



NATIONAL SECURITY
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**Digital Battleground: Ethiopia, China, and the Future of U.S.
Influence in Africa**

By: Annalise Pereira

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Executive Summary

China's Belt and Road Initiative (BRI) and its digital extension, the Digital Silk Road (DSR), have greatly expanded Beijing's influence in Africa through infrastructure investment, technology exports, and strategic partnerships. Ethiopia, a key BRI and DSR partner, has emerged as a key partner for Chinese engagement, making it both a gateway to East Africa and providing a foundation for digital authoritarianism. While these initiatives have brought investment and development, they also pose risks to democratic governance, data sovereignty, and U.S. strategic interests. In contrast, the United States has approached Ethiopia primarily through humanitarian aid, missing opportunities for long-term partnership. Implications for policy include:

- The need for a U.S.-led digital development investment plan focused on building secure data centers, expanding digital infrastructure, and supporting cloud services in Ethiopia
- Reframing U.S.-Ethiopia relations from aid dependency to strategic partnership, investing in mutually beneficial development that promotes economic resilience, digital sovereignty, and democratic norms.
- Launch targeted public diplomacy campaign to expose risks of Chinese digital coercion, assist with contract transparency

BRI Background

China's Belt and Road Initiative (BRI) was launched in 2013 by President Xi Jinping to expand Chinese infrastructure to Africa, Oceania, and Latin America. Over the past decade, the BRI has been incredibly successful, with over 200 BRI agreements being signed in more than 150 countries.ⁱ These projects include constructing or upgrading roads, ports, railways, pipelines, and other infrastructure. Additionally, China has funded hundreds of special economic zones, which are industrial areas designed to create jobs and expand China's tech offerings, such as 5G networks to increase internet connectivity or satellite television.

BRI is one of the main ways China hopes to expand their power and influence under Xi, as establishing these diplomatic and economic ties gives China geopolitical leverage over BRI countries.ⁱⁱ Opponents of BRI claim China is using "debt-trap diplomacy", which aims to burden countries with unaffordable loans to make them vulnerable to Chinese coercion. This issue is especially salient for developing countries as they take on large amounts of debt to fund BRI projects. China can demand repayment of loans at any time, and grants loans close to market rate. Recently a growing number of countries have struggled to repay the loans. For example, in 2017 Sri Lanka signed a 99-year lease handing operational control to a Chinese SOE because they could not repay a \$1 billion loan. In other cases, China extends loan repayment options, lowers interest rates or refinances debt.ⁱⁱⁱ Despite these concerns, the BRI program remains many countries only option to quickly build infrastructure and, more importantly, access modern technology.

The Digital Silk Road (DSR) is an expansion of the BRI project which focuses on expanding access to essential high-tech systems such as telecommunications networks, artificial intelligence

(AI) capabilities, cloud computing, e-commerce, and surveillance technology. The DSR fuses state and Chinese tech companies, which establishes China as the main supplier of technology goods. Chinese firms are in DSR countries to expand infrastructure, but they also establish training centers, R&D programs and transfer technical knowledge.^{iv}

Similar to BRI, some countries raise concern about China's assertiveness on the world stage. They worry that by using Chinese technology, DSR countries will also adopt China's technological authoritarianism. Additionally, there are security concerns over China's access to data and sensitive information, which will be expanded on later in the paper. However, many developing countries sign DSR agreements out of necessity; without access to affordable expansion of wireless phone networks and internet coverage, these countries lack critical technology infrastructure and fall behind. Still, the success of the DSR has expanded China's commercial influence, geo-economic interests and created standards of digital authoritarianism through governing technology. Both the DSR and BRI demonstrate China's commitment to competition with the United States and poses a threat to the rules-based international order with democratic norms led by the US.^v

China-Ethiopia Partnership

The China-Ethiopia partnership, now upgraded to an "all-weather strategic partnership" as of October 2023, has become one of China's key partnerships on the African continent. Rooted in diplomatic ties dating back to 1970, the partnership expanded under the Belt and Road Initiative (BRI), making Ethiopia a model BRI country and a key gateway to East Africa. Chinese investment has transformed Ethiopia's infrastructure and economy, especially through high-impact projects like the Addis Ababa–Djibouti Railway (ADR), Africa's first electrified transnational railway.^{vi} Additionally, China has also established over 20 industrial parks in Ethiopia. Industrial parks serve as starting points for Chinese enterprises to enter certain markets. These parks are operated by Chinese firms to offer a familiar business environment for Chinese companies, streamlining operations by offering similar business practices and services which minimizes adoption costs resulting from cultural differences. These parks are strategically located in free trade or other economic zones that enjoy policy incentives such as tax exemptions or investment benefits to further incentivize Chinese firms. These projects have fueled job creation, particularly for young Ethiopians, and laid the foundation for Ethiopia to become a lower-middle income, manufacturing-driven economy.^{vii}

Ethiopia's strategic value extends beyond economics. As Africa's second-most populous country and home to the African Union and other major international organizations, it is also central to continental diplomacy.^{viii} Despite domestic instability and a recent civil war, Ethiopia's GDP continues to grow, and the country remains attractive to investors due to its large labor force, pro-investment policy environment, and abundant natural resources. China has capitalized on this opportunity, with trade between the nations making up the bulk of the \$4.9 billion bilateral trade in goods and finance, with over 2,100 Chinese ventures approved in Ethiopia. Unlike Western partners, China offers preferential trade terms, such as zero-tariff treatment on 98% of Ethiopian product and maintains a policy of non-interference. This contrasts with the U.S. suspension duty-free access in 2022 due to human rights concerns and backing out of other trade alliances.^{ix}

More recently, the bilateral relationship has evolved into the digital domain through the Digital Silk Road (DSR), Beijing's global initiative to promote AI, 5G, safe cities, and cloud computing infrastructure. Chinese companies such as Huawei can offer affordable infrastructure and subsidized loans, essentially a turn-key solution to 5G development. Ethiopia is central to the expansion of DSR, and China has financed and built much of Ethiopia's national digital infrastructure through state-owned giants like Huawei and ZTE. Over \$3.1 billion in Chinese loans, mostly from the EXIM Bank, have enabled the construction of nationwide fiber-optic networks, cloud data centers, and public surveillance systems. Huawei's Safe City systems, with facial recognition and predictive policing capabilities, are already operational in Addis Ababa.^x

The development of this "safe city" began in 2009–2010 and has expanded in phases. It features an extensive CCTV camera network integrated with modern surveillance technologies such as facial recognition, traffic monitoring, and AI video analytics. The project has been implemented through partnerships with major Chinese tech firms, like Huawei and KEDACOM, which are often supported by Chinese loans and expertise. As of the early 2020s, Addis Ababa's system includes over a thousand cameras covering key roads and public spaces, integrated with emergency response and data analysis.^{xi}

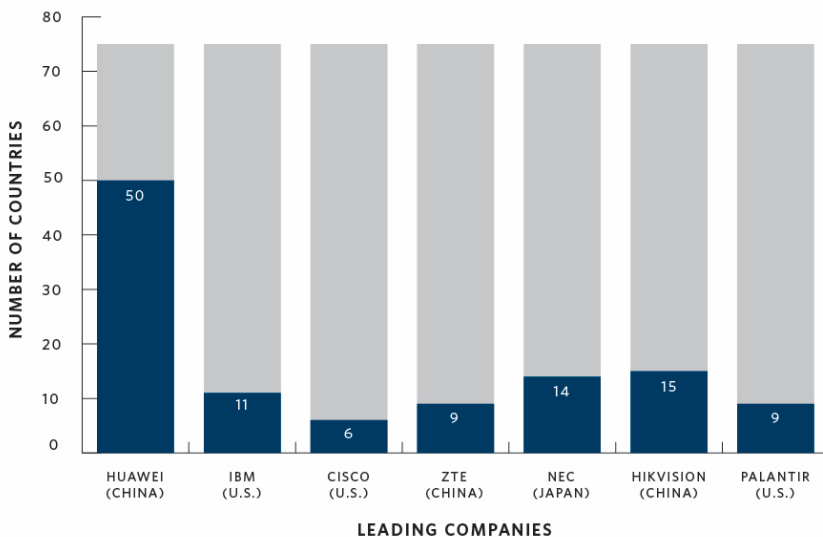
What distinguishes Ethiopia's DSR from other African countries is the government control over its digital network. Unlike Kenya or South Africa, Ethiopia has rejected liberalization in favor of a government-run, monopolistic model.^{xii} This is an important distinction as, despite attempts to liberalize, Ethio Telecom functions as essentially a monopoly under the government. Additionally, their Prime Minister Abiy Ahmed has consolidated power, meaning China deals with a single leader. This has allowed Chinese firms to easily integrate into the country's surveillance and information infrastructure. While Chinese officials frame these projects as apolitical and commercially driven, they instead increase state-surveillance, especially in the absence of national data protection laws or AI regulatory frameworks.^{xiii}

Huawei Risks

The major risk surrounding Huawei's dominance in 5G and digital infrastructure lies in its opaque corporate structure, lack of transparency, and close ties to the Chinese Communist Party. Under China's 2017 National Intelligence Law, companies like Huawei are legally obligated to cooperate with state intelligence efforts, raising serious concerns for data privacy. Since 2012, the United States has accused Huawei of enabling espionage on behalf of Beijing, culminating in a 2019 executive order that banned the company from US networks due to national security concerns. These fears are not unfounded, as Huawei has actively assisted authoritarian regimes in Africa. Huawei actively helped governments spy on political opponents, monitor protests, and suppress dissent. In Uganda, Huawei technicians helped authorities deploy facial recognition software to identify and arrest opposition leaders after protests.^{xiv} The African Union headquarters in Addis Ababa were built and outfitted by the Chinese government with Huawei equipment, and investigations revealed that data was being secretly transferred to Shanghai nightly, prompting accusations of espionage. Huawei's Safe City platforms offer governments powerful tools for real-time tracking, mass data collection, and digital repression.^{xv} As Huawei expands its presence across Africa, it not only builds physical infrastructure, it helps shape

digital norms and security practices in ways that may undermine democratic institutions and enable authoritarian governance.^{xvi}

FIGURE 2
Leading Companies Contributing to AI Surveillance



NOTE: The AIGS Index tracks seventy-five countries that employ AI surveillance. The numbers here reflect how many of those countries each company is present in.

Source: Carnegie Endowment

This government-controlled model allows for an interesting comparison with Uganda and China’s digital surveillance and authoritarian governance domain. In Uganda, Chinese technology, especially Huawei’s facial recognition “Safe City” system, has been key in entrenching President Museveni’s authoritarian rule. The technology enables the government to track opposition figures, suppress dissent, and implement repressive policies, all while arguing they were for security purposes.^{xvii} A similar dynamic is observable in Ethiopia where Chinese tech companies have built Addis Ababa’s extensive surveillance infrastructure, including more than a thousand AI-powered CCTV cameras integrated into a centralized command system. While Ethiopian officials frame these technologies as tools for urban management and crime prevention, their implementation occurred during periods of heightened political unrest. For example, during the state of emergency following the Tigray conflict. This raises concerns about their use in curbing civil liberties and monitoring political opposition. Ethiopian, much like Uganda’s, reflects a broader trend in which Chinese digital technologies are used by authoritarian-leaning governments to maintain power, posing significant implications for democratic governance across the continent.

Strategic Concerns

Ethiopia’s prime location in the Horn of Africa and its connectivity to the port of Djibouti represents the strategic significance of the country, not just for China, but also for the United

States. China's only overseas military base is situated just miles from Djibouti's main port, placing it in one of the of key global shipping lanes and regional security operations. Additionally, China built the Ethiopia-Djibouti railway, allowing for easier transportation and trade of 90% of Ethiopian goods, enhancing China's logistical hold in East Africa.^{xviii} Ethiopia is also rich in valuable natural resources, including gold, platinum, and rare-earth minerals; all essential to the future of AI, battery storage, semiconductors, and other emerging technologies. China continues deepens its Belt and Road and Digital Silk Road investments across Africa, including in surveillance infrastructure like Huawei's Safe City systems in Kenya, Uganda, South Africa, and Ethiopia. Therefore, China's access to Africa's markets, governments, and critical minerals is expanding rapidly, while the US essentially pulled out of Africa post-Cold War. For the US, ceding influence in Africa risks allowing Beijing to shape global technology standards, expand its military footprint, and secure privileged access to supply chains. Critically, 30% of the critical mineral reserves are in Africa, and access to these resources will drive key technological advancements related to AI and future technology advancements.^{xix} Despite China's current control, their growing role is not without limits. Many African governments, including Ethiopia's, have demonstrated agency in shaping the terms of engagement, pressuring Beijing to renegotiate loans or deliver on local capacity-building promises. This raises key questions for U.S. policymakers: not only how to compete with China's scale and speed, but how to offer partnerships that respect African sovereignty while aligning with democratic norms and strategic interests.

Policy Implications and Suggestion

As artificial intelligence development accelerates, its expansion is directly tied to access to robust data center infrastructure. The private sector in Ethiopia has shown growing interest in building data centers to support AI, cloud computing, and digital services. This presents a unique opportunity for the United States, which holds a strategic advantage in data center technology, cybersecurity, and transparent data governance. Ethiopia is arguably America's closest diplomatic partner in sub-Saharan Africa, evidenced by one of the largest African diasporas in the United States and significant U.S. foreign aid. However, Ethiopia's reliance on humanitarian assistance without substantial development investment has hindered long-term progress. Rather than treating Ethiopia as a passive aid recipient, the United States should reframe the relationship as a mutually beneficial strategic partnership.^{xx}

To counter China's growing digital footprint in the region, the United States should consider launching a targeted, values-based alternative to China's DSR Initiative. This digital investment plan must be focused on American strengths: secure, efficient data center infrastructure and a commitment to digital privacy, transparency, and fair contracting. Control over data centers in Ethiopia would not only support domestic development but also undermine Huawei's system of control, which would rely on US-sourced server components and data center interconnectivity. Greater U.S. presence in Ethiopia's digital ecosystem would help disrupt potential data theft, cyber espionage, or digital authoritarianism linked to Chinese technologies.^{xxi}

In addition to infrastructure investment, the U.S. should launch a coordinated public diplomacy campaign. This effort would highlight the risks of opaque Chinese deals and emphasize how Chinese firms often exploit unequal bargaining positions. One example is China's contract with

Djibouti, where the Chinese-language version of the agreement reportedly included provisions not found in the English translation, raising serious concerns about deception. By providing legal and technical support for contract negotiations, the U.S. can help Ethiopia and similar partners avoid exploitative terms and preserve sovereignty.

Given the current policy environment, this approach should be framed domestically not as charity, but as a strategy to make America stronger, wealthier, and more competitive. In the context of the AI arms race and shifting global power dynamics, strengthening partnerships like the one with Ethiopia can reinforce U.S. hegemony, secure supply chains, and promote a digital order grounded in transparency and accountability. Otherwise, China will cement its dominance across Africa.

ⁱ Chatzky, James McBride, Noah Berman, Andrew. *China's Massive Belt and Road Initiative* | Council on Foreign Relations. <https://www.cfr.org/backgrounder/chinas-massive-belt-and-road-initiative>. Accessed 16 Jul. 2025.

ⁱⁱ Feingold, Spencer. "China's Belt and Road Initiative Turns 10. Here's What to Know." *World Economic Forum*, 20 Nov. 2023, www.weforum.org/stories/2023/11/china-belt-road-initiative-trade-bri-silk-road/

ⁱⁱⁱ *Debt Distress on the Road to "Belt and Road"* | Wilson Center. 16 Jan. 2024, <https://www.wilsoncenter.org/blog-post/debt-distress-road-belt-and-road>.

^{iv} "China's Digital Aid: The Risks and Rewards." *Council on Foreign Relations*, <https://www.cfr.org/china-digital-silk-road>. Accessed 16 Jul. 2025.

^v Codings. *DIGITAL SILK ROAD*. <https://www.orcasia.org/digital-silk-road>. Accessed 16 Jul. 2025.

^{vi} "China-Ethiopia Trade, Investment, and Opportunities." *China Briefing News*, 28 Mar. 2025, <https://www.china-briefing.com/news/china-ethiopia-trade-investment-opportunities/>.

^{vii} Duguodong. "China's Strategic Industrial Parks: Gateway to the Middle East and North Africa." *Arab-China Institute for Economics and Policy*, 22 Feb. 2024, <https://www.aciep.net/en/2024/02/22/chinas-strategic-industrial-parks-gateway-to-the-middle-east-and-north-africa/>.

^{viii} "**Interview: BRI Cooperation with China Transforms Ethiopian Lives for Better.**" *Belt and Road Portal*, Xinhua News Agency, 26 Mar. 2024, eng.yidaiyilu.gov.cn/p/0SAV3Q82.html.

^{ix} **Ethiopia as a Belt and Road Initiative Model.** *Review of African Political Economy (ROAPE)*, 24 July 2024, roape.net/2024/07/24/ethiopia-as-a-belt-and-road-initiative-model/.

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- ^x Jili, Bulelani. “The Spread of Chinese Surveillance Tools in Africa: A Focus on Ethiopia and Kenya.” *Africa–Europe Cooperation and Digital Transformation*, Routledge, 2022.
- ^{xi} *KEDACOM Ensuring Better Safety and Security for Addis Ababa City -KEDACOM*.
<https://www.kedacom.com/es/newskd/347>
- ^{xii} **GSMA**. *AI in Ethiopia: Promising Use Cases for Development*. GSMA, Apr. 2025, www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2025/04/AI_in_Ethiopia.pdf
- ^{xiii} Jima, Wegene Demisie, et al. “State of Artificial Intelligence Eco-System in Ethiopia.” *AI and Ethics*, vol. 5, no. 2, Apr. 2025, pp. 977–90. *Springer Link*, <https://doi.org/10.1007/s43681-024-00436-3>.
- ^{xiv} **Chin, Josh**. “Huawei Technicians Helped African Governments Spy on Political Opponents.” *The Wall Street Journal*, 14 Aug. 2019, www.wsj.com/articles/huawei-technicians-helped-african-governments-spy-on-political-opponents-11565793017.
- ^{xv} “After Allegations of Spying, African Union Renews Huawei Alliance.” *Voice of America*, 6 Jun. 2019, <https://www.voanews.com/a/after-allegations-of-spying-african-union-renews-huawei-alliance/4947968.html>.
- ^{xvi} “The Global Expansion of AI Surveillance.” *Carnegie Endowment for International Peace*, <https://carnegieendowment.org/research/2019/09/the-global-expansion-of-ai-surveillance?lang=en>. Accessed 16 Jul. 2025.
- ^{xvii} Writer, Guest. “PRC Malign Influence Is Inspiring Ugandan Digital Authoritarianism.” *ICTworks*, 20 Nov. 2024, <https://www.ictworks.org/prc-foreign-malign-influence-digital-authoritarianism-uganda/>.
- ^{xviii} “China’s Huge Goeconomic Footprint in the Horn of Africa.” *ThinkChina - Big Reads, Opinions & Columns on China*, <https://www.thinkchina.sg/economy/chinas-huge-geoeconomic-footprint-horn-africa>. Accessed 16 Jul. 2025.
- ^{xix} Admin. “The Growing Importance of Rare Earth Minerals in African Mining.” *IOA*, 11 Feb. 2025, <https://www.inonafrica.com/2025/02/11/the-growing-importance-of-rare-earth-minerals-in-african-mining/>.
- ^{xx} Hairong, Yan, and Barry Sautman. “China, Ethiopia and the Significance of the Belt and Road Initiative.” *The China Quarterly*, vol. 257, Mar. 2024, pp. 222–47. *Cambridge University Press*, <https://doi.org/10.1017/S0305741023000966>.
- ^{xxi} **Amin, Hadya**. *The Impact of Chinese AI on Developing Countries in Sub-Saharan Africa*. California State University, 2024, scholarworks.calstate.edu/downloads/t435gn69c.