Building Bridges

Leveraging Alternative Diplomacy to Foster U.S.-African Relations and Counter Chinese Influence

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In an era of shifting geopolitical dynamics, the relationship between the United States and African nations is becoming increasingly vital. With Africa's population projected to double by 2050[1] and its economies exhibiting remarkable growth, the continent is a pivotal player in the global economic and geopolitical landscape. However, China's growing influence in Africa, driven by large-scale infrastructure investments and strategic partnerships, poses a challenge to the United States' ability to maintain and expand its influence in the region. This policy paper proposes leveraging alternative diplomacy—specifically in food security and collaborative science and technology research—as a means to build trust, enhance relations, and counterbalance China's influence.

Alternative diplomacy focuses on using nontraditional forms of engagement to achieve diplomatic goals, such as economic cooperation, humanitarian aid, and educational exchanges. By embracing this strategy, the United States can foster deeper connections with African nations, addressing mutual priorities like food security, technological innovation, and sustainable development. This approach aligns with African nations' needs while offering the U.S. an opportunity to reclaim influence in the region. The paper outlines actionable steps for U.S. policymakers to implement alternative diplomacy strategies effectively.

Geopolitical Landscape

Historically, the United States and China have taken different approaches to their engagement with Africa. The U.S. has typically emphasized development aid, democratic governance, and human rights, while China has prioritized economic investments and infrastructure development. China's Belt and Road Initiative (BRI) has led to major infrastructure projects across the continent, including railways, ports, and energy facilities, positioning China as Africa's largest trading partner. In contrast, U.S. investments have been more fragmented and less visible, focusing on humanitarian aid and security assistance.

The rise of China as a dominant power in Africa has raised concerns in Washington about Beijing's long-term geopolitical objectives. China's influence is not merely economic but also political, as seen in its use of "debt-trap diplomacy," where African nations are pressured to cede control of critical assets when they struggle to repay loans. The U.S. must offer a more attractive, sustainable, and ethical alternative to counterbalance China's presence.

Africa's Priorities

African nations face several key challenges, including food insecurity, poverty, unemployment, and inadequate infrastructure. Food security, in particular, is a pressing issue. Despite the continent's rich natural resources, many African countries depend heavily on food imports and are vulnerable to climate change–induced agricultural disruptions. The African Union's 2063 Agenda prioritizes agriculture as a key driver of economic transformation and emphasizes the importance of scientific and technological advancements in achieving this goal.

For the U.S. to regain influence in Africa, it must address these pressing needs while also recognizing the importance of mutual respect and partnership. By collaborating with African countries on food security and scientific research, the U.S. can promote sustainable development and foster long-term relationships.

Food Security as Diplomatic Leverage

Africa's food insecurity stems from several factors, including climate change, conflict, poor infrastructure, and limited access to agricultural technologies. Sub-Saharan Africa is particularly vulnerable, with nearly 282 million people experiencing hunger.[2] The region's dependency on rain-fed agriculture makes it highly susceptible to climate variability, further exacerbating food insecurity. This situation poses a risk to political stability, as food scarcity can lead to social unrest and migration crises.

The U.S. has a long history of supporting agricultural development in Africa through initiatives like Feed the Future, the U.S. Agency for International Development's (USAID) flagship program aimed at reducing global hunger. Feed the Future has worked to improve agricultural productivity, nutrition, and market access across Africa. However, the scale of U.S. efforts pales in comparison to China's massive infrastructure investments under the BRI.[3]

The U.S. has an opportunity to expand its role in African agriculture by promoting sustainable agricultural practices, investing in climate-resilient crops, and supporting local capacity-building initiatives. For example, the Vision for Adapted Crops and Soils (VACS) was launched by the U.S. Department of State in partnership with the African Union and the Food and Agriculture Organization of the United Nations in February 2023.[4] By collaborating with African nations on agricultural research and development, the U.S. can provide sustainable solutions that align with African priorities.

Strategic Recommendations

Expand Agricultural Research and Development Partnerships: The U.S. should work with African governments, universities, and research institutions to develop climate-resilient crops and farming techniques. This can be done through joint research initiatives and exchange programs that facilitate knowledge transfer.

Support Local Capacity-Building Initiatives: To ensure the sustainability of food security programs, the U.S. should invest in training local farmers, extension workers, and policymakers. This will empower African communities to implement sustainable agricultural practices and manage resources effectively.

Promote Sustainable Agricultural Practices and Technologies: The U.S. should promote the adoption of technologies like precision agriculture, which uses data-driven approaches to optimize crop yields while minimizing environmental impact. Collaborating with African nations to introduce these technologies can enhance food security and improve resilience to climate change.

America's Role in Science and Technology for Development

Scientific advancements are critical for solving near-term challenges in Africa, but investment in innovation is vital for developing homegrown companies that drive twenty-first century economies. For example, of the twelve largest companies in the world by market cap, ten are technology companies whose success is driven by innovation in computer science, physics, and chemistry.[5] Scientific discoveries lead to better quality of life and economic benefits, but achieving this requires knowledge, tools, and human capacity.

Africa has a wealth of young talent, and the United States is ideally suited to help with the knowledge transfer. Although China has been catching up to the U.S. in science and technology, Africans still view the United States, and the West, as the leaders in science. When 25 physics, chemistry, and materials researchers in Africa were surveyed for this paper about the top universities in the world, they predominantly chose American and European universities (Figure 1). When they were asked about the top technology companies in the world, America was even more dominant. This new data shows that Africans admire America's universities and technology companies, and this reputational strength is a potent source of soft power.

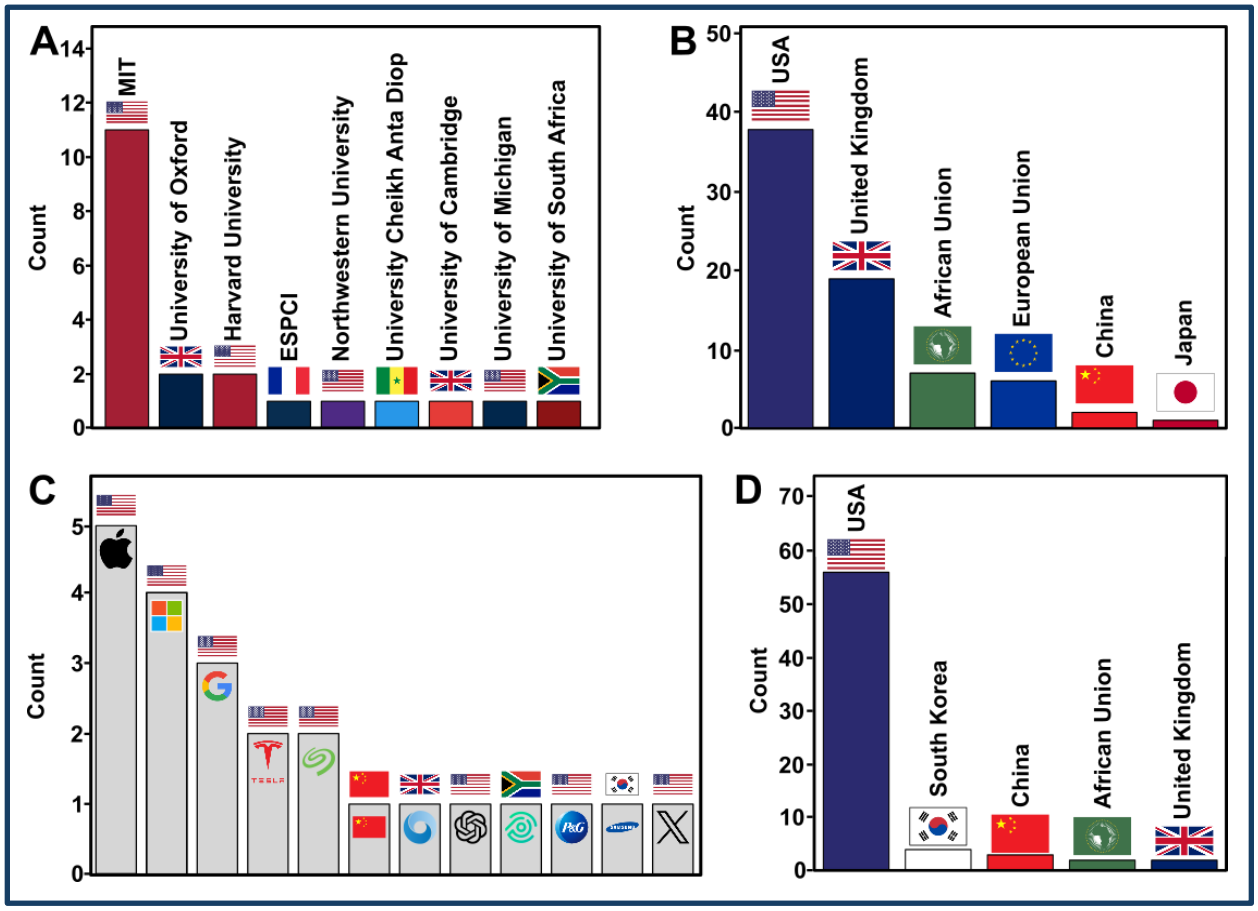

Figure 1. Original survey of 25 anonymous physicists, chemists, and material scientists from Ethiopia, Cameroon, Kenya, South Africa, Tanzania, Malawi, Nigeria, Rwanda, Senegal, and Uganda. The respondents were professors, PhD students, master's students, and undergraduate students, in roughly equal proportions. A) Answers to question: "What is the number one university in the world for physics/chemistry/materials science?" B) Answers to question: "What are the top universities in the world for physics/chemistry/materials science?" sorted by location. C) Answers to question: "What is the number one technology company in the world?" D) Answers to question: "What are the top technology companies in the world?" sorted by location.

Opportunities for U.S.-Africa Partnerships

Applied science areas such as renewable energy, health tech, digital infrastructure, and resource-efficient electronics are promising areas of collaboration. Collaborative knowledge-sharing and networking events have had great success so far, including the Joint Undertaking for an African Materials Institute (JUAMI) funded by the National Science Foundation and Northwestern University[6] and the U.S.-Africa Frontiers of Science, Engineering, and Medicine Symposiums funded by National Academies of Sciences, Engineering, and Medicine and the African Academy of Science.[7] Technology companies such as IBM have opened research centers in Africa over the last fifteen

years, providing employment and skill development for local STEM talent.[8] Joint research projects also exist, but the inability of U.S. science funding agencies to support non-U.S. scientists creates resource constraints.

African countries benefit from the knowledge sharing, science capacity building, and intellectual property generation of research collaborations. The U.S. benefits from access to human capital, new markets for technology products, and goodwill of African citizens toward the American brand.

Strategic Recommendations

Establish Joint Research Centers: The U.S. should prioritize creating joint research centers in Africa co-led and co-funded by U.S. science agencies, U.S. technology companies, and the African host countries.

Streamline the Process for African Scientists to Visit the U.S.: The exchange of scientists should be stimulated through prioritized visa processing of African scientists coming to the U.S. for scientific visits. Standards should be provided for African students seeking to study in the U.S. to help universities identify top talent (standardized testing, university accreditation).

Invest in Africa's Technology Ecosystem: Existing aid money such as USAID funds should be used for technology infrastructure building in Africa. Private investment from U.S. venture capital firms should also be encouraged and supported.

Integrating Food Security and Science Diplomacy: Convincing African leaders to invest financial and human resources into science can be challenging when more immediate concerns such as food and water security exist. Agricultural technology collaborations can be the bridge that addresses near-term problems in Africa while also building scientific capacity. Novel AI and chemistry research has opened new opportunities to detect and treat crop diseases, track and decrease water usage, and remove weeds without pesticides. Joint agritech research projects could leverage American technology knowledge and African agriculture expertise to the benefit of both.

Countering Chinese Influence

China has built strong connections with African countries over the last decade through large infrastructure investments. The relationship is transactional, with significant costs to the African nations, including debt, natural resource extraction, and expectations of support for China on the international stage. For leaders of African countries badly in need of infrastructure development and respect from global powers, China's exploitive initiatives can be enticing.

Food security and science diplomacy enables America to leverage its own strengths of innovation, ethical practices, and desire for mutual growth. Bringing citizens together to collaborate on scientific research, connections between the U.S. and African nations can go beyond simply State Department officials. In contrast to the exploitative nature of the Chinese relationship, America can offer a partnership that leads to growth in the short and long term.

Conclusion

The U.S. has a unique opportunity to strengthen its relations with African nations by leveraging alternative diplomacy in food security and science and technology collaboration. These strategies align with African priorities and offer sustainable solutions that can counter China's growing influence in the region. By embracing this approach, the U.S.

can foster mutual respect, trust, and long-term partnerships that contribute to global stability and prosperity. Policymakers must act swiftly to implement these recommendations, ensuring that the U.S. remains a key player in Africa's future.

The views expressed in this paper are those of the authors and do not reflect the official policy or position of Seagate Technology, Food Systems for the Future, nor any other affiliated organization or employer.

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