 2 Chainalysis weighs total value received, retail value received (transfers over \$10 thousand), and peer-to-peer exchange volume (number of transactions) in its rankings.
 3 "The 2020 Geography of Cryptocurrency Report." Chainalysis, 2020.

FIGURE 5.6. THE GROWING ROLE OF CRYPTOCURRENCY FOR REMITTANCE PAYMENTS IN AFRICA

Cryptocurrencies hold enormous potential to improve remittance payment systems, offering a fully digital, rapid, and low-cost cross-border payment platform. Whereas international wire transfer fees cost an average 7 percent of the total amount sent and could take several days to clear, some cryptocurrencies are designed to support foreign exchange and money transfers for less than a U.S. penny and process payments in 3 to 5 seconds. Cryptocurrency transfers associated with remittance payments have experienced rapid growth, both in terms of value and volume, since the start of the COVID-19 pandemic.



NOTE: It is impossible to decipher the intended purpose of individual cryptocurrency transfers, so many experts use retail-sized transfer payments (less than \$1000) as an indication of cryptocurrency usage in remittance networks. **SOURCE:** "2021 Geography of Cryptocurrency Report." Chainalysis, 2021.

Because cryptocurrency platforms bypass traditional banking services by introducing decentralized peer-to-peer lending services, they can help level the economic playing field and expand finance options to underserved customer markets.

reducing financing gaps for micro-, small-, and medium-sized enterprise (MSME) sectors to facilitating the transfer of remittances. In fact, of the \$48 billion remitted to sub-Saharan Africa in 2019,⁴ Chainalysis estimates that up to \$562 million worth of remittance payments were facilitated by cryptocurrencies such as Ripple.^{5,6} Cryptos have also accelerated affordable mortgages and are accommodating irregular income patterns that limit credit.

Empowa, a Mozambique fintech start-up, exudes the spirit of this new movement—the democratization of finance—by crowdsourcing funding to finance residential real estate development through cryptocurrency.⁷ As such, it demonstrates decentralized finance’s proof of concept in Africa, circumventing traditional bottlenecks in financing homes and harnessing the blockchain platform to channel finances toward developers and innovators.⁸ Similarly, Pezesha, a Kenyan fintech focused on MSME credit scoring and loan origination, unlocked new capital by converting the cryptocurrency community into MSME lenders in East

Top 10 Countries in Crypto Adoption

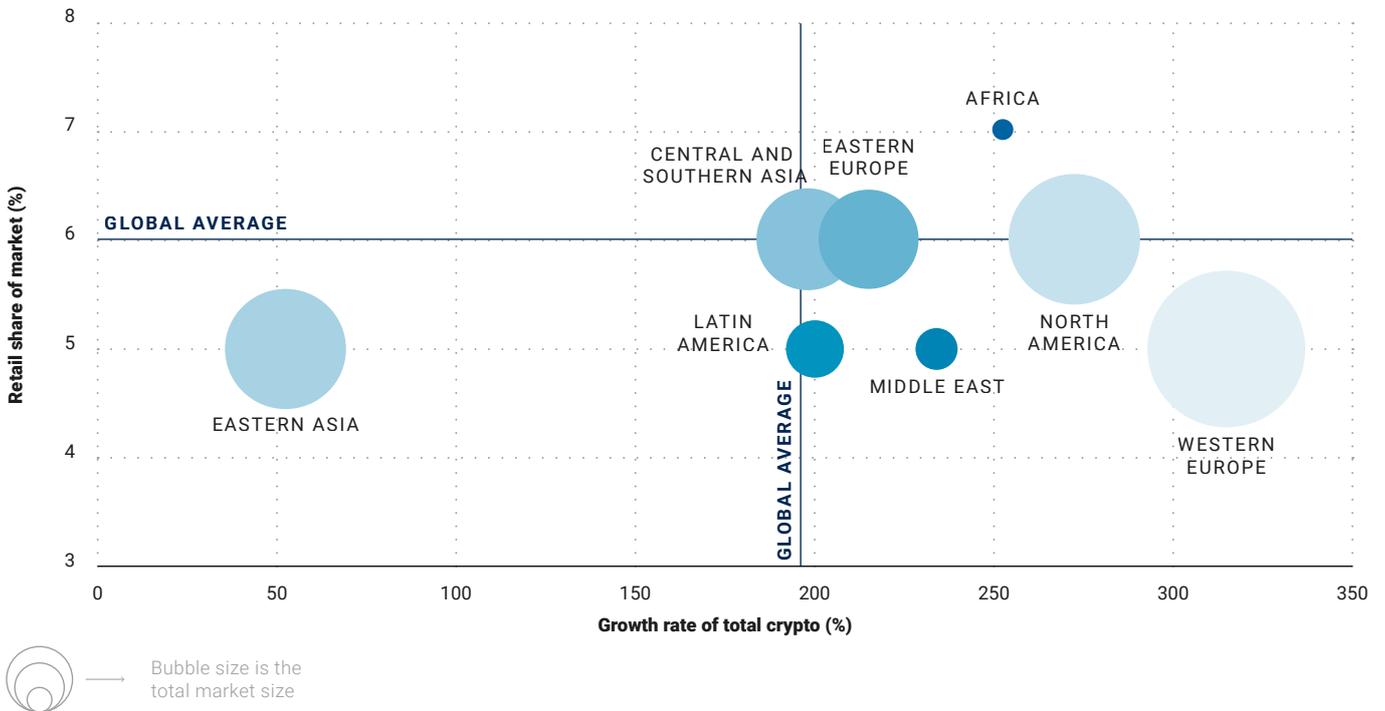
1. Ukraine
2. Russia
3. Venezuela
4. China
5. Kenya
6. United States
7. South Africa
8. Nigeria
9. Columbia
10. Vietnam

Source: "The 2020 Geography of Cryptocurrency Report." Chainalysis, 2020.

4 "World Bank Predicts Sharpest Decline of Remittances in Recent History." World Bank, 2020.
 5 This estimate is based on retail-sized cryptocurrency transfers under \$10,000.
 6 "The 2020 Geography of Cryptocurrency Report." Chainalysis, 2020.
 7 Empowa: White Paper, 2021.
 8 Empowa is partnering with Mozambiquan affordable housing developer, Casa Real, to extend access to affordable mortgages.

FIGURE 5.7. AFRICA'S CRYPTOCURRENCY MARKET IN A GLOBAL CONTEXT

Africa is the fastest-growing cryptocurrency market among developing economies and the third-fastest growing market in the world. However, it also remains the smallest. Notably, Africans living abroad have begun using the novel digital currency to send remittance payments back home. In fact, Africa also comprises the highest ratio of retail crypto transfers, which is an indicator of crypto's usage for remittances.



NOTE: Retail market represents transfer payments below \$10,000. Retail share of market data collected from July 2020 – June 2021. Growth rate of cryptocurrency accounts for the entire market and compares data from June 2019 – July 2020 and July 2020 – June 2021.
SOURCE: "2021 Geography of Cryptocurrency Report." Chainalysis, 2021.

Blockchain technologies are the future, and any effort to ban them—or even excessively intervene in their operations—would meet the same fate as other state attempts to circumscribe behavior.

Africa, introducing a global pool of lenders to invest directly in Kenyan enterprises. It saw a threefold turnover for one of its short-term loan portfolios in a four-month period. This venture enables foreign lenders to send USD stablecoin (a type of digital currency that is pegged on some external asset, such as fiat currency or other assets like gold), convert it to Kenyan shillings, and leverage other credit-scoring facilities to bridge the capital divide between MSMEs and investors. As of this writing, Pezesha has facilitated over 3,751 loans in Kenya and 344 in Ghana.

Countries with crypto exchanges but no regulatory framework: Cameroon, Côte d'Ivoire, Ghana, Nigeria, Senegal, and South Africa

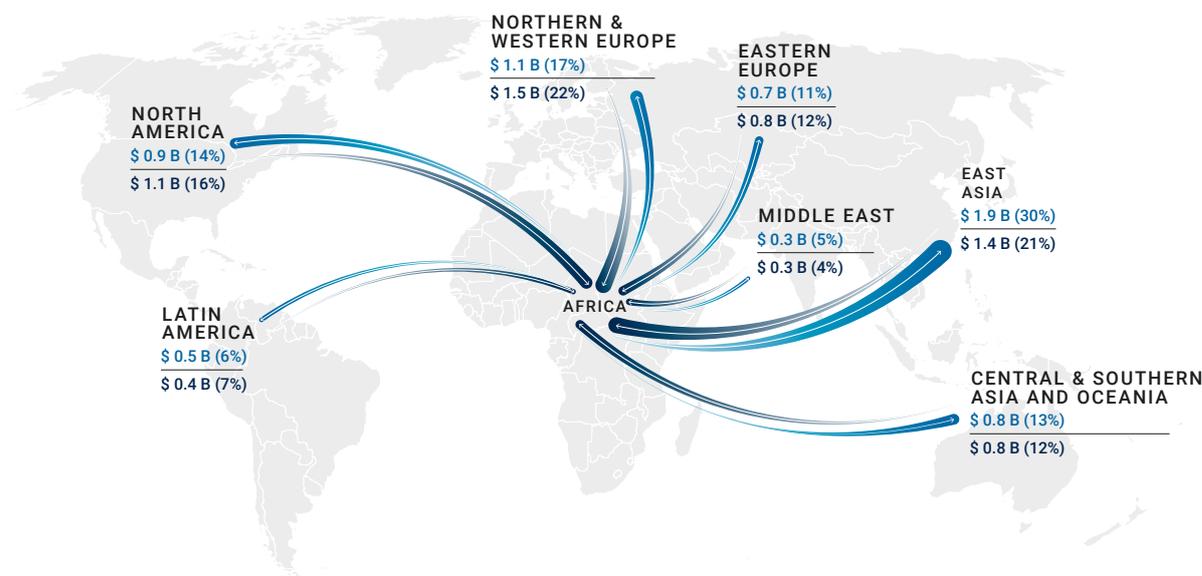
Countries that allow trading but do not provide an exchange: Botswana, Kenya, Zimbabwe

While decentralized finance and blockchain technology are scalable and have been operationalized in other countries in other countries and regions, African policymakers have struggled with how to reconcile cryptocurrencies with their existing monetary system. Many countries in Africa have, in fact, overlooked this financial innovation—maintaining crypto exchanges but failing to offer a regulatory framework or begrudgingly allowing trading but not providing their citizens an exchange.

Government cannot “shut the stable door after the horse has bolted.” Blockchain technologies are the future, and any effort to ban them—or even excessively intervene in their operations—would meet the same fate as other state attempts to circumscribe behavior. Moreover, restricting cryptocurrencies at the moment, when they are facilitating innovations and brimming with potential, would undermine financing of critical sectors

FIGURE 5.8. AFRICAN CRYPTOCURRENCY FLOWS BETWEEN COUNTRIES

The volume of cryptocurrency flows between Africa and the world offers a novel lens to analyze the continent's financial connections. Northern and western Europe, East Asia, and North America, respectively, comprise the largest regional shares of cryptocurrency inflows into Africa, accounting for approximately 59 percent of the \$6.7 billion sent to Africa via cryptocurrency between July 2019 and June 2020. These dominant connections correspond with the size of African immigration networks abroad, who send remittances back home, as well as the growing involvement of China in African commerce and the presence of Chinese nationals working in Africa. Conversely, East Asia receives more than twice the amount of cryptocurrency outflows from Africa than Northern and Western Europe and North America, the second- and third-largest destinations of cryptocurrency sent from Africa.



■ VALUE SENT FROM AFRICA ■ VALUE SENT TO AFRICA

NOTE: Percentages in parentheses represent a region's respective share of inflows and outflows to/from Africa.

SOURCE: "2020 Geography of Cryptocurrency Report." Chainalysis, 2020.

like MSMEs, affordable housing, and remittance payments right when Africa needs these options most.

Still though, government does—and should—have a role to play. Kenya, for example, has recently established a “regulatory sandbox”⁹ to crowd-source financing for MSMEs. This sandbox, according to the Kenyan Capital Markets Authority, is a “tailored regulatory environment that allows for the live testing of innovative capital markets related products, solutions and services with the potential to deepen and develop the capital markets prior to launching into the mass market.”¹⁰ In other words, Kenya’s approach to artificial intelligence and blockchain was to offer a safe space for the supervision of burgeoning technologies, techniques, or services with the potential to benefit the public. This approach allows the state to encourage experimentation and development without officially authorizing new practices. In addition to building capacity to track and trace all transactions, ensuring proper identification for all citizens (to validate clients and ensure the security of transactions), and shoring up a robust cybersecurity system, countries in Africa should establish their own regulatory sandboxes.

While no one can predict the future of cryptocurrencies, what we do know is that their novelty requires an equally nontraditional regulatory approach—one as invested in the virtues of experimentation and entrepreneurship as the practices it aspires to oversee.

9 “Capital Markets Authority Regulatory Sandbox.” Capital Markets Authority of Kenya, 2021.

10 “What it is: Capital Markets Authority Regulatory Sandbox.” Capital Markets Authority of Kenya, 2021.

Developing an effective data governance framework to deliver African digital potentials

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Rapid digitalization has the potential to enhance structural transformation among African countries as well as galvanize progress on regional developments like the recent African Continental Free Trade Area. However, these benefits are not guaranteed given the multipronged threats in the digital space that can limit trust and curtail the adoption of such innovations. Indeed, the platform-based business model that dominates the digital economy raises fundamental issues about data protection and citizens' privacy. Likewise, the monopoly market structure that characterizes the digital platforms implies a winner-takes-all paradigm, leaving less for developing economies. Rising cybercrime, ransomware, and digital identity theft pose significant threats: African economies lost over \$3.5 billion through cyberattacks in 2017 alone.¹ The more worrisome threat emanates from the rise in the number of African states with spyware, surveillance, censorship, and internet shutdowns. This trend is affecting trust in the digital space.

The intersections of these threats could significantly affect the transformational impacts of digitalization; hence, there is a need for a data governance framework that maximizes the potential gains (through enablers) and limits the threats (through safeguards).

STATE OF DATA GOVERNANCE IN AFRICA

- **There is a proliferation of laws and regulations on data protection.**

Between 2012 and 2021, the number of African countries with at least one form of data protection law tripled from 12² to 28.³ Though the current adoption rate is 52 percent for the African region, it is still the lowest relative to other regions. Notably, the data governance framework tends to show more emphasis on fostering safeguards (e.g., data protection, privacy), and less focus on enablers (e.g., data portability, localization)—but both efforts are crucial.

- **Implementation remains a challenge.**

Institutions charged with regulating data governance have not evolved with the dynamic needs and peculiarities of the digital space. Regulatory inertia and capacity challenges that characterize broader governance in Africa are manifesting in data governance implementation, given that this structure is embedded within the existing public institutional framework. The implementation gap is further worsened by the limitations in human and financial capacity of regulatory agencies, and power and knowledge asymmetry between platform firms and mostly small and resource-constrained African countries.

- **There is more progress at the national level than through regional and multilateral frameworks.**

Given the fragmented data policy environment and capacity gap in Africa's digital space, scaling up regional efforts is crucial for addressing the inadequacies in the national efforts: Even developed countries like those in Europe have found a regional approach to be an effective means of addressing power and knowledge asymmetry. Currently, only

¹ "Africa Cyber Security Report 2017." Serianu, 2017.

² Greenleaf, Graham. "Global Data Privacy Laws 2019: 132 National Laws & Many Bills." Privacy Laws & Business International Report, vol. 157, 2019, pp. 14-18.

³ "Data Protection and Privacy Legislation Worldwide." United Nations Conference on Trade and Development, 2021.

eight African countries have ratified the [Malabo Convention](#),⁴ the regional-led approach for data protection and cybercrime law. Similarly, only six African countries are participating in the [World Trade Organization's e-commerce plurilateral negotiations](#),⁵ which will set up new global trading rules for electronic commerce and trade.

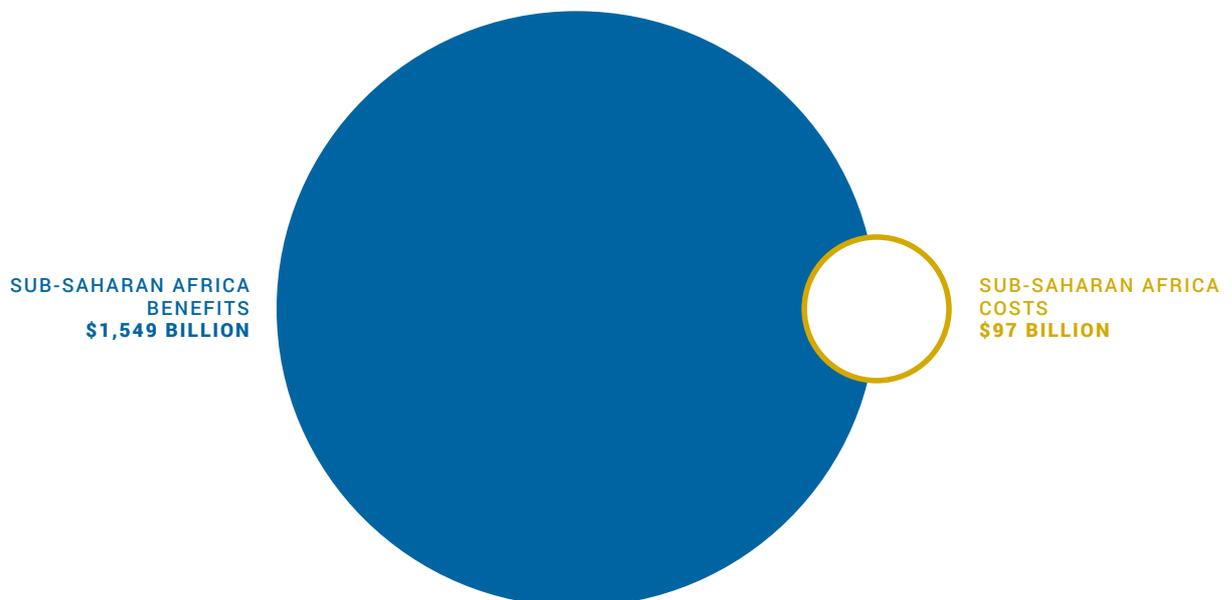
RECOMMENDATIONS

Policymakers must build checks and balances into the data governance framework, as a monopoly in data governance, either by government or the private sector, will hinder digital development.

- Policymakers should scale up efforts on “enabler” laws, especially around e-commerce, for safe and secure financial settlements, improved and better enforcement without recourse to data protectionism, and enabling cross-border data flows. In general, enhancing the implementation capacity with investment in finance, manpower, and technical skills of data regulatory authorities is important to ensuring data governance supports development outcomes.
- Policymakers must build checks and balances into the data governance framework, as a monopoly in data governance, either by government or the private sector, will hinder digital development. Civil society accountability and regional cooperation are also needed to limit state abuses as well as platform companies’ abuse resulting from their dominance and gatekeeper roles in the digital space.
- National and regional leaders must enhance collaboration and coordination around strengthening regional data governance, sharing mechanisms and experiences for best practices in regulating the digital space, and committing more to multilateral frameworks for data governance.

FIGURE 5.9. ECONOMIC BENEFIT OF ACHIEVING UNIVERSAL INTERNET ACCESS

The cost to achieve universal internet access is greatly overshadowed by its downstream economic benefits. These economic gains are estimated to be more than 15-fold greater than the cost of implementing universal internet access in sub-Saharan Africa.



NOTE: Universal internet access is defined as at least 4G or equivalent connection for 90 percent of the population over 10-years-old

SOURCE: “The Progressive Case for Universal Internet Access: How to Close the Digital Divide by 2030.” Tony Blair Institute For Global Change, 2021.

4 “List Of Countries Which Have Signed, Ratified/Accessed to the African Union Convention on Cyber Security and Personal Data Protection.” African Union, 2020.

5 “Data Governance in Africa - Pathways For Strengthening Confidence In The Digital Economy.” Centre For the Study of the Economies of Africa, 2021.

06

**AFRICA'S
EXTERNAL
RELATIONS:
REINVENTING
AND PURSUING
NEW
PARTNERSHIPS**

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The tips of the butterfly: Linking East Asia and Africa

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In the late 1990s, South Africa's then-Trade and Industry Minister Alec Erwin likened the country's trade strategy to a "butterfly," according to which the thorax ran north-south to Europe and North America, while the "wings" oriented west-east were to link Africa with Latin America and Asia.

Erwin's concept promised much then, as now, for a diversification effort, but so far has delivered less. Still, there is much to gain from closer regional ties, in at least two respects.

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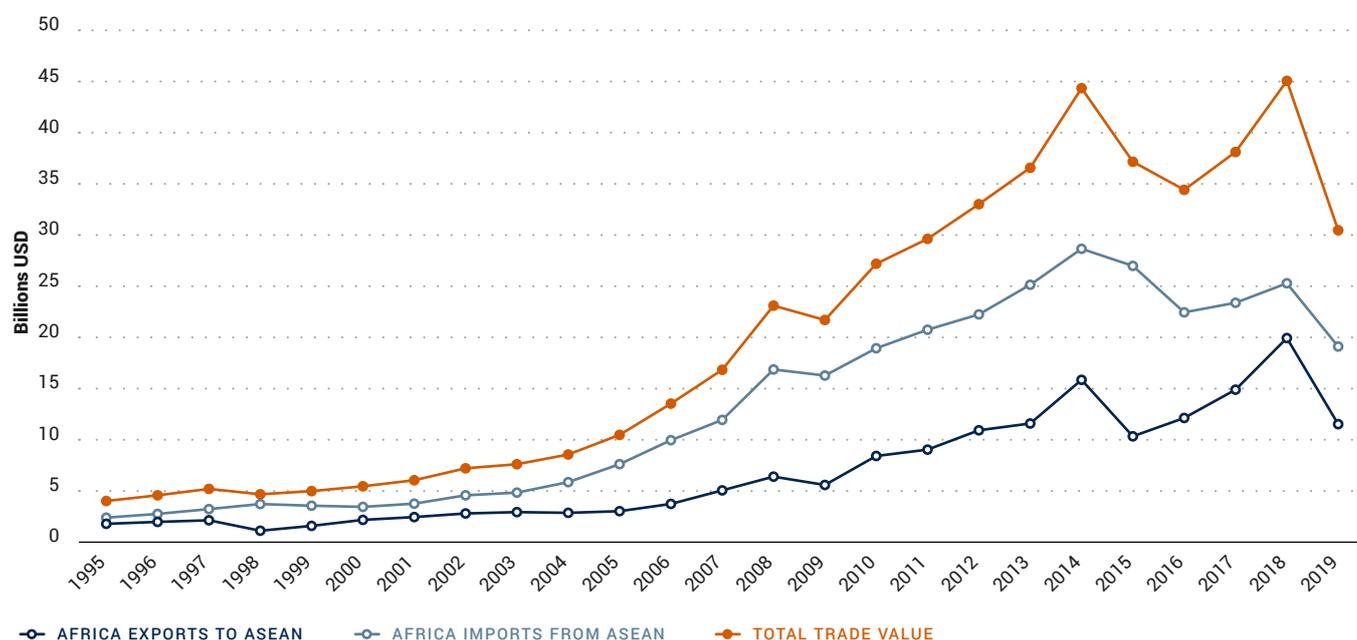
The first of these is underscored by the growth and nature of economic relations. While trade relations between Africa and Asia have burgeoned, they remain lopsided; Africa is primarily a source of raw commodities, Asia an exporter of finished products. This result speaks to the relative development and diversification experience of the two regions over the last 60 years.

Moreover, the trend also hints at the second benefit of closer regional ties: Africa does not have to reinvent the development wheel in learning from Asia's experience.

That more than 1 billion people have been lifted worldwide out of extreme poverty since 1990s is largely due to developments in East Asia—and in China in particular.

FIGURE 6.1. AFRICA-ASEAN TRADE VOLUME, 1995-2019

Trade between Africa and ASEAN countries grew rapidly in the 10 years between 2004 and 2014. Both exports and imports fueled the rise in trade. Since 2014, trade between the two blocs has leveled off as African imports with ASEAN receded.



SOURCE: Authors' calculations, WITS Trade Flow, 2020.

THE ASIA STORY HAS LESSONS—BOTH GOOD AND BAD—TO SHARE

Not so long ago, many Asian countries found themselves under circumstances very similar to much of Africa today: high levels of poverty, commodity dependent, political and social instability, and with few prospects of employment for burgeoning urban populations.

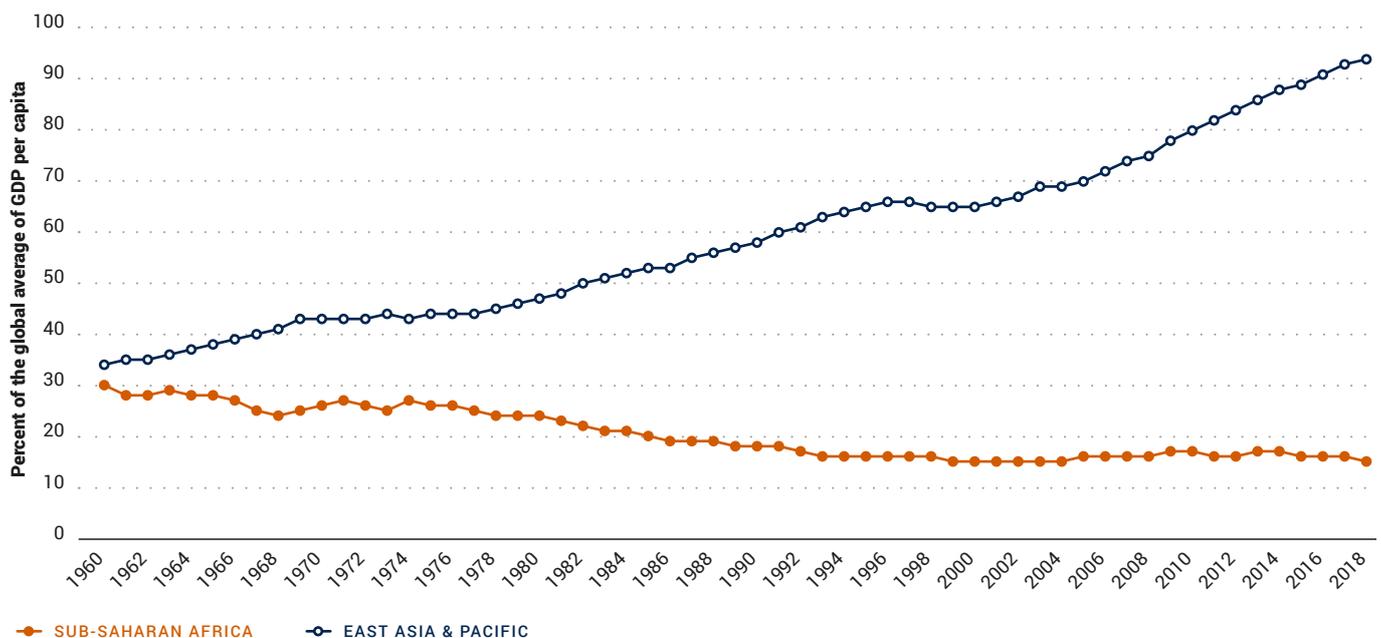
The transformation started with Japan after World War II, when it redirected its industrial prowess towards consumer manufacturing rather than imperialist ambition. Then followed the “Asian Tigers”, as South Korea similarly transformed itself from the debris of the Korean War. Between 1962 and 1989, the Taiwanese economy grew at nearly 10 percent each year. The same happened in Singapore between 1967 and 1993. And so followed others. Now, the 620 million-person, 10-country ASEAN (Association of South East Asian Nations) grouping¹ has seen its average Human Development Indicator improve from 0.543 to 0.719 between 1990 and 2018, reflecting the region’s impressive improvements in both the expectancy and quality of life.²

Then along came China. The sheer scale of its population coupled with an average of nearly 10 percent annual growth has been responsible for three-quarters of the global poverty alleviation effect by lifting 680 million people out of misery, reducing its extreme-poverty rate from 84 percent to just 10 percent in 33 years starting from 1980. As a consequence, over half of the world’s poorest now live in sub-Saharan Africa.

The importance of learning from the example of others, and looking forward, not backwards, are two of the central lessons from East Asia’s development revolution. There

FIGURE 6.2. REGIONAL GDP PER CAPITA RELATIVE TO THE WORLD’S GDP PER CAPITA

In 1960, the average GDP per capita of the world was just \$445. At \$134, sub-Saharan Africa’s GDP per capita was 30 percent of the world’s average. East Asia and the Pacific’s GDP per capita was slightly higher, at \$151. However, the relative GDP per capita of these two regions have diverged sharply since then. Now, East Asia and the Pacific’s GDP per capita is almost equivalent to the global average (\$11,345), while sub-Saharan Africa remains at 15 percent of that number.



NOTE: Data are in constant 2010 USD.

SOURCE: Authors’ calculations, World Development Indicators, 2019.

1 ASEAN includes: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

2 “Human Development Reports.” United Nations Development Program, 2019.

FIGURE 6.3. LESSONS FROM THE ASIAN EXPERIENCE

WHAT ASIA DID	WHAT AFRICA SHOULD AVOID
Listen to business	A focus on commodities alone
Ensure openness	Mistake trading for development
Instill the basics: political and macro stability	Infrastructure absent a package of logistics
Invest in education and skills	Reattempt import substitution
Import ideas and talent, and learn	Ignore the environment for the next generation
Endlessly improve productivity	Lose not use the upcoming demographic change
Attach a laser-like focus to job creation.	Attempt authoritarianism as a political solution

are others: The premium of good leadership, rolling out the “basics” from agriculture to infrastructure, and the central importance of openness (summarized in Table 6.1).

Despite the obvious differences, Africa and Asia share many similarities: In fact, East Asia seemed to have very few advantages over Africa at the point of decolonization.

Traditional East Asian societies were often characterized by ethnic disunity, frail institutions, limited governance outside of the capital, weak democracy, subsistence agriculture, fragmentary external trade linkages, and acute social stratification—conditions prevalent in many African states.

Traditional East Asian societies were often characterized by ethnic disunity, frail institutions, limited governance outside of the capital, weak democracy, subsistence agriculture, fragmentary external trade linkages, and acute social stratification³—conditions prevalent in many African states. Both share a history of commodity and colonial exploitation, where the conquerors were sharply divided from the conquered by race, though there was a tendency on the part of the colonizers to favor some local groups over others.

East Asia has prospered in spite of this legacy. While most East Asian countries had to accept a complex ethnic make-up as a result of colonial involvement—as did Africa—this situation, in most cases, has not resulted in endemic instability. East Asia, too, has had to cope with weak human capital, yet its states have, by and large, quickly turned their people into an asset through investment in education. While Africa’s institutional capacity is cited as a structural developmental impediment, some countries in Southeast Asia have grown economically with institutions at independence far worse resourced than those in African countries. Few African countries, after all, can claim the bitter cost and damage wrought by the wars in Vietnam, Laos, and Cambodia.

Whereas some Asian countries enjoyed especially large aid flows (South Korea and Taiwan, for example) and continue to do so (such as Vietnam), they did not allow themselves to become dependent on this single source of income. Most Asian countries have put aid to good use, in part because of firmer local ownership of projects.

Similarly, a more conducive policy environment also helps to explain why some East Asian countries have used their significant natural resource endowments to their advantage (Vietnam, again, or Malaysia, for instance) without becoming overly locked into commodity production and, hence, vulnerable to price fluctuations.

The regions share a parallel on corruption. Africa’s average ranking in 2018, for instance, on Transparency International’s Corruption Perceptions Index is 32/100; ASEAN scores 42/100. (The world average is 43, with higher scores indicating better governance.)⁴

³ Osborne, Milton. *Southeast Asia: An Introductory History*. Allen & Unwin, 2013.

⁴ “Corruption Perceptions Index.” Transparency International, 2021.

The difference in development results between the regions does not originate in political systems either,⁵ even though for some, East Asia's development success has been used to justify authoritarianism, given that the region's economies have managed high economic growth rates without full political rights.

Rather, a lot of East Asia's success has been down to leadership, policy style, and governance substance.

Overall, the most notable differentiating factor between the regions of Africa and East Asia is in the relationship between government and the private sector.

Key aspects of Asia's relative economic success—including high spending on education, bureaucratic responsiveness, attractive policy for business investment, low wages, high productivity, investment in infrastructure, raised agriculture outputs as an initial spur to growth, and an overwhelming focus on competitiveness—are routinely overlooked by advocates for autocracies.

Those East Asian states that attempted centrally planned economic development were a catastrophe, just as the model has, too, proven a disaster in the African countries pursuing this path. Asian countries—e.g., China, Cambodia, Vietnam—that moved away from this model immediately prospered.

Overall, the most notable differentiating factor between the regions of Africa and East Asia is in the relationship between government and the private sector. Investment growth that diversifies the economies and creates jobs, notably in industry, in Africa has remained comparatively very low.

The extent of economic openness, not only to trade and capital but also technology and the ideas that go with it has been key in these success stories. The figures are stark. Whereas its population share is 18 percent of the global sum of 7.9 billion people, Africa today receives an average of around 3 percent of global flows of foreign direct investment (FDI). The continent's GDP amounts to just under 2.7 percent of the worldwide total—a share per capita that has fallen by 50 percent over the last 60 years.

Japan's industrialization was, for example, based on three key elements:

- a strong private sector supported by an education system providing apposite skills;
- a supportive state;
- a willingness to attract and absorb outside ideas, technology, skills, and capital.

Simply being receptive to outside thinking was not enough. The government deliberately sought lessons and imported technical and commercial partners by sending government officials abroad to network and study. In pre-World War II Japan, as much as two percent of the government's budget was dedicated to the advice of foreign corporate and industrial specialists.

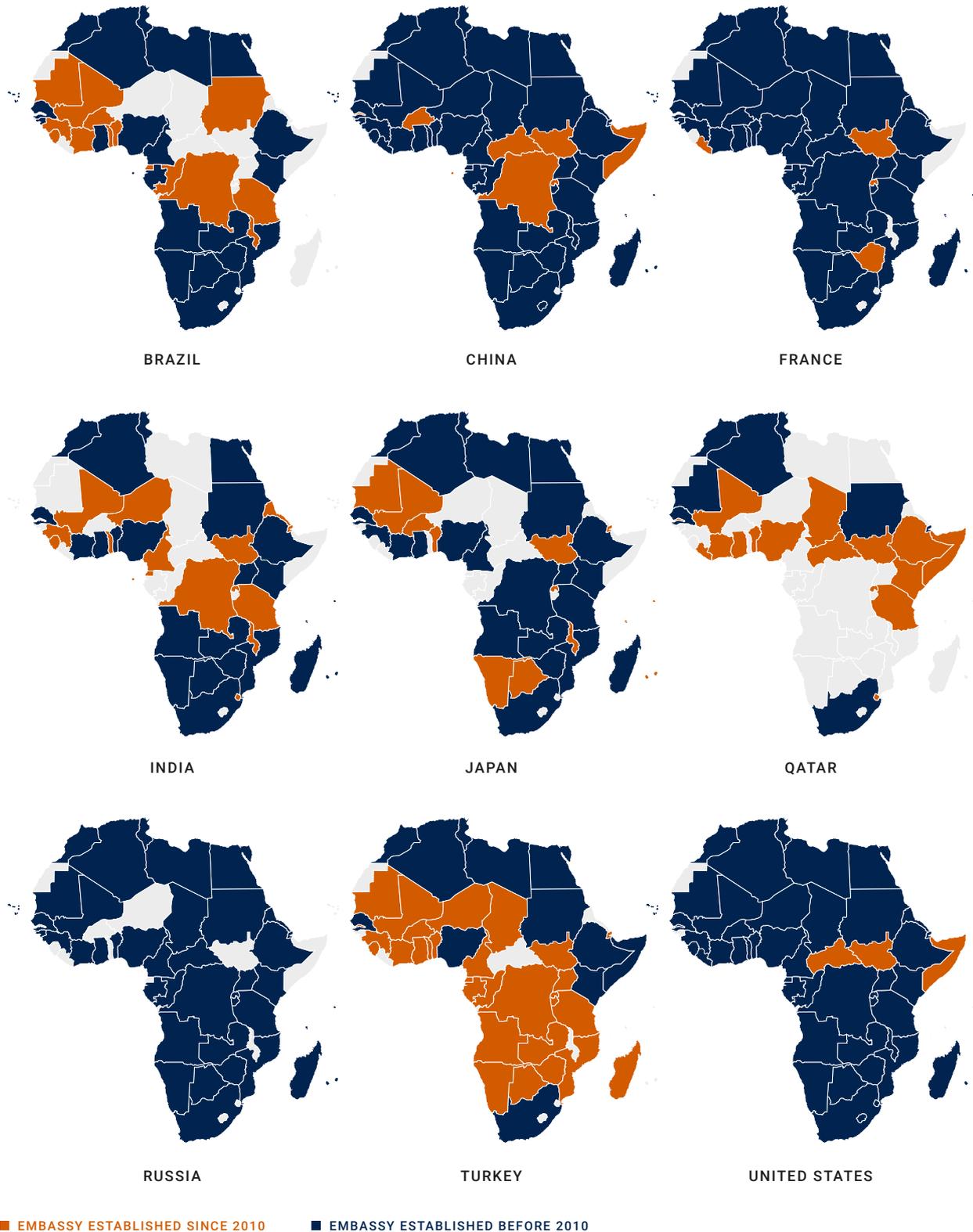
Despite the caricature of a closed society to outsiders, Japan actively diffused and internalized the technologies and practices foreigners left behind. Its spinning technology leaned on British technology; electrical machinery to a relationship with GE, AEG, and Siemens; the telegraph to French involvement; and shipbuilding to British and U.S. firms. The steel industry was based around collaboration between the state-owned Yamata Iron Works and Germany's Gutehoffnungshutte and, later, between the Mitsui zaibatsu and Britain's Armstrong and Vickers. Japan likewise borrowed car and motorcycle expertise: Isuzu from Wolseley Motors and Nissan from Austin, Toyota from U.S. carmakers, and Mitsubishi from Fiat. After the war, Honda and Suzuki, among others, were willing to study European models and reverse-engineer and improve on their products.

One contributing factor of Japan's early success was the presence of a corporatist state, although sometimes inefficiently so. In the 1950s, the role of the Ministry of International Trade and Industry (MITI, which transformed to the Ministry of Economy, Trade and Industry—METI—in 2001), was to target key sectors, particularly textiles, through foreign exchange allocation. Their focus over the following decade shifted to promoting domestic

5 Mills, Greg et al. *Democracy Works: Turning Politics to Africa's Advantage*. Hurst, 2019.

FIGURE 6.4. EMBASSIES, OLD AND NEW, BY GUEST COUNTRY

While political interest from outside actors is not new to Africa, the geopolitical landscape is changing. Countries like the United States, France, and Russia have had embassies in a majority of African countries for more than a decade. In recent years, however, new partners have emerged, evidenced by the rise of their diplomatic representation on the African continent. Perhaps the most striking example of this is Turkey, which has opened embassies in 30 African countries in the last decade alone.



SOURCE: Moyer JD, Turner SD, Meisel CJ. (2021). "What are the drivers of diplomacy? Introducing and testing new annual dyadic data measuring diplomatic exchange." *Journal of Peace Research*. 2021;58(6):1300-1310. doi:10.1177/0022343320929740
Pardee Centre for International Futures, Diplometrics Project

technology through research and development subsidies. In the 1970s, it promoted alternative energy sources (notably nuclear) in the wake of the oil shock, along with deregulation. Now its role is mainly as a “troubleshooter” within government ministries—or “troublemaker,” as one former official put it.

Still, Japan’s economic transition remains pertinent to Africa.

One priority for Japan’s development spending in Africa is on *kaizen*—the “continuous improvement” of the workforce. To this end, a Kaizen Institute was established in Ethiopia in 2013, while the Japan International Co-operation Agency (JICA) continues to fund seminars, experts, training, and other skills improvement initiatives in Africa as part of its \$1 billion in annual African aid. This engagement has accelerated and deepened as Japan has felt marginalized by China’s African ambitions, and Tokyo has learned lessons from the effectiveness (or not) of its aid.

Such a focus on skills and education is not going to be enough to replicate, or even adapt, the Japanese model. At its core, it will require understanding the nature of business and its needs to seeing the customer—whether a business or an individual—as being at the center of government’s actions.

LEARNING TO TRUST THE PRIVATE SECTOR

While no country or region is a complete analogue to any other, the East Asian experience illustrates the astonishing results a determined government can deliver. Africa’s leaders will have to adopt a sense of urgency equal to the task if they are to ensure that their countries prosper from huge demographic changes underway.

Africa has sought to address these deficiencies in part through increasing sovereign debt, much of it for Chinese-supplied infrastructure. This strategy carries with it other challenges, not least the management of this stock for future generations, and the transparency and corruption surrounding such deals.⁶

Africa’s development answers lie in providing the space for the private sector to flourish and to establish the regulatory conditions in which it can grow to formalize. There are an increasing number of stories of sustained entrepreneurial success across Africa. Too often these stories are, however, in spite of often-predatory government interference rather than because of adroit policy. African business is supremely practiced at circumventing government obstacles, rather than relying on government to catalyze and nurture good ideas and must routinely find workarounds to inefficient infrastructure. The continent gets ahead now largely because of the power of entrepreneurship and not the efficiency of governments.

Take South Africa’s roll-out of COVID-19 vaccines: With the private sector leading, after a slow start (when government tried to control the process), the country has now developed a system with the capacity to vaccinate up to 0.7 percent of the 60 million population each day. Likewise, the country possesses world-class banking and insurance services, and its private mining sector has long been acknowledged as a global leader. However, the sinews that keep these economic muscles flexing are chronically dysfunctional. South Africa’s state-run ports languish at the bottom of global, and even African, efficiency rankings. Its state electricity systems, which on paper make up more than half of the continent’s generating capacity, are beset by operational problems and, thus, consumers by frequent outages. Its railways, once the best in Africa, are today a rickety facsimile of a proud history and are proving a major constraint to exports of raw materials.

And, yet, other African countries, such as Botswana and Morocco, show how it is possible to run state-owned entities along efficient, commercial lines and, in so doing—coupled with streamlined regulatory and tax processes reducing the cost and wear of everyday frictions—provide the requisite foundation for external investors. The power of the private

Africa’s development answers lie in providing the space for the private sector to flourish and to establish the regulatory conditions in which it can grow to formalize.

6 Mills, Greg. *Expensive Poverty: Why Aid Fails and How it Can Work*. Pan Macmillan South Africa, 2021.

The critical aspect in Africa's developing relationship with Southeast Asia is to find the means to build stronger ties, a relationship that goes beyond a burgeoning loan book for African infrastructure, to a regime that expedites freer trade and seeks fresh investment in African industrial and services sectors.

sector, formal and informal, can be seen in a multitude of ways, from tourism to retail. As Asia has shown, state ownership is not the problem; it's how these entities are run. Whether they operate along commercial principles or as agents for the redistribution of political largesse is the difference between success and failure.

*

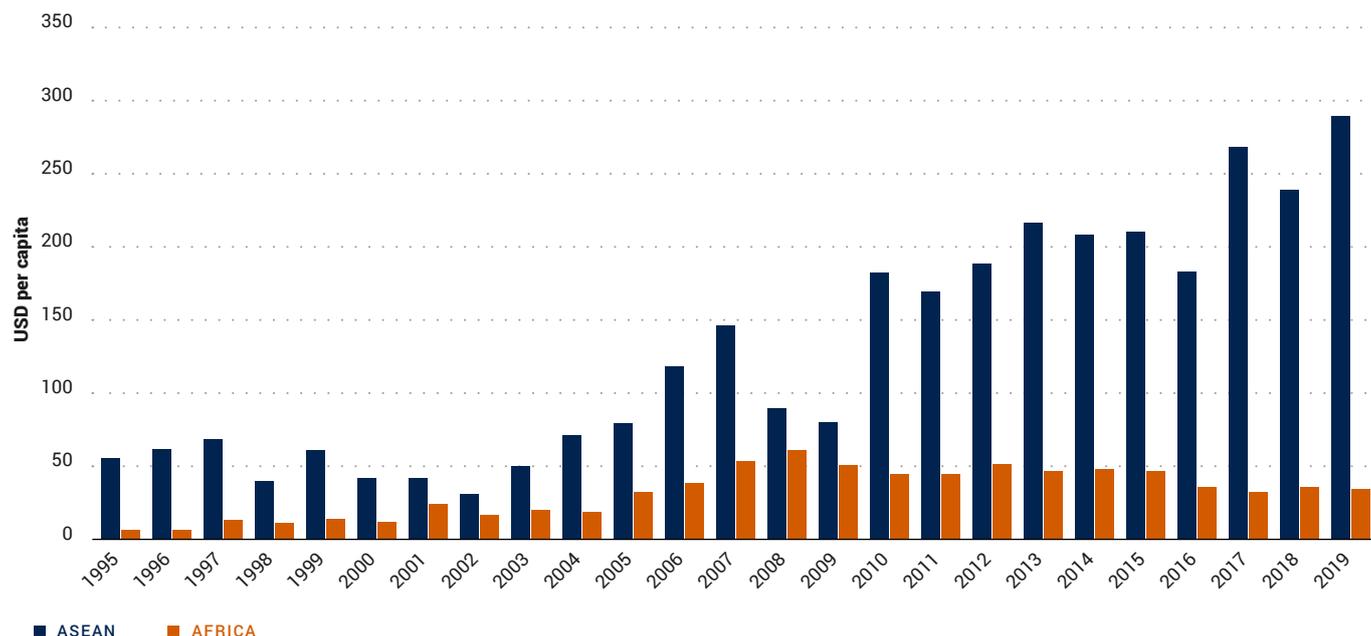
In May 2000, *The Economist* led with the headline, "The Hopeless Continent." A decade later it led with the heading, "Africa Rising." Yet Africa is neither a continent of chronic despair nor unchecked optimism. The key lesson from Asia's development choices and progress is to focus on dealing with the facts on the ground as they are.

Implicit in the difference in developmental performance between the two regions is, however, opportunity.

The critical aspect in Africa's developing relationship with Southeast Asia is to find the means to build stronger ties, a relationship that goes beyond a burgeoning loan book for African infrastructure, to a regime that expedites freer trade and seeks fresh investment in African industrial and services sectors. For their part, Asian countries should seek a more equitable and thus sustainable relationship with Africa; and for theirs, African governments should seek to put business, not government, at the center of economic development.

FIGURE 6.5. FOREIGN DIRECT INVESTMENT PER CAPITA, NET INFLOWS

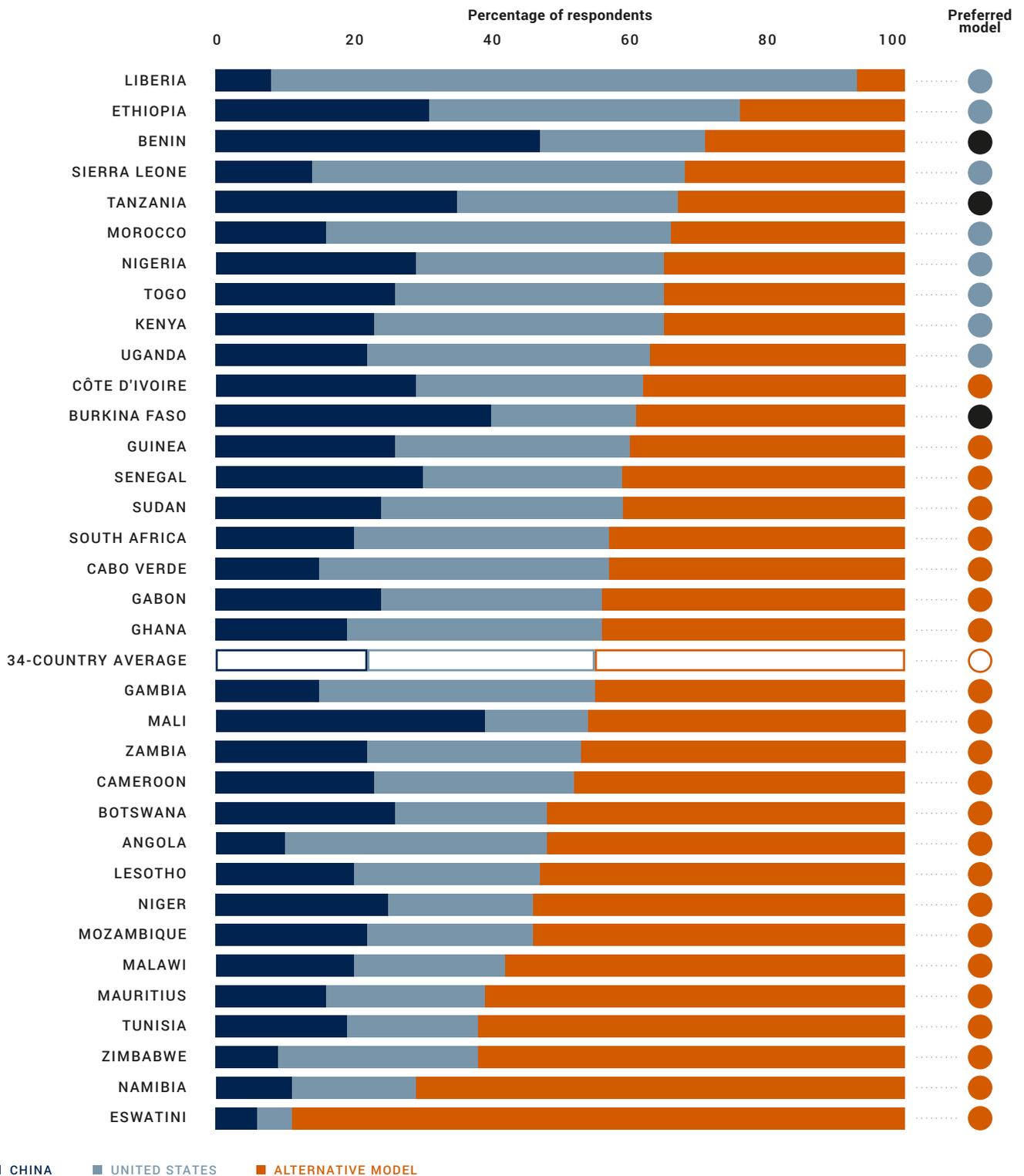
In 2001, ASEAN and Africa attracted close to the same foreign direct investment (FDI) per capita (\$42 and \$24 per capita respectively). Although both regions have seen their FDI per capita increase since then, their paths have nonetheless diverged. ASEAN receives \$289 per capita in FDI per year, a value that has increased nearly every year since 2001. Africa, meanwhile, saw its FDI per capita peak in 2008 before stagnating over the past decade.



SOURCE: Authors' calculations, World Development Indicators, 2021.

FIGURE 6.6. AFRICA IS OPEN TO A NEW DEVELOPMENT MODEL

While the United States is still the more preferred single development partner across the African continent (with China coming in second), Afrobarometer survey data indicate that Africa is open to an alternative model. In fact, in more than 70 percent of the countries surveyed, a plurality of voters preferred an alternative model to the United States or China. In Eswatini, the results were stark: Nearly nine in 10 respondents preferred an alternative development model.



NOTE: Respondents were asked, "In your opinion, which of the following countries, if any, would be the best model for the future development of our country, or is there some other country in Africa or elsewhere that should be our model?" Data shows responses from Afrobarometer survey Round 8 (2019/2021), which covered 34 countries.

SOURCE: Sanny, J. and Selormey, E. (2021). "Africans welcome China's influence but maintain democratic aspirations." Afrobarometer. Dispatch No. 489.

The future of India-Africa relations: Opportunities abound

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The [AfCFTA] is not only good for Africa: Concomitantly, it will provide a unified continental market that Indian firms can easily access and tap into—potentially increasing the scope and level of India's engagement with Africa.

India and Africa's historical links have experienced a revival in recent years,¹ and there are strong reasons for optimism that the partnership could be mutually beneficial. In fact, in recent years, and especially during the COVID-19 pandemic, Prime Minister Narendra Modi's government has made moves that indicate its intention for India to become Africa's biggest partner.²

Building on a growing trade and investment portfolio, India now has a strategy with clear guiding principles and areas of focus. The private sector is key to this strategy, particularly in the areas of skill and capacity-building initiatives, health care, agriculture, and the digital revolution. Moreover, underpinning the seriousness of India's Africa policy shift, the country has made maritime security a key pillar in most of its engagement with countries like Kenya and South Africa.

But why would India be interested in Africa? Present mega trends in Africa are supportive of India's trade and investments in the region. Africa's large working-age population, its growing middle class, and the significant share of services are all ingredients for value adding trade and investment relationships. Consumer-driven goods related to agribusiness, apparel and clothing, pharmaceuticals, and automotive components are opportunities for India's foreign direct investment (FDI) where Africa, through the African Continental Free Trade Area (AfCFTA), is putting in place the appropriate rules of origin to assure their optimization. Importantly, experts expect the African Continental Free Trade Agreement, which is already operational, to boost the levels of trade and investment, development of value chains, and industrialization across the region. The agreement is not only good for Africa: Concomitantly, it will provide a unified continental market that Indian firms can easily access and tap into—potentially increasing the scope and level of India's engagement with Africa. And there is a lot of room for India in Africa: For example, Africa accounted for just 15 percent of India's outward total investment stock between 2017 and 2019.³ In the same period, Mauritius, which is often used to re-route investments to third countries due to its favorable tax conditions, accounted for 82 percent of that number.

LOW-HANGING FRUIT FOR AFRICA-INDIA TRADE

Recent Export Credit Agency (ECA) estimates suggest that gains from the AfCFTA will be pronounced in the agri-food and industrial sectors, hence creating additional opportunities for adding value to natural resources and diversifying into new business areas. Currently, India's FDI flows to Africa are concentrated in the services sector, which accounts for almost 75 percent of the total (Figure 6.6). Increased FDI in the manufacturing sector by Indian companies could catalyze the development of value chains by providing foreign capital and technical know-how.⁴ In fact, a low-hanging fruit that can be exploited by Indian firms is the strengthening of the pharmaceutical manufacturing capacity in Africa.⁵

1 See ECA and CII (2017). Deepening Africa-India Trade and Investment Partnership and Mevel, S. (2017) For a Win-Win Africa-India Trade Partnership, in Trade Insight for detailed information.

2 See Pant, V. Harsh and Mishra, Abhishek, "Is India the New China in Africa?", *Foreign Policy*, June 17, 2021.

3 IMF (2021). Coordinated Direct Investment Survey. Available at: <https://data.imf.org/CDIS>

4 For instance, investors from Taiwan and China in the 1990s and South Africa in the 2000s were instrumental in developing and expanding the apparel value chain in Lesotho while the Moroccan automotive industry has relied on investments by the French Renault-Nissan Alliance and PSA Group car companies (World Bank (2020). Trading for Development in the Age of Global Value Chains).

5 See report by ECA and AU (2020), Review of Policies and Strategies for the Pharmaceutical Production Sector in Africa, for more insights on the state of Africa's pharmaceutical manufacturing sector and the future prospects.

FIGURE 6.7. THE AVERAGE COMPOSITION OF INDIA'S INVESTMENT IN AFRICA BY SECTOR, 2017-2019

India's investment in Africa has accelerated in recent decades and has been heavily concentrated in certain industries.

For example, transport, storage, and communication services account for just under half of that investment (44 percent). Manufacturing and financial, insurance, and business services roughly account for another third (35 percent).



SOURCE: Reserve Bank of India. (2021). Foreign Direct Investment data. Reserve Bank of India.

The leadership of India together with South Africa in the proposal to waive certain provisions of Trade Related Aspects of Intellectual Property Rights (TRIPS), has been reassuring to developing countries.

India is an important source of Africa's pharmaceutical imports, but the pandemic revealed the adverse effects of international supply chains disruptions.⁶ India's actions in restricting vaccines destined for COVAX-dependent countries may have made African countries question its commitment as a dependable partner in times of need, and for that, work is cut out for Indian diplomacy when it comes to the next India-Africa Forum Summit. The leadership of India together with South Africa in the proposal to waive certain provisions of Trade Related Aspects of Intellectual Property Rights (TRIPS), has been reassuring to developing countries. The sought waivers, if granted, could lead to increased production of vaccines in Africa, and India's know how will be crucial.

Notably, India has emerged as an attractive destination for "medical tourism." The number of African tourists visiting the country for medical treatment has increased almost threefold in the last decade, from 5.4 percent of the total tourist visits in 2010 to 15.4 percent in 2019.⁷ Continued collaboration between Indian health care providers and African partners, ranging from capacity building to establishment of hospitals and investment in telemedicine, is therefore necessary to engender universal health coverage. Moreover, India has signaled health care delivery will be key in its inclusive and transparent development model with Africa. The joint ventures in health care delivery call for education programs, including towards clinical research in the pharmaceutical sector. It is this ecosystem that will continue to make India a partner of choice for Africa when it comes to the health sector.

In the similar vein, knowledge transfer/lessons from the rollout and implementation of India's biometric digital identification program—Aadhar—matters for African governments.⁸ If implemented effectively, digital identity can promote good governance by establishing clear institutional mandates and accountability mechanism and more.⁹ And the sharing of legal and technical advances on digital identity may help anchor Africa's optimization of digital services trade and integration, an area where India is considered a world leader.

⁶ This is elaborated in MacLeod, Jamie, et al. "What lessons can Africa learn from India's COVID-19 crisis?" Africa in Focus. Brookings Institution, 2021.

⁷ Ministry of Tourism (2021). India tourism statistics. Available at: <https://tourism.gov.in/market-research-and-statistics>

⁸ For instance, Kenya's biometric Huduma number was declared illegal by the country's High Court due to data protection and privacy concerns. Similar issues raised during the implementation of the Aadhar and the consensus was that data security issues should be addressed before the rollout and implementation of such initiatives.

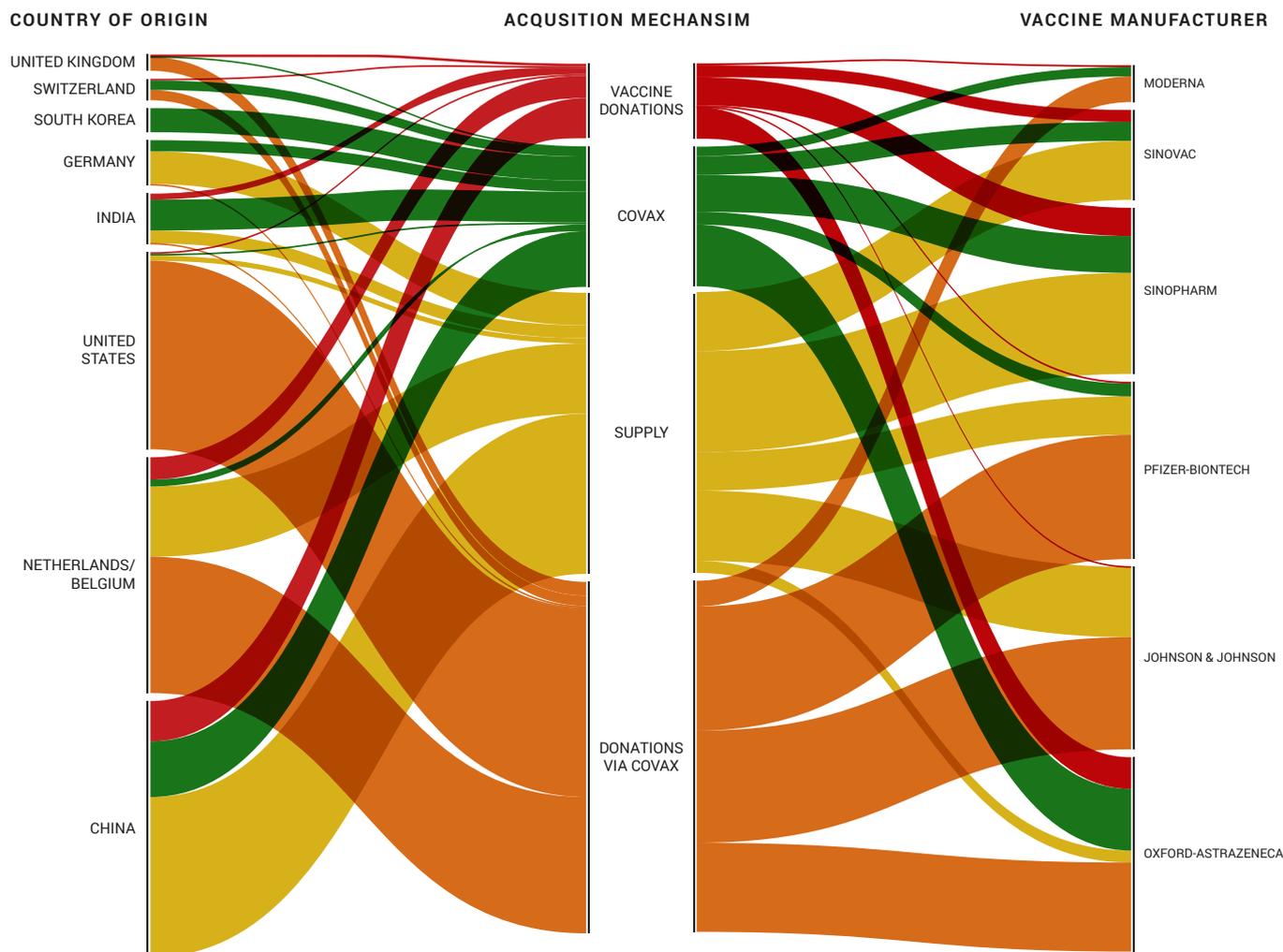
⁹ This is in addition to being an enabler for financial inclusion, cash transfers, digital trade, democratic voting process etc.

India has signaled health care delivery will be key in its inclusive and transparent development model with Africa.

Differences in governance systems within the continent could undermine the development of a strong Africa-India partnership. Unlike in India where there is a homogenous governance system, Africa has a diverse and heterogenous system. However, the principles of multilateralism can play a crucial role in realizing a mutually beneficial relationship between India and Africa. Such cooperation will not only be important in dealing with global challenges, but also in defining solutions that offer opportunities for both the African and Indian people.

FIGURE 6.8. COVID-19 VACCINE DELIVERY BY COUNTRY OF ORIGIN, ACQUISITION MECHANISM & MANUFACTURER

China, the Netherlands and Belgium, and the United States account for more than four in five doses delivered to Africa. More than 95 percent of the doses sourced from the United States have been donations, compared to 16 percent of those from China and 67 percent of those from the Netherlands and Belgium. The majority of the donated vaccines has been delivered through the COVAX facility.



NOTE: The data does not differentiate between the Netherlands and Belgium and hence they have been aggregated. Countries (Argentina and Russia) and vaccines (Covaxin, Sputnik V, and Sputnik Light) that account for less than 1 percent of production are not displayed in the diagram. Vaccine donations = bilateral donations of vaccines delivered without an intermediary, such as COVAX. COVAX = procurement and delivery supplied by COVAX via the initiative's pooled purchasing power to leverage equitable deals with manufacturers. Supply = bilateral and multilateral supply deals (including the African Union's AVAT). Donations via COVAX = donations by donor countries received and delivered by COVAX.

SOURCE: Airfinity. (2021). "COVID-19 Vaccination Data." Airfinity.

Deepening Gulf engagement with sub-Saharan Africa

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Over the past two decades, the engagement of the Gulf Cooperation Council (GCC) countries with Africa has been shaped largely by a narrow set of economic and security interests among Gulf states rather than a long-term commitment to deep cooperation with Africa. In the wake of the COVID-19 pandemic, however, there are signs of a shift in relations that signal a broadening of mutual diplomatic and economic ties and emerging partnerships that will benefit both the Gulf and sub-Saharan Africa going forward. This shift is driven by the pandemic recession and a new geopolitical environment facing the GCC.

The Gulf countries have been particularly impacted by the prolonged nature of the COVID-19 pandemic, which drove oil prices to historic lows and exposed their vulnerability to disruptions in global supply chains and overdependence on food imports. As a result, economic diversification and food security have emerged as GCC policy priorities that could serve as levers for deepening economic relations with Africa. Increased cooperation in agriculture and agribusiness, for example, would address food security concerns in the Gulf while raising agricultural productivity and building value chains in Africa along the lines of product development, packaging, and light manufacturing.

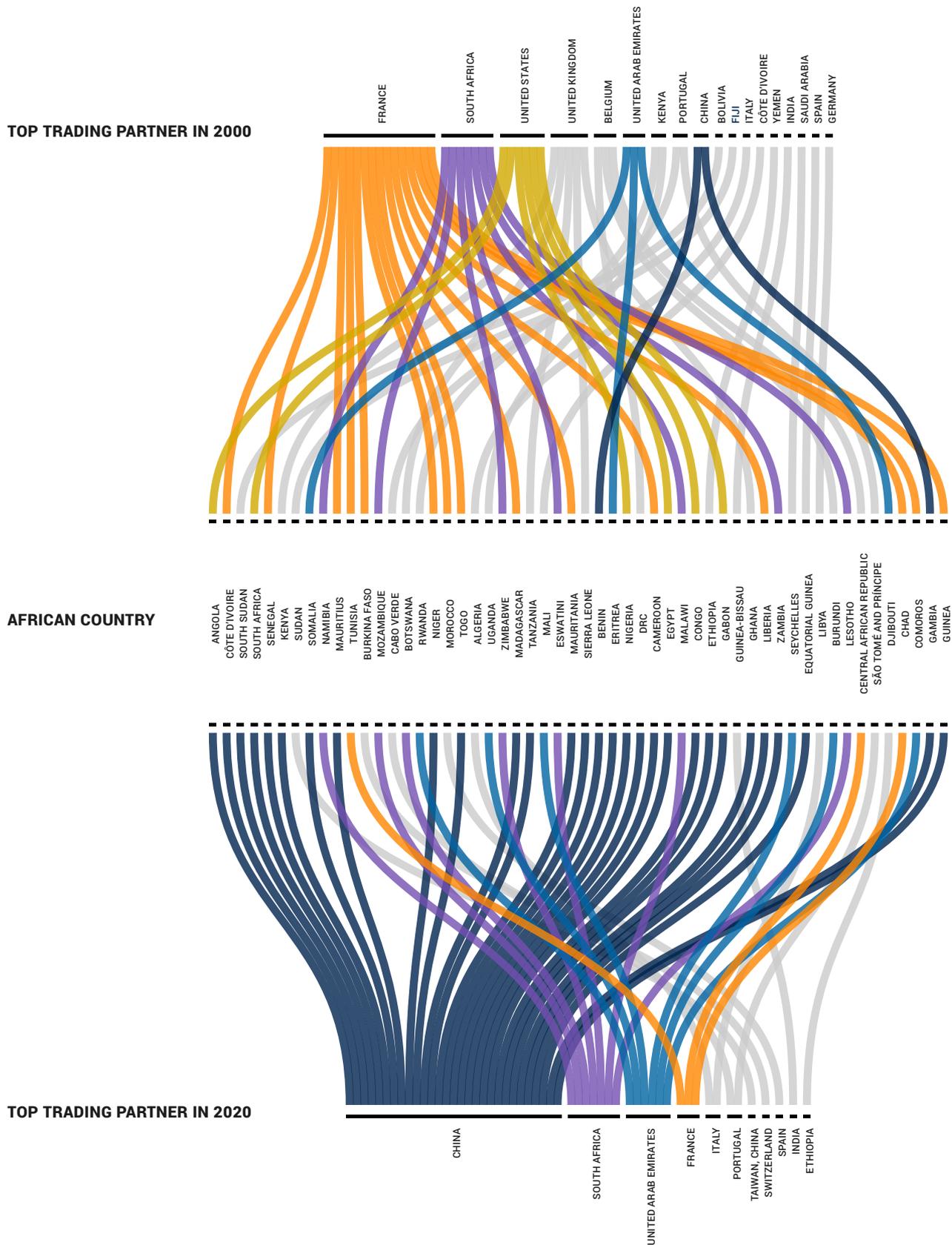
Similarly, as the Gulf countries expand their investments in African transport and logistics infrastructure to leverage their strengths at home and existing assets in Africa, they will bolster trade flows between both regions while integrating Africa more deeply into global supply chains through Gulf hubs. In keeping with past trends, these strategic investments will coincide with an expansion of private investment from the Gulf in a broader range of African industries and economic activities, including construction, telecoms, and financial services. The recent uptick in international oil prices is expected to restore the investment appetite of both Gulf sovereign wealth funds and private corporations.

The prospects for deeper economic relations between the Gulf and Africa are further enhanced by the ongoing shift in regional geopolitics. Rivalries among the Gulf states over the past decade, especially the United Arab Emirates and Qatar, have underpinned growing military assistance and security alliances in the Horn of Africa. These interventions have been tied to a wider competition between regional powers in the aftermath of the Arab Spring revolutions. Geopolitical stalemates, pandemic recession, and the U.S. pivot to the Indo-Pacific have pushed the Gulf countries to deprioritize their security posture abroad. While military cooperation may well continue, the interests of Gulf states in Africa will increasingly focus on economic promotion and investment that expands markets and enables longer-term diversification.

The prospects for deeper economic relations between the Gulf and Africa are further enhanced by the ongoing shift in regional geopolitics.

FIGURE 6.9. TOP TRADING PARTNER, AFRICA, 2000 AND 2020

China has been Africa's top trading partner for many years and is now the top trading partner for 29 Africa countries, including the continent's three largest economies—Nigeria, South Africa, and Egypt. This trend is an abrupt change from two decades ago, when China was the top trading partner for just two African nations. In 2020, the United States was not the top trading partner for any African country.



SOURCE: UNCTAD. (2021). "Bilateral trade data." United Nations Conference on Trade and Development.

The future of Russia-Africa relations

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Russia has been aggressively pursuing its strategic objectives in Africa in recent years—securing a foothold in the eastern Mediterranean, gaining naval port access in the Red Sea, expanding natural resource extraction opportunities, displacing Western influence, and promoting alternatives to democracy as a regional norm.

Africa, thus, is a “theater” for Russia’s geostrategic interests rather than a destination itself—a perspective reflected in the means that Russia employs. Unlike most major external partners, Russia is not investing significantly in conventional statecraft in Africa—e.g., economic investment, trade, and security assistance. Rather, Russia relies on a series of asymmetric (and often extralegal) measures for influence—mercenaries, arms-for-resource deals, opaque contracts, election interference, and disinformation.

PARTNERSHIP WITH WHOM?

Russia’s Africa-focused initiatives are typically concentrated on propping up an embattled incumbent or close ally: Khalifa Haftar in Libya, Faustin Archange Touadéra in the Central African Republic (CAR), and coup leaders Colonel Assimi Goïta in Mali and Lieutenant General Abdel Fattah al-Burhan in Sudan, among others.

To assess the future of Russia-Africa relations, therefore, it is necessary to be clear that the “partnerships” that Russia seeks in Africa are not state- but elite-based. By helping these often illegitimate and unpopular leaders to retain power, Russia is cementing Africa’s indebtedness to Moscow.

This strategy works for Russia and the respective leaders who gain international diplomatic cover, resources to consolidate power domestically, a mercenary force, arms, and revenues from resource deals. However, Russia’s opaque engagements are inherently destabilizing for the citizens of the targeted countries, resulting in stunted economic development, human rights abuses, disenfranchisement of African citizens, the perpetuation of illegitimate governments, and social polarization.

Through this model, Russia has been able to advance its objectives with limited financial and political costs. Accordingly, we can expect to see Moscow continuing to expand its influence on the continent in 2022.

FOCAL POINTS FOR AFRICA-RUSSIA RELATIONS IN 2022

* Libya

Russia retains Wagner mercenary forces (former Russian defense intelligence troops) and military assets on the ground in support of its proxy, warlord Khalifa Haftar. Russia can be expected to try and steer the outcome of the postponed presidential and legislative elections with the aim of emerging as the principal powerbroker in this geostrategically important territory—with access to oil reserves and deep-water ports in the eastern Mediterranean and a permanent presence on NATO’s southern flank.

To assess the future of Russia-Africa relations, therefore, it is necessary to be clear that the “partnerships” that Russia seeks in Africa are not state- but elite-based.

- * **Sudan**

Russia has been striving to gain naval port access in the Red Sea, especially Port Sudan. It also has longstanding ties to the Sudanese military, elements of the ousted Bashir regime, and gold trafficking networks in the west. Continuation of the military government in Khartoum provides a ready entry point for expanded Russian influence.

- * **Mali**

The military coup in Mali has provided Russia an opportunity to become a pivotal actor in the Sahel. We can expect Moscow to provide political cover to the junta of Assimi Goïta as it seeks to avoid a transition back to a democratic government. Indications are that Wagner mercenaries have already been deployed in support of the junta.

- * **Guinea**

Russia has long been a patron of former president Alpha Condé, who had been a strong supporter of Russia's extensive mining (bauxite) interests in Guinea. Following Condé's ouster in a coup in September 2021, Moscow can be expected to refocus its diplomatic efforts on propping up the military junta of Colonel Mamady Doumbouya in return for Moscow's continued political sway and unencumbered access in the mining sector.

- * **Gulf of Guinea**

Having consolidated its position in the CAR in 2021, Russia is set to expand its influence in nearby Republic of the Congo, the Democratic Republic of the Congo, and Gabon in 2022. Moscow has been cultivating ties with leaders of all three countries with an eye on becoming a more significant player in the lucrative oil and mineral networks of Central Africa.

- * **Angola**

President João Lourenço is contending for a second term in office in 2022 amid a long recession, criticisms for increasing authoritarianism, and divisions within his ruling party. Russia's opportunistic strategy of coming to the aid of isolated leaders as a means of enhancing Moscow's leverage makes Lourenço an attractive target. His military academy training in the USSR, Russia's extensive Cold War-era ties to Angola, and Angola's vast diamond, oil, gold, and mineral resources will all factor into increased Russian attention on Lourenço in 2022.

Reform, therefore, will not come from these leaders but from African citizens, which will entail greater civil society engagement, enhanced transparency around contracts, and higher levels of scrutiny of any deals struck with Russia.

CIVIL SOCIETY ENGAGEMENT AND SCRUTINY

Since Russia's engagements in Africa are typically predicated on co-opting leaders facing limited checks and balances, they are nearly always detrimental to African citizens who must endure deepened institutionalized corruption, diverted public revenues, unaccountable leaders, and instability. Reform, therefore, will not come from these leaders but from African citizens, which will entail greater civil society engagement, enhanced transparency around contracts, and higher levels of scrutiny of any deals struck with Russia.

Building more mutually beneficial Africa-Russia relations depends on changes in both substance and process. Such a shift would require Russia to establish more conventional bilateral engagements with African institutions and not just individuals. These initiatives would focus on strengthening trade, investment, technology transfer, and educational exchanges. If transparently negotiated and equitably implemented, such Russian initiatives would be welcomed by many Africans.

UK–Africa relations: The need for an urgent reset

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The COVID-19 pandemic, the United Kingdom's post-Brexit economic and political orientation towards the Asia-Pacific, and cuts in development assistance all appear to have widened the political and economic distance between the U.K. and Africa in recent years. But these changes are part of a long-term trend of a slow decline in the relationship: For example, Africa's share of U.K. imports has fallen from 2.1 percent to 1.7 percent over the last 10 years (ONS).¹

The trade, aid, and financing environment within Africa is also changing: Despite delays in its negotiation and implementation, the African Continental Free Trade Area (AfCFTA), under which trading began in 2021, represents a significant opportunity for many African countries to transform their economies and develop regional value chains, reducing reliance on trade and investment with the U.K. and other traditional partners.

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Both Africa and the U.K. can benefit from a reversal of this trend. Indeed, given the dynamism of many African economies, technological innovations, and the climate change challenge, stronger strategic engagement with Africa is essential for the U.K., now more than ever. From a commercial point of view, demand from Africa is not only increasing but also becoming more sophisticated as its middle class expands.² This growth generates medium- and long-term opportunities for investment in critical sectors such as business services, in which the U.K. has substantial expertise.

The COVID-19 pandemic, the United Kingdom's post-Brexit economic and political orientation towards the Asia-Pacific, and cuts in development assistance all appear to have widened the political and economic distance between the U.K. and Africa in recent years.

Moreover, the green transformation of the U.K. economy towards net zero will require the creation of partnerships with many African countries to ensure access to critical inputs, such as rare earth minerals. Importantly, this access needs to be built on the transformation and development of African economies themselves: The U.K. should reconsider its lack of an import policy beyond trade preferences and its recent cuts to support for economic transformation.³

On the African side, the negotiators of AfCFTA and African policymakers must better consider and design additional policies to develop the enabling environment modern firms require. Such policies should include the provision of critical essential services (e.g., energy), adequate infrastructure, and other business environment aspects. Moreover, the provision of modern services such as business, financial, insurance, and technological services is key for the success of modern firms as well as the development of regional and continental value chains. The UK's investment and expertise in all these sectors can play a useful role.

Importantly, the creation of new and the strengthening of old partnerships between the U.K. and individual African economies must be at the center of the U.K.'s global economic and political strategy. The U.K. might need to be flexible: These partnerships should be developed and implemented within the context of the AfCFTA and Africa's own ambitions. Indeed, the U.K.'s support to the implementation of the AfCFTA constitutes a significant first step⁴ that must be supplemented by further action to put the relationship with the continent at the center of the U.K.'s geopolitical strategy over coming decades.

1 "International trade." United Kingdom's Office for National Statistics, 2021.

2 Mendez-Parra, Maximiliano and Raga, Sherilyn. "Africa and the United Kingdom: Challenges and Opportunities to Expand UK Investments." Overseas Development Institute, 2020.

3 Velde, Dirk Willem te and Mendez-Parra, Maximiliano. "Importing for development: reforming the UK's trade preferences." Overseas Development Institute, 2021.

4 "AfCFTA Secretariat signs landmark agreement with UK Government." Bilaterals, 2021.

A slim hope for negotiating a settlement to the Tigray conflict in Ethiopia

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Despite intense international engagement, including by the United States, the African Union, and European countries, to institute a cessation of hostilities and conflict-resolution negotiations, the conflict dynamics have been mostly driven by battlefield circumstances.

The year-long conflict in Ethiopia pitting the Tigray People's Liberation Front (TPLF) and its allies against the Ethiopian government and its internal and external allies has been deadly, with thousands, perhaps tens of thousands, of battlefield casualties.¹ It has also been brutal, with severe human rights abuses perpetrated by all the warring parties.² The conflict has caused a massive humanitarian catastrophe in the northern part of the country where 5.2 million people have been facing hunger and lack of basic supplies for almost a year as the Ethiopian government purposefully sought to strangle the Tigray region and violently hampered aid delivery.³ Hundreds of thousands have been displaced and suffered in Amhara and Afar.

The war has pulled in a set of regional countries, and its persistence threatens the stability of the entire Horn of Africa and Red Sea regions. Moreover, despite intense international engagement, including by the United States, the African Union, and European countries, to institute a cessation of hostilities and conflict-resolution negotiations, the conflict dynamics have been mostly driven by battlefield circumstances.

Embattled between April and November 2021, the Ethiopian government recently succeeded in pushing the TPLF back into the Tigray area. The December 21 decision of Prime Minister Abiy Ahmed to halt the counteroffensive of the Ethiopian National Defense Forces (ENDF) at Tigray borders gives some hope that international diplomacy, bolstered by a U.S.-created sanctions regime, could finally help incentivize a negotiated end to the conflict. But any expectations of a negotiated breakthrough should not be great.

THE BACKGROUND

Since 2018, ethnic tensions and competition over state resources and power have intensified in Ethiopia, as the country has sought to move away from three decades of authoritarian rule dominated by the Tigray ethnic minority. Elected prime minister in 2018, Abiy, an Oromo, struggled to stave off demands for faster economic redistribution and pent-up grievances of long-suppressed ethnic groups, including the Oromo and Amhara, while tensions escalated between his government and Tigray leadership, culminating in the Tigray seizure of military depots in October 2020.⁴ Abiy responded with military force and enlisted the help of Eritrea, a long-term TPLF enemy.

THE BATTLEFIELD SWINGS

Despite ENDF's initial successes, Tigray forces routed the ENDF in the Tigray region in late spring 2021 and pushed into Amhara and Afar. Human rights abuses perpetrated against the Tigray population by ENDF⁵ and Eritrean forces helped entrench the Tigray insurgency.⁶

1 Burgess, Annika. "A year of bloodshed, famine and civilian torture. Why is Ethiopia on the brink of all-out civil war?" *ABC News*, 2021.

2 Bearak, Max. "She was in Abiy Ahmed's cabinet as war broke out. Now she wants to set the record straight." *The Washington Post*, 2021.

3 Walsh, Declan. "This Ethiopian Road Is a Lifeline for Millions. Now It's Blocked." *The New York Times*, 2021.

4 "Tigray crisis: Ethiopia orders military response after army base seized." *British Broadcasting Company*, 2020.

5 "Ethiopia's Tigray War: A Deadly, Dangerous Stalemate." International Crisis Group, 2021.

6 "Ethiopia: Eritrean Forces Massacre Tigray Civilians." Human Rights Watch, 2021.

Then, in the fall of 2021, Tigray forces swept to the doorsteps of Addis Ababa, and the government's very survival seemed precarious.

However, through the controversial acquisition of drones from [Turkey](#),⁷ the [United Arab Emirates, and Iran](#)⁸ and aerial bombardment, the ENDF drove Tigray forces back into the Tigray region.

ELUSIVE NEGOTIATIONS AND INTERNATIONAL ENGAGEMENT

Beyond controversial military support for the Ethiopian government, the conflict attracted intense international diplomacy from the United States and various European and African countries, including Kenya. The United States appointed a renowned and highly accomplished diplomat Ambassador Jeffrey Feltman as Special Envoy for the Horn of Africa, and the African Union appointed Nigeria's former President Olusegun Obasanjo as its High Representative.

These various efforts to bring about negotiations between the Ethiopian government and the TPLF have emphasized more or less the same elements since November 2020:

- ✿ A comprehensive ceasefire;
- ✿ The withdrawal of ENDF, Tigray, Amhara, and Afar warring parties and associated militias to their original territories and the departure of Eritrean forces from Ethiopia;
- ✿ Unhampered humanitarian access; and
- ✿ Inclusive peace negotiations about equitable power distribution in Ethiopia.

Despite the intensive international engagement, both the Ethiopian government and the Tigray forces remained essentially non-responsive, each seeking to press temporary military advantage, if not outright military defeat of the opponent, before negotiating or making any concessions.

Although the United States for years coddled the Ethiopian People's Revolutionary Democratic Front (EPRDF) regime (1988-2019) and supported the Ethiopian government as a key counterterrorism ally in Somalia and Horn of Africa, throughout these events, the Ethiopian government has become increasingly alienated from the United States because of U.S. criticism of and toughening responses to the government's complicity in the Tigray humanitarian catastrophe.

In September 2021, the United States unveiled a [smart sanctions regime](#) targeting a wide set of actors, including members of the Ethiopian government, Tigray and Amhara leaders, and Eritrean forces while exempting humanitarian aid.⁹ Sanctions against the Eritrean forces were implemented, while sanctions against others were delayed to incentivize humanitarian access and internal negotiations. Additionally, because of human rights abuses, [Ethiopia's eligibility](#) for duty-free imports under the U.S. African Growth and Opportunity Act (AGOA) were [removed on January 1, 2022](#).¹⁰

THE RECENT REASON FOR HOPE AMID OMINOUS CLOUDS

In late fall of 2021, the sanctions regime and diplomatic engagement seemed to be producing some results. In November, the Ethiopian government [restored](#) a humanitarian-work license to Médecins Sans Frontières, while withholding it from the Norwegian Refugee Council.¹¹ On December 21, Abiy halted the ENDF advance at the Tigray borders, though some air strikes continue and humanitarian [access remains hampered](#).¹² On

7 Spicer, Jonathan. "U.S. concerned over Turkey's drone sales to conflict-hit Ethiopia." Reuters, 2021.

8 Walsh, Declan. "Foreign Drones Tip the Balance in Ethiopia's Civil War." The New York Times, 2021.

9 Felbab-Brown, Vanda. "The exemplary U.S. sanctions regime for Ethiopia's Tigray conflict and its limitations." The Brookings Institution, 2021.

10 "US removes Ethiopia, Mali and Guinea from AGOA trade programme." Al-Jazeera, 2022.

11 Jerving, Sara. "Ethiopia lifts suspension on MSF, but not NRC." Devex, 2021.

12 "Ethiopia - Northern Ethiopia Humanitarian Update: Situation Report." United Nations Office for the Coordination of Humanitarian Affairs, 2021.

Beyond controversial military support for the Ethiopian government, the conflict attracted intense international diplomacy from the United States and various European and African countries, including Kenya.

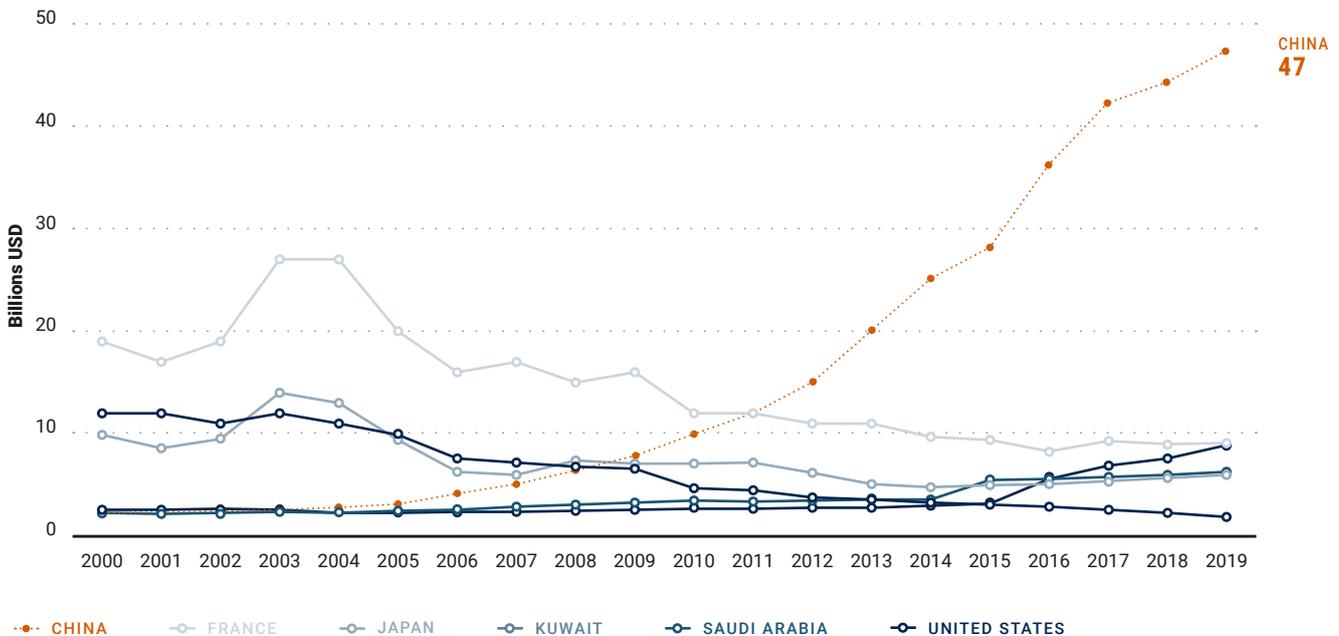
December 30, Ethiopian lawmakers authorized a commission for national dialogue proposed by Abiy.¹³

But while maintaining steadfast international mediation efforts is essential, there are ominous signs. The national dialogue commission excludes the two interlocutors fundamental for any peace: the TPLF and its military ally the Oromo Liberation Army. Moreover, highly incomplete steps taken by the Ethiopian government have likely been motivated to avert Ethiopia’s removal from AGOA, but on January 2, 2022, the United States did remove Ethiopia anyway.

There is no credible sign yet that the Ethiopian government is prepared to negotiate any compromise with the TPLF or, if negotiations do start, to seek anything other than a victor’s peace and strong punishment of the TPLF leaders. Such terms will, of course, deter the TPLF from a deal even as the insurgency may become resurrected and while the catastrophic suffering of people in northern Ethiopia continues. Any eventual negotiations will not be easy or fast. They are likely to start only after a protracted battlefield stalemate, and international mediators will continue to struggle to alter the calculations of the warring actors before the stalemate becomes obvious.

FIGURE 6.10. AFRICA'S OUTSTANDING DEBT BY CREDITOR

In just a couple of decades, China went from being a nonplayer in Africa's bilateral debt market to being Africa's largest creditor. It now holds more debt than the next 10 largest bilateral creditors combined. Meanwhile, countries traditionally holding Africa's debt, such as the United States and France, have decreased their debt holdings significantly over the last two decades.



NOTE: Debt data include debt serviced by the general government, which does not include public corporations or public financial institutions such as central banks.

SOURCE: World Bank. (2021). "International Debt Statistics 2021." World Bank Group.

¹³ "Ethiopia to create national dialogue commission." Deutsche Welle, 2021.

