

WHY AFRICA MATTERS TO THE US

TOP 5 REASONS



WHY AFRICA MATTERS TO THE US

TOP 5 REASONS

Authors

BELINDA ARCHIBONG is a David M. Rubenstein fellow in the Global Economy and Development program at Brookings.

ALOYSIUS UCHE ORDU is the director of the Africa Growth Initiative and a senior fellow in the Global Economy and Development program at Brookings.

DANIELLE RESNICK is a David M. Rubenstein fellow in the Global Economy and Development program at Brookings.

WITNEY SCHNEIDMAN is a nonresident fellow in the Global Economy and Development program at Brookings.

LANDRY SIGNÉ is a senior fellow in the Global Economy and Development program at Brookings.

CONTENT

Enhancing Africa's food security and food system transformation
On the importance of funding the health sector in Africa
Bridging Africa's infrastructure gap: How the US can help
Growing US trade and investment in Africa13
How to advance US-Africa relations through emerging technologies19
About the program

ENHANCING AFRICA'S FOOD SECURITY AND FOOD SYSTEM TRANSFORMATION

Danielle Resnick, David M. Rubenstein Fellow Global Economy and Development | Brookings Institution

The priority

Food security is fundamental for human health, economic livelihoods, and political stability. Even though Africa is the continent with the largest share of arable land, food insecurity is a perennial concern for millions of households in the region. In the last several years, conflict in Ukraine, supply chain blockages from COVID-19, climate change, and pest invasions have collectively undermined agricultural productivity and access to affordable food. Food price volatility hampers long-term planning for governments and undermines household resilience.

The region's heavy dependence on imports for key inputs, including seed and fertilizer, as well as for specific cereals, means that global trade disruptions can have seismic repercussions. This is exacerbated by the fact that the region's rapid urbanization and urban consumers' demonstrate preferences for certain foods, such as wheat-based goods and rice, that are not being produced in sufficient supply to meet growing demand. At the same time, the region's growing demand for ultra-processed foods is contributing to a "double burden of malnutrition" whereby obesity and noncommunicable diseases coincide with underweight populations and child stunting. Subnational inequalities in nutrition and diet outcomes can be particularly alarming, especially in conflict-affected areas, such as the Sahel and the

Horn of Africa, where levels of food insecurity are most severe.

Encouragingly, there is substantial political will among Africa's leaders to address food insecurity, nutrition, and agricultural transformation. For almost two decades, agriculture has received sustained attention from policymakers under the African Union's Comprehensive African Agriculture Development Program (CAADP) and through its biennial reviews that track government progress towards meeting commitments. The African Union has also declared 2022 the "Year of Nutrition" in Africa, and most of the region has moved towards fortifying key foods with micronutrients to tackle vitamin A, iodine, folic acid, and other deficiencies.

Why it matters for the US

Historically, food price inflation and volatility have the potential to spark political violence and exacerbate existing conflicts, undermining U.S. efforts to mitigate drivers of fragility in the region. From South Africa to Sudan, protests over the rising cost of food occurred across the continent in 2022. Recent debt relief negotiations with international creditors also require some countries to significantly reduce costly food, fuel, and fertilizer subsidies, prompting concerns that

popular discontent over food prices may continue to grow.

At the same time, there are many opportunities for knowledge diffusion between experts in the U.S. agriculture and technology sectors with African farmers, processors, and distributors. Identifying ways to further integrate technology into the food system offers a chance to not only improve efficiency but also to potentially attract more of Africa's youth into the agriculture sector, which is essential as African farmers age.

Opportunities

The U.S. government already is one of the biggest donors for global agriculture and food security. However, there are further opportunities for U.S. engagement in Africa's food security that could better reflect how incentives, capacity, and risks intersect with the food system. The opportunities highlighted below could also bolster opportunities for civil society engagement and public accountability over investments and decisions that affect the food system.

Bolstering investments into agriculture research, extension, and development

Reducing Africa's vulnerability to global shocks requires continued investments in agronomic research and extension services, which are essential for developing high-yielding seed varieties, identifying innovative cultivation techniques, and finding more efficient uses of inputs. The U.S. government should therefore continue to mobilize and invest in Africa's agricultural research institutes and extension services while fostering the adoption of new technologies. Specialized fertilizer targeting techniques can, for instance, help reduce African governments' dependence on large shares of fertilizer imports. Electronic extension services, including mobile applications, can also address the growing depletion of Africa's extension workers who are often discouraged by low pay and transfers to remote locations. Exchange programs of agricultural

scientists between the U.S. and Africa and within Africa can promote knowledge diffusion and South-South learning.

At the same time, there is scope for identifying incentives for African leaders to invest their own resources in their agricultural research and development systems. One option involves earmarking a share of agriculture export revenue for such purposes. The region's growing number of producers' organizations could be empowered to track these investments for the public, thereby enhancing public expenditure accountability and offering leaders a tangible way to showcase their commitment to enhancing Africa's agricultural productivity. More broadly, all agricultural investments from governments, donors, the private sector, and civil society-should adhere to the 10 principles agreed by the Committee on World Food Security (CFS), which include fostering youth and women's empowerment, respecting cultural heritage and traditional knowledge, and incorporating transparent governance structures and processes.

Integrating futures scenarios into early warning systems

Humanitarian assistance is one of the largest components of U.S. foreign assistance, much of which is allocated to food aid. Early warning systems to inform food aid decisions often focus predominantly on the climatic and production elements of food systems. Increasingly, however, those most at risk of hunger are those facing compounding crises that include not only environmental impacts and farming challenges, but also marketing, trade, and conflict dynamics. Consequently, a more holistic approach to warning systems is needed to account for threats, not only on the farm, but also to food access and livelihoods. This would require, for instance, futures scenarios that incorporate calculations of how political risks and trade decisions may affect food security in African countries. For example, understanding tensions between political parties or within a regime might increase preparedness in the event of post-electoral violence or a coup that disrupts stability and undermines food access.

Regular forums for crop and trade modelers to engage with members of the intelligence and diplomatic communities could foster this integration.

Broadening partnerships with subnational leaders on food policy

Traditional engagement with African governments on food security and food systems typically involves focusing on working with national ministries and agencies. However, many African countries are devolving functions related to agriculture and nutrition to local governments, and mayors increasingly are also leaders for food system decisions. Initiatives such as the Milan Urban Food Policy Pact have elevated the role of municipalities and mayors and showcased their critical role in shaping consumer food access, as well as fostering ties between urban agriculture and informal food traders. Several African cities are even establishing multi-stakeholder food policy councils, thereby offering the opportunity to strengthen civil

FURTHER READING

African Union. 2022. "3rd CAADP Biennial Review Report.". Addis Ababa, Ethiopia: African Union.

Food and Agriculture Organization. 2022. "The State of Food Security and Nutrition in the World." Rome, Italy: FAO.

Goyal, Aparajita and John Nash. 2017. "Reaping Richer Returns: Public Spending Priorities for African Agriculture Productivity Growth." African Development Forum series, Washington, DC: World Bank.

Milan Urban Food Policy Pact. 2022. "Policy Brief." Milan, Italy. Available at: https://www.milanurbanfoodpolicy-pact.org/wp-content/uploads/2022/04/Policy-Brief_MUFPP_2022.pdf

Barry Popkin, Camila Corvalan, and Laurence Grummer-Strawn. 2020. "Dynamics of the Double Burden of Malnutrition and the Changing Nutrition Reality." Lancet, January (395): 65-74.

ON THE IMPORTANCE OF FUNDING THE HEALTH SECTOR IN AFRICA

Belinda Archibong, David M. Rubenstein Fellow Global Economy and Development | Brookings Institution

The priority

The virulence of recent pandemics has placed a spotlight on the resilience of health systems in countries around the world to epidemics, particularly in African nations that bear the double cost of historically high disease burdens and relatively little investment in health infrastructure. 1,2 Sudden unexpected shocks to health like epidemics are extremely costly for households and economies, not just on account of the direct health costs caused by the disease, but also through the indirect effects on crucial development outcomes like education and employment. They can also lead to severe costs for the most vulnerable members within societies, like women, who often bear the brunt of the costs of these health shocks in the form of worsened health, education, employment, and income.3

Research on the effects of epidemics in African countries has shown that health aid can play a significant role in reversing the negative economic effects of epidemics, suggesting that a major domestic and global policy response to these shocks should be an influx of health aid to regions most affected by current and future epidemics.⁴ Particularly, in light of research in environmental health linking climate change and epidemics, we expect these epidemics to be more frequent in the future, making the subject of increased health aid and funding to build more resilient health sectors in African countries even more crucial.⁵

Why it matters for the US

Health funding in Africa is important not just to build resilience to epidemics, but to shore up weak primary health infrastructure, with relatively fewer health facilities, poor infrastructure functionality in the existing health facilities and often poorly paid health care workers, and a severe lack of health care workers in the region.6 By World Bank estimates, as of 2019, government spending was just 40 percent of total health spending for countries in sub-Saharan Africa, much lower than the world average of 60 percent. Compared to the rest of world, Africa's government spending on health is only 2 percent of GDP, lower than the world share of 3.5 percent. Additionally, out-ofpocket spending as a share of health spending in Africa was among the highest in the world at 37 percent of health spending, compared to 18 percent in the rest of the world.

A key feature of health spending in African countries is the high share of health spending coming from external, donor sources. External spending on health accounts for 20 percent of health spending in Africa on average, a figure which is higher than the world average of 0.2 percent. Given the existing high share of health spending from donor sources and the recommended policy response to increase disbursement of funds

for health projects during epidemics, international aid has featured heavily, historically, as a way to mitigate the adverse effects of epidemics (such as meningitis epidemics) in the region.^{7, 8} As we have recently observed from the COVID-19 pandemic, the effects of poor health infrastructure and high disease burdens in any region have negative external costs for the rest of the world—as disease can spread across borders with accordant spillover effects on global economic growth and development.⁹ Funding the health sector in Africa is an important, urgent part of global policy for economic resilience and growth.

illence and growth.

Opportunities

There are several other opportunities for U.S. engagement with Africa's health sector—beyond increased health aid and funding. Three strategic ones are identified below:

Creating stronger formal partnerships

Creating stronger formal partnerships with local African pharmaceutical firms, universities, and research institutes to facilitate knowledge sharing and exchange related to drug and vaccine manufacture especially for understudied tropical diseases. Given the increased likelihood of future epidemics due to global warming, more knowledge sharing and learning is needed to get ahead of any future pathogens and mitigate the adverse effects of global pandemics in the future.

Creation of a more integrated health database

Creation of a more integrated health database that leverages and shares knowledge from country ministries of health and centers for disease control in the U.S. and across African countries. One of the blind spots revealed by the COVID-19 pandemic was just how little data and information was known and shared across borders, which dampened the effectiveness of health policy to combat the pandemic.

Investment in information and communication technology

Investment in information and communication technology (ICT) specifically for health systems, including knowledge sharing and leveraging health worker expertise across country borders. This is particularly significant, given recent research showing that ICT can improve mental health and the growing role of telehealth systems around the world.¹⁰

ENDNOTES

- ¹ Ibrahim Abubakar, Sarah L Dalglish, Blake Angell, Belinda Archibong, Olutobi Sanuade, Seye Abimbola, Aishatu Lawal Adamu, Ifedayo MO Adetifa, Tim Colbourn, Afolabi Olaniyi Ogunlesi, Obinna Onwujekwe, et al. 2022. "The Lancet Nigeria Commission: Investing in health and the future of the nation." The Lancet 399 (10330): 1155–1200.
- ² Blake Angell, Olutobi Sanuade, Ifedayo MO Adetifa, Iruka N Okeke, Belinda Archibong, Aishatu Lawal Adamu, Muktar H Aliyu, Emmanuel A Ameh, Fatima Kyari, Muktar A Gadanya, Diana A Mabayoje, et al. 2022. "Population health outcomes in Nigeria compared with other west African countries, 1998–2019: a systematic analysis for the Global Burden of Disease Study." The Lancet 399 (10330): 1117–1129.
- ³ Belinda Archibong and Francis Annan. 2017. "Disease and Gender Gaps in Human Capital Investment: Evidence from Niger's 1986 Meningitis Epidemic." American Economic Review 107 (5): 530−35.
- ⁴ Belinda Archibong, Francis Annan, and Uche Ekhator-Mobayode. "The Epidemic Effect: Epidemics, Institutions and Human Capital Development," 2020.
- ⁵ Belinda Archibong and Francis Annan. 2017. "Disease and Gender Gaps."
- ⁶ Ibid.
- ⁷ Adia Benton and Kim Yi Dionne. 2015. "International political economy and the 2014 West African Ebola outbreak." African Studies Review 58 (1): 223–236.
- ⁸ Belinda Archibong, Francis Annan, and Uche Ekhator-Mobayode, "The Epidemic Effect: Epidemics."
- ⁹ Belinda Archibong and C Jessica E Metcalf. 2021. "Building toward useful SARS-CoV-2 models in Africa." Proceedings of the National Academy of Sciences 118 (31): e2110873118.
- ¹⁰ Belinda Archibong and Francis Annan. 2022. "How can information and communication technology be leveraged to improve mental health?" The Brookings Institution. Available at: https://www.brookings.edu/blog/up-front/2022/11/02/how-can-information-and-communication-technology-be-leveraged-to-improve-mental-health/

BRIDGING AFRICA'S INFRASTRUCTURE GAP: HOW THE US CAN HELP

Aloysius Uche Ordu, Director, Africa Growth Initiative Global Economy and Development | Brookings Institution

The priority

During December 13 to 15, 2022, the Biden-Harris administration will host the second U.S.-Africa Summit, which virtually all of Africa's heads of states are expected to attend. With the heightened uncertainties in the global economy and multiple headwinds confronting Africa right now, it is not difficult to imagine the litany of competing interests and diverse agenda items that merit discussion at the summit. Yet, the long-term interest of the African continent would be greatly served if the visiting heads of states could speak with "one voice" and seek the Biden-Harris administration's unflinching support to bridge Africa's infrastructure gap. Of all world regions, Africa is in most desperate need of transformational infrastructure projects.

Improved infrastructure will bring huge benefits. Road networks greatly improve connectivity and access to local, regional, continental, and global markets, and with tremendous benefits to the continent's landlocked countries. Improved access to electric power is key to the delivery of quality health and education services and provides a much needed boost to the productivity of small and large businesses. Increased access to improved water and sanitation saves time and slows the spread of water-borne diseases. Investments in broadband will further boost connectivity and access to information and reduce transport costs by enabling digital transactions of the kind that boomed in the COVID-19 era.

Why it matters for the US

"Agenda 2063: The Africa We Want" is contingent on improved infrastructure: Africa would be a booming consumer market—with young people constituting the biggest share—ushering in further economic growth under the "demographic dividend." A vibrant economy with access to opportunity and markets has the added advantage of reducing the number of migrants crossing the Mediterranean Sea to Europe and the U.S. It would also cut off the pipeline of unemployed youths gravitating to the region's conflict hotspots, e.g., in the Sahel and Horn of Africa.

Africa could thus be a beacon of growth and prosperity, ushering in unparalleled development, with connectivity, trade, and investments. Global investors in search of high emerging market yields will probably flood to Africa or regret their lack of exposure to such a vibrant region.

These unprecedented changes are possible, especially now that Africa's leaders are acting in solidarity and taking concerted actions, such as the establishment of the African Continental Free Trade Area (AfCFTA) and the Africa Centres for Disease Control and Prevention—institutions that have required tough political choices, especially at a time when globalization and global coordination is seriously under threat.

Opportunities

Here are two ways that the Biden-Harris administration can help Africa unleash priority infrastructure developments to boost economic growth and transform the continent.

Provide grant funding for the Program for Infrastructure Development for Africa (PIDA)

PIDA is a continental initiative that develops robust pipelines of bankable cross-border projects. It encapsulates the continent's strategic vision for infrastructure until 2040 and uses the "Priority Action Plans" detailing immediate steps to realize its long-term vision. The shortlisted projects, adopted on February 7, 2021, were approved by the African Union heads of states, following lengthy consultations and rigorous assessments by the African Union Commission, the African Development Bank (AfDB), the African Union Development Agency (AUDA-NEPAD), and the United Nations Economic Commission for Africa (UNECA).

Highways provide an illurstaive example: Linking the Atlantic Ocean with the Indian Ocean (for example, via a major highway from Mombasa to Lagos, Dakar to Lagos, and Cairo to Dakar) has been a long-term aspiration—see Figure 1. In addition, north-south trans-African highways such as Algiers to Lagos, Tunis to Cape Town, and Cairo to Cape Town, would clearly transform the continent into an integrated whole, create jobs for the burgeoning population of youths, and substantially boost intra-area trade and investment under the AfCFTA. Similar priority projects in various dimensions of infrastructure—railways, electric power, transboundary water and broadband—have also been identified by PIDA.

Encouragingly, over the past few decades, infrastructure spending in Africa has increased but remains well short of needs, amounting to \$360 billion for the period to 2040. These projects need funding to get off the ground—to be "de-risked" (bankable projects). Infrastructure project preparation, however, is a complex, costly, and risky business. It entails rigorous economic and financial analyses, fiduciary assessments, social

and environmental safeguards, and climate-resilience evaluations vital for sustainability. In Africa, lack of grant funding has severely constrained preparation of high-quality bankable projects.

Here is the good news: Project preparation and design costs are usually modest as a proportion of total project costs, roughly five percent. Thus, a modest amount of grant funding from the Biden-Harris Administration (about \$5 billion) could go a long way to complete the preparation, and "de-risking" of some of the priority projects already identified by PIDA.

Such de-risked projects could be pitched to potential funders, including bilateral, multilateral, private sector, and other entities. Investors would include pension funds, insurance companies, sovereign wealth funds, and other financial institutions looking for stable longterm returns. It will improve the deal flows to the Africa Investment Forum, an initiative of eight institutions accelerating transactions and attracting investors to close Africa's evident infrastructure gap. (AIF members include Africa 50, Africa Finance Corporation, AfDB, AFREXIM Bank, Development Bank of South Africa, European Investment Bank, Islamic Development Bank, and the Trade and Development Bank of Eastern and Southern Africa.) In essence, the ready availability of well-assessed bankable projects will send a clear message to investors worldwide that Africa is seriously open for business.

Grant financing to assure a pipeline of bankable projects will also greatly elevate the U.S. brand at a time of increasing soft power competition in Africa.

Go big in support of the 16th Replenishment of the African Development Fund (ADF-16)

Since its inception in 1972, the ADF has provided about \$45 billion in concessional financing and grants to the continent's poorest countries, including fragile states. It has demonstrated its credibility as Africa's premier infrastructure vehicle with a portfolio of projects dominated by transportation, electric power, water supply and sanitation, and ICT/broad band infrastructure in low-income African countries.

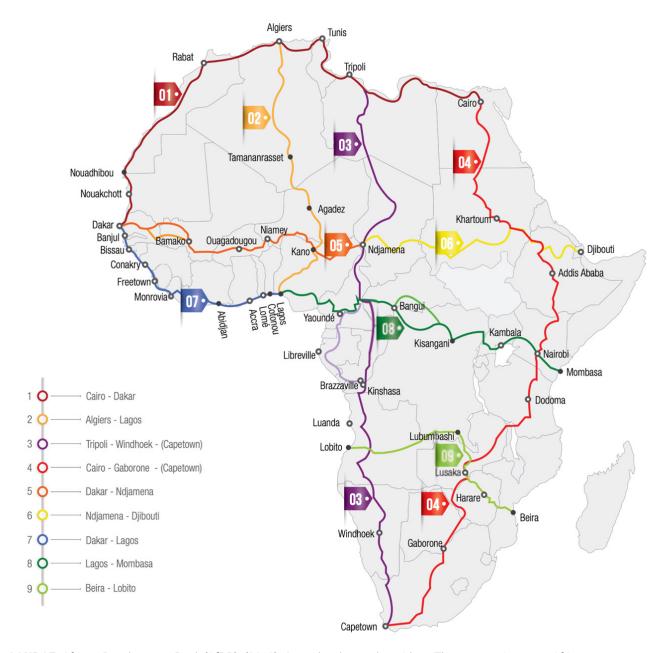
In the past five years, with ADF support, over 15 million people have been connected to electricity, 74 million have gained access to improved agriculture (including rural roads to boost agricultural productivity), and 42 million have benefited from access to improved water and sanitation services.¹

For ADF-16 replenishment, covering the period 2023-2025, the fund aims to vastly expand its interventions in quality, sustainable, and climate-resilient infrastructure. The replenishment meeting, planned for Morocco in December 2022, comes at a time of heightened uncertainty in the global economy with multiple headwinds that are rolling back decades of progress in poverty reduction among ADF countries; these countries account for 95 percent of Africa's poor. Moreover, donor countries providing concessional finance are facing fiscal challenges of their own, which diminishes the prospects for increased aid.

Under these circumstances, a higher level of ambition for ADF-16 by the Biden-Harris administration is called for—in order to support a robust economic revival in low-income Africa, by helping to close the continent's infrastructure deficit. Already, the administration has taken commendable first steps as is evident in its new Africa strategy and believes that Africa will be the next global economic powerhouse. Going big on ADF-16 and strengthening African institutions, for example PIDA, to assure a robust pipeline of bankable infrastructure projects constitute the logical next steps.

Trans-African highway master plan

The Trans-African Highway network comprises transcontinental road projects being developed by the African Union, the African Development Bank (AfDB), and the United Nations Economic Commission for Africa (UNECA) in conjunction with Regional Economic Communities. The total length of the nine highways in the network is 56,683 km.



SOURCE: African Development Bank (AfDB). (2019). Cross-border road corridors: The quest to integrate Africa.

ENDNOTES

¹ African Development Bank, "50th Anniversary of ADF" Press Release, May 31, 2022; Jocilyn Estes and Erin Collinson, "ABC of the IFIs: The African Development Fund's 16th Replenishment," CGD Brief, July 2022.

GROWING US TRADE AND INVESTMENT IN AFRICA

Witney Schneidman, Nonresident Fellow
Global Economy and Development | Brookings Institution
Landry Signé, Senior Fellow
Global Economy and Development | Brookings Institution

The priority

The recent upswing in U.S. diplomacy to Africa, launch of a new U.S. strategy toward the continent, and convening of the second Africa Leaders Summit are welcome developments in U.S.-Africa relations. The recent strategy's emphasis on "African agency" reflects the administration's awareness of the changing dynamics in its relations with the African continent and the region's value as an economic partner. There now is a window of opportunity for the administration to begin the real work of implementing this revised approach toward the continent while recognizing Africa's importance in global affairs.

A top priority for the U.S., in this regard, should be strengthening commercial diplomacy by focusing on trade and investment. While not mentioned explicitly in the strategy, there is an implicit recognition that strengthening commercial ties is an essential aspect of the current and future relationship with the region. Effective commercial diplomacy that leads to more trade and investment, job creation, and adherence to governance standards will improve overall stability and help address geopolitical concerns.

Why it matters for the US

Innovating and reenergizing U.S. economic policy toward Africa is critical given the continent's youthful and entrepreneurial population, growing middle class, and rising economic relationships with other trade partners such as China, Russia, and India, among others.1 As these demographic and relational shifts have occurred, the U.S. has lost ground commercially in Africa over much of the last decade. While trade and investment flows have declined since 2014. encouragingly both showed an uptick in 2021.2 This comes at an opportune time for the U.S., as Africa's consumer market is rapidly growing, accelerated by the recently implemented African Continental Free Trade Area (AfCFTA) agreement which is estimated to have a combined consumer and business spending of \$6.7 trillion by 2030 and \$16.12 trillion by 2050.3

To ensure that this uptick is sustained and increased, the Biden administration needs to implement a mutually beneficial commercial diplomacy where true "African agency," which includes economic agency, is at the core.

Opportunities

A culmination of research has shown that there are tangible steps the U.S. can take to foster trade and investment with African countries as summarized in the recommendations below. The U.S. government should consider the following:

Renew and expand AGOA preferences in a way that will support African regional economic integration in tandem with the AfCFTA

The African Growth and Opportunity Act (AGOA) has been the backbone of the U.S.-Africa commercial relationship for nearly a quarter century. By providing African countries with access to U.S. markets through tariff-free provisions, AGOA has led to the creation of hundreds of thousands of jobs and has used trade to stimulate economic development. With the legislation set to expire in 2025, it should be modernized in the following ways:

- Continuity: The vast majority of AGOA beneficiaries are least developed countries. For these countries, AGOA should be extended for another 10 years. At the same time, the U.S. should double down on developing national utilization strategies with AGOA beneficiaries. Research indicates that when countries develop these strategies, their noncrude AGOA exports to the U.S. have increased significantly, as much as 3,000 percent in some instances.⁴
- African countries have signed trade agreements that put American exports at a tariff disadvantage. For example, U.S. cosmetics, plastics, textiles, motor vehicles, and agricultural products and machinery face an 18.4 percent tariff going into the South African market in contrast with the same products that originate in the European Union for which the tariff is only 4.5 percent.⁵ In these countries, the U.S. should negotiate most-favored-nation applied tariffs in those sectors where U.S. goods and services are being disadvantaged or exempt those sectors from the renewal of AGOA.

Governance: One of the objectives behind AGOA was to incentivize democratic governance. Given that Freedom House counts only eight countries in sub-Saharan Africa as "free," the fewest since 1991, the effects of this linkage are questionable. Moreover, leaders who wage war and stage coups clearly have little concern for the welfare of their people. Consideration should therefore be given to restructuring the linkage between good governance and AGOA. The U.S. government has other more effective instruments, such as sanctions or the Global Magnitsky Program, with which to hold accountable those who undermine governance and human rights in AGOA-eligible countries. When the U.S. withdraws AGOA benefits, it is usually women assembling apparel for export to the U.S. who lose their jobs and bear the cost. The U.S. should not be putting at a disadvantage the very people whom it wants to support with AGOA.6

Promote regional integration by supporting the implementation of the AfCFTA

Regional integration, if properly supported and implemented, can have great benefits for the U.S. To help support the implementation, the U.S. can help facilitate information sharing among U.S. multinationals, especially educating U.S. companies on the potential benefits of investing in African countries and on how increased regional integration on the African continent will lead to higher demand for regionally sourced products.7 The U.S. can also promote regional integration by investing in sectors that will accelerate this effort, especially those that will contribute to closing digital and physical infrastructure gaps, as well as human capital gaps. The U.S. should also focus its investments on its specific strengths including digital transformation, education, democratic values, and creative industries, among others.

Expand Prosper Africa to focus on areas of comparative advantage and address information and coordination challenges

There is great need for the U.S. to disseminate information about the rapid changes in business opportunities in African countries, in order to

bridge information gaps, that may hinder interest or commitment by U.S. companies. Prosper Africa can help coordinate and regularly update information on why and how investment in African countries is mutually beneficial; information that has historically been difficult to acquire for U.S. companies. Storytelling and communication should be prioritized to make sure sector-specific insights are more widely available whether through government and embassy websites or paid advertising and search engine optimization.8 Prosper Africa is also well positioned to work with both U.S. and African government officials and business leaders to promote coordination between African leaders and U.S. companies that align with U.S. comparative advantage or advance national security goals.9

Prosper Africa should focus on supplying information to U.S. investors about how African startups operate, which is likely different from the U.S. model and may require flexible investment models. Information about the context for early stage investing in African countries will help investors curb assumptions and better understand Africa's startup and technology opportunities.¹⁰

Partner with African leadership to promote an enabling business environment

The U.S. government could help foster enabling business environments both through data collection and capacity building strategies. Data collection about business and investment environments can help governments make decisions and develop priorities, as well as track progress. The U.S. could play a role in developing a new index that is similar, but more robust than the World Bank's Ease of Doing Business Rankings and Power Africa's Enabling Environment Tracker. The U.S. government can also promote an enabling business environment by providing hands-on assistance both organizationally and technologically when it comes to implementing market-friendly reforms.

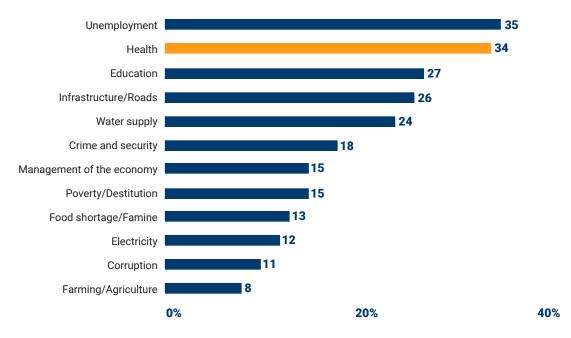
Focus on shared priorities—strengthen and expand programs that generate jobs and economic opportunities for young people

The youth population across Africa is estimated to exceed 2 billion by 2050, contributing to the estimate that one in four people on the planet will live in Africa by this time as well. Unemployment is cited as a top concern both in the U.S. and in 34 African countries, making job creation a shared priority that the U.S. can contribute to by growing trade and investment with the continent.¹¹

Programs such as the Young African Leaders Initiative and International Visitor Leadership Program should be expanded along with other exchange programs, such as one for medical professionals, that could contribute to capacity building in African countries.¹² The U.S. Department of State could also expand the Young African Leaders Initiative to feature technological skills and ICT entrepreneurial training as a main component.

Africa's most pressing public policy issues according to Africans

Respondents were asked: "In your opinion, what are the most important problems facing this country that government should address?"



NOTE: Respondents were allowed up to three answers, so percentages add to more than 100 percent. Figure shows the percentage who cite each response as one of their three responses.

SOURCE: Salau and Logan. (2022). "Rising concern, falling performance: Health-sector challenges evident before and after onset of COVID-19 pandemic." Afrobarometer Policy Paper No. 80.

ENDNOTES

- ¹ Zainab Usman, "How Biden Can Build U.S. Africa Relations Back Better," 2021. Carnegie Endowment. https://carnegieendowment.org/2021/04/27/how-biden-can-build-u.s.-africa-relations-back-better-pub-84399
- ² The United States Census Bureau, "2022: U.S. trade in goods with Africa," available at: https://www.census.gov/foreign-trade/balance/c0013.html; see also https://www.statista.com/statistics/188594/united-states-direct-investments-in-africa-since-2000/
- ³ Landry Signé, Landry Signe Testimony: "Understanding the African Continental Free Trade Area and How the U.S. Can Promote its Success," 2022, available at: https://www.brookings.edu/wp-content/uploads/2022/05/Landry-Signe-Testimony-April-27-2022.pdf
- ⁴ Witney Schneidman, Kate McNulty, and Natalie Dicharry (2021), "How the Biden administration can make AGOA more effective," https://www.brookings.edu/blog/africa-in-focus/2021/11/15/how-the-biden-administration-can-make-agoa-more-effective/
- ⁵ The Office of the United States Trade Representative (USTR), "2021 National Trade Estimate Report on Foreign Trade Barriers," p.463, available at: https://ustr.gov/sites/default/files/files/reports/2021/2021NTE.pdf.
- ⁶ Witney Schneidman, Testimony, "U.S. Trade and Investment in Africa," https://waysandmeans.house.gov/sites/democrats.waysandmeans.house.gov/files/documents/Witness%202%20Witney%20Schneidman%20Testimony.pdf
- ⁷ Landry Signé, "Landry Signe Testimony: Understanding the African Continental Free Trade Area and How the U.S. Can Promote its Success," 2022. https://www.brookings.edu/wp-content/uploads/2022/05/Landry-Signe-Testimony-April-27-2022.pdf
- ⁸ Judd Devermont and Marielle Harris. "Getting it Right: U.S. Trade and Investment in Sub-Saharan Africa," Center for Strategic and International Studies, 2021. https://www.csis.org/analysis/getting-it-right-us-trade-and-investment-sub-saharan-africa
- ⁹ Ibid.
- ¹⁰ Landry Signé and Chris Heitzig, "Effective Engagement in Africa," 2022. Brookings Institution. Avaliable at: https://www.brookings.edu/wp-content/uploads/2022/04/Effective-engagement-Africa_April-2022.pdf
- ¹¹ Tosin Salau and Carolyn Logan, "Rising concern, falling performance: Health-sector challenges evident before and after onset of COVID-19 pandemic," 2022. Afrobarometer Policy Paper No. 80.
- ¹² Usman, "How Biden Can Build U.S. Africa Relations Back Better," 2021.

HOW TO ADVANCE US-AFRICA RELATIONS THROUGH EMERGING TECHNOLOGIES

Landry Signé, Senior Fellow Global Economy and Development | Brookings Institution

The priority

The announcement of the Biden administration's new U.S. Africa strategy and the upcoming U.S.-Africa Leader's Summit to be held in December all signal welcome changes in the relationship between the U.S. and African countries. The strategy's respectful tone and its emphasis on "African agency" are a source of optimism among observers that the administration recognizes the changing dynamics of partnership with the African continent and sees it as the valuable economic partner that it is, with combined consumer and business spending projected to reach \$16.12 trillion by 2050.1 There is now a window of opportunity for the administration to begin the real work of turning promises into successful action and implementation, and the new and emerging technologies collectively associated with the Fourth Industrial Revolution (4IR) can play a central role.2

As summarized in my book on Africa's Fourth Industrial Revolution (forthcoming from Cambridge University Press, 2023), the 4IR describes a broad range of innovations and disruptions reshaping the global economy, from the Internet of Things and artificial intelligence to biotechnology and 3D printing. 4IR has major implications for productivity, sustainability, poverty, structural transformation, labor and skills, cooperation and inclusivity, governance, and security. The pronounced scope, pace, and impact of the 4IR are undeniable: Intoday's increasingly interconnected world,

no state, industry, or firm can avoid interaction with the technological forces driving digital transformation and the 4IR, and the U.S. is leading the 4IR globally.

Why it matters for the US

The disruptive technologies and transformations associated with the 4IR and digital transformation represent not only phenomenal opportunities, but also critical risks in key sectors related to the future of U.S.-Africa relations.

Analyzing current developments and prospects for the 4IR by industry sector reveals unique momentum to use new technologies to improve growth and productivity, in areas such as banking and financial services, manufacturing and industrialization, infrastructure and construction, oil and gas, agriculture and agroindustries, tourism and creative industries, information and communications technology, sustainability, education, energy, and health care, among others. The potential to use the 4IR to advance democracy, governance, service delivery, peace, inclusion, and development is also substantial. Taking advantage of these opportunities requires not only leadership with intentionality, but also the adoption of more stringent cybersecurity regulations and policies, in order to ensure protection from cyberattacks and unethical uses of disruptive innovations.

Given its leadership in the global tech revolution, the U.S. would be remiss to overlook the sweeping technological changes unfolding on the African continent, in a context where Russia and China are making strategic progress. The U.S. can seize the unique opportunity to position itself as a key geopolitical and technological player (as well as a partner) on the continent, contribute to addressing Africa's most pressing challenges at the heart of the U.S.-Africa strategy, and provide American and African businesses, investors, and citizens phenomenal opportunities in a continent where about four out of 10 people in world will be hosted by the end of 2100.

Opportunities

The Biden administration's strategy mentions the critical role of technology, but the next phase of the U.S.-Africa partnership will require more than just acknowledgement: Concrete actions will need to be taken. The following are recommendations for how the U.S. can strengthen its engagement with Africa by focusing on the 4IR and the digital economy.³

Support African countries in developing and implementing a digital transformation and 4IR strategy centered on agile governance and extensive private sector investment

Given the speed and velocity of the 4IR, African countries will need a coordinated and multistakeholder approach which the U.S. can support through technical assistance, knowledge transfer, and funding. Strategies could be supported by expanding initiatives such as the Centers for the Fourth Industrial Revolution (South Africa and Rwanda) and the Presidential Commission on 4IR (South Africa). As a nation with a long history of successfully implementing cutting-edge technological innovation, the U.S. is well suited to support African leadership (through capacity building) to embed anticipation and foresight into the regulatory systems that govern innovation and technology. The U.S. can also help develop tools that facilitate new and more efficient financial systems for medium and large enterprises, including platforms that can connect African entrepreneurs to equity-based and early-angel investors.

Next, the U.S. government could help foster probusiness environments and protect intellectual property by helping develop new mechanisms for safe and reliable data collection. Collecting data on business and investment environments can help governments make decisions and develop priorities as well as track progress.

Provide new investments to close the physical and digital infrastructure gaps

The U.S. has already invested in various initiatives including Connect Africa, Access Africa, and Prosper Africa, which have strengths that can be further leveraged to close critical infrastructure gaps, necessary to increase two-way trade and investment with Africa. Connect Africa was launched in 2018 by the Overseas Private Investment Corporation (OPIC, now United States Development Finance Corporation, or DFC), investing \$1 billion in projects focused on transportation and logistics, ICT, and value chains. The BUILD Act in 2018 doubled the agency's funding for emerging market infrastructure projects to \$60 billion. Access Africa, an initiative through the U.S. Trade and Development Agency, has also been successful in developing ICT infrastructure in Africa specifically to help people underserved by traditional banking. These initiatives, along with Prosper Africa's focus on business expansion, could be refined to further center priorities on developing technologies for African markets.

Create educational partnerships to close the digital skills and human capital gap

Digital skills, both basic and advanced, will be critical for the world's youngest continent to harness the 4IR. With online education accelerated due to the pandemic, the U.S. should encourage American universities and educational service providers to partner with African universities as well as primary and secondary schools, to teach basic and advanced digital skills—particularly for marginalized groups. These skills will be critical if Africa is to have both a consumer market and a labor

force engaged with emerging technologies. As a recent Afrobarometer survey revealed (see Figure 2), unemployment is cited as a top concern in numerous African countries, making job creation a critical priority that the U.S. can help address.⁵

Invest in the clean energy technology sector and create value locally and continentally

The Democratic Republic of the Congo is the fourth largest producer of copper and home to 70 percent of the world's cobalt and 60 percent of its coltan, key minerals for clean technologies. Despite such abundance of valuable resources, the U.S. has not sufficiently invested in the DRC or in the mining sector for these minerals, ceding its influence in this domain to China. The U.S. should accelerate its investment in the DRC and its mining sector by focusing on partnerships based on mutual interests: peace and security, economic diversification, and local value. Positioning itself as an alternative to an extractive model—for example, by promoting local and continental value chains in the clean technology sector—will be beneficial.

Partner with African governments to protect against data privacy and cybersecurity threats

With greater digitalization comes greater risk for digital attacks, a vulnerability that could expand beyond national borders if not effectively dealt with. Attacks on digital infrastructure pose huge risks for security in both the short and long term. The U.S. should partner with African utilities to protect against these attacks and create reporting systems that can identify vulnerabilities. The U.S. can help African governments develop nationwide response plans that are specific to local contexts and based on available financial, human, and technology resources. Where cybersecurity specialists are scarce, the U.S. should lead in capacity building, and assistance with data encryption software for the long-term success of both regions.

Support regional integration, implementation of the African Continental Free Trade Area (AfCFTA) and contribute to Africa's local and continental technology value chains

Regional integration, if effectively supported and implemented, can have great benefits for the U.S. given Africa's potential market of more than \$16.12 trillion by 2050. The telecommunication market alone will represent about \$144.5 billion in combined consumer and business spending, creating unique opportunities for both American and African businesses and investors.

By prioritizing the 4IR and technological development in Africa, the U.S. can gain a competitive edge over other partners on the continent and achieve mutual goals, while unlocking mutual prosperity. The disruptions caused by the 4IR will continue to evolve at a rapid pace, but an equal and sustained U.S.-Africa partnership, will help transform these challenges into opportunities; and improve the lives of African and American citizens alike.

ENDNOTES

- ¹ "Testimony of Professor Landry Signé," Testimony before the United States House Foreign Affairs Committee: Subcommittee on Africa, Global Health, and Global Human Rights, April 27, 2022.
- ² Njuguna Ndung'u and Landry Signé, "The Fourth Industrial Revolution and digitization will transform Africa into a global powerhouse," Chapter 5 of the Foresight Africa 2020 report, January 8, 2020. Available at: https://www.brookings.edu/research/the-fourth-industrial-revolution-and-digitization-will-transform-africa-into-a-global-powerhouse/; see also: Landry Signé and Chris Heitzig, "Effective Engagement in Africa," 2022. Brookings Institution. Avaliable at: https://www.brookings.edu/wp-content/uploads/2022/04/Effective-engagement-Africa_April-2022.pdf.
- ³ Louise Fox and Landry Signé, "From subsistence to disruptive innovation Africa, the Fourth Industrial Revolution, and the future of jobs," March 2022. Available at: https://www.brookings.edu/wp-content/uploads/2022/03/4IR-and-Jobs_March-2022_Final.docx.pdf.
- ⁴ Signé and Heitzig, "Effective Engagement," 2022.
- ⁵ Tosin Salau and Carolyn Logan, "Rising concern, falling performance: Health-sector challenges evident before and after onset of COVID-19 pandemic," Afrobarometer Policy Paper, July 2022.
- ⁶ U.S. Department of State, "2021 Investment Climate Statements: Democratic Republic of the Congo." Available at: https://www.state.gov/reports/2021-investment-climate-statements/democratic-republic-of-the-congo/.
- ⁷ Landry Signé and Kevin Signé, "How African states can improve their cybersecurity," TechStream (Brookings), 2021. Available at https://www.brookings.edu/techstream/how-african-states-can-improve-their-cybersecurity/.

ABOUT THE PROGRAM

GLOBAL ECONOMY AND DEVELOPMENT

Founded in 2006, the Global Economy and Development program at Brookings aims to shape the policy debate on how to improve global economic cooperation and fight global poverty and sources of social stress. With a long-term vision of strong, sustainable, and balanced growth for a prosperous world, the program undertakes high-quality research, identifies target audiences and policy opportunities, and shares its findings to inform new policy solutions.

AFRICA GROWTH INIATIVE

The Brookings Institution's Africa Growth Initiative believes that the time is right for Africa to sustainably and inclusively converge with the rest of the world in terms of standards of living, opportunity, and GDP per capita income. However, the road to achieving this vision will not be easy. Despite the progress, Africa's growth to date has failed to meaningfully impact the continent's startling rates of poverty and inequality. For Africa to achieve transformative growth, regional leaders and their U.S.-based counterparts need new models and policies for economic development, which expand opportunity for workers, families, and communities. The Brookings Institution's Africa Growth Initiative supports this process by producing and disseminating high-quality, independent policy research, which helps establish long-term strategies for economic growth and enhances the programs of Africa's key partners in Washington, D.C.

BROOKINGS

1775 Massachusetts Ave NW Washington, DC 20036 (202) 797-6000 www.brookings.edu

