

INSIGHTS

China, Africa Deepen Industrialization Cooperation

Voice of the World

Edited by TANG Zhexiao

Green, coordinated and sustainable industrialization is an important path to economic development and poverty reduction, and a key driving force for countries to achieve modernization and sustainable development.

From the 2015 Johannesburg Summit of the Forum on China-Africa Cooperation (FOCAC) to the 2018 Beijing Summit of the FOCAC, from the 8th FOCAC ministerial conference in 2021 to the China-Africa Leaders' Dialogue in 2023, China has always supported Africa's in-

dustrialization and worked hand in hand with Africa on the path of modernization.

Infrastructure cooperation is a priority area of China-Africa cooperation, providing important support for improving Africa's investment environment, strengthening its industrial foundation, and promoting its industrial upgrading.

Since the establishment of FOCAC, Chinese companies have completed several landmark projects in the fields of transportation, energy, electricity, housing and people's livelihood.

They helped Africa add and upgrade more than 10,000 kilometers of railways, nearly 100,000 kilometers of roads, about 1,000 bridges, nearly 100

ports, 66,000 kilometers of power transmission and transformation lines, 120 million kilowatts of installed power capacity, 150,000 kilometers of communication backbone networks, and network services covering about 700 million users, which have effectively promoted the economic and social development of African countries.

"Infrastructural development of a transformative nature in Africa has been the cornerstone of FOCAC engagement," said South Africa's president Cyril Ramaphosa at the China-Africa Leaders' Dialogue held in August 2023, stressing that infrastructure investment also fosters innovation and productivity, lowers transaction costs and will improve Africa's integration and connectivity.

African Leadership Magazine also thinks China's investment projects in Africa have supported Africa's economic growth and regional integration development by solving Africa's infrastructure problems.

In addition to improving infrastructure and promoting industrial upgrading, the cooperation between the two sides in the economic and trade fields has enhanced the manufacturing capacity of the African continent.

Data shows that over the past three years, Chinese companies have created more than 1.1 million local jobs, and invested in economic and trade cooperation zones covering agriculture, processing and manufacturing, trade and logistics, and other industries. These zones, which attracted more than 1,000 companies, made important

contributions to local tax revenue and export earnings.

According to the Chinese embassy in Uganda, China's foreign direct investment in that country reached 55.7 million dollars in 2023.

Ugandan officials said the exponential investment is catalyzing the country's industrialization and the ultimate goal of modernization, according to the Belt and Road Portal. China is an important cooperation partner of Uganda, and the country's minister of state for trade, industry and cooperatives, David Bahati, said that, "It has been providing capital as well as sharing skills and technology to develop energy and transport infrastructure, which are key drivers of industrialization."

Meanwhile, in Mali, a West African nation that heavily depends on fossil fuels, a Chinese company started building a 100-megawatt solar power plant in Safo, northeast of the capital Bamako on May 29, according to Mali Actu website. The project is part of a series of initiatives aimed at utilizing Mali's solar potential and diversifying energy sources. When completed, the solar power plant will generate about five percent of Mali's electricity.

Malian Foreign Minister Abdoulaye Diop said that, "[The partnership] is a friendly cooperation between brothers." African people have benefited from the decades long cooperation with China, which ushered in newer infrastructure, more job opportunities, and greater momentum for the continent's sustainable development, he said.

AI Ripples

GenAI Self-Regulation Initiative Launched

By LIN Yuchen

On August 29, a groundbreaking self-regulation initiative in the field of generative artificial intelligence (GenAI) was announced during the China Internet Civilization Conference held in Chengdu, Sichuan province in southwest China. The initiative is a landmark move to ensure the safe and ethical development of AI technologies.

The initiative was jointly launched by nearly 50 leading companies, including Alibaba Cloud, Baidu, and iFlytek, under the guidance of the Cyberspace Administration of China, the China Academy of Cyberspace Security, along with other key institutions.

GenAI refers to AI systems capable of generating new content, such as text, images, and music, by learning and mimicking the underlying patterns of input data. China's progress in this area has been impressive, with the country leading the world in patent applications related to GenAI, including chatbots. According to United Nations data, China's patent applications are six times those of the U.S.

The initiative is a significant step towards balancing innovation with safety and ethical standards. It comprises five key principles: ensuring data security and compliance, fostering a healthy content ecosystem, promoting technological innovation and quality enhancement, adhering to ethical standards, and encouraging collaboration and

openness. Companies are being urged to avoid generating harmful content, respect human dignity, and ensure that AI technologies do not infringe on personal privacy, propagate harmful or misleading information, or violate any rights.

This initiative comes at a time when GenAI is rapidly transforming various industries, from education and finance to healthcare and media. However, the rapid advancement of AI has also introduced significant risks, including data breaches, the generation of false information, and ethical concerns. In February, the Guangzhou Internet Court issued a landmark ruling in the first case of copyright infringement involving generative AI. The court found that a generative AI service had unlawfully used copyrighted content, setting a global precedent.

Legal experts at the 2024 World Artificial Intelligence Conference in Shanghai emphasized the importance of a cautious yet supportive approach to AI regulation. They advocated for accelerating legislation that promotes AI development while addressing the new challenges it creates, particularly in the areas of generative AI, autonomous driving, and judicial AI.

The introduction of the self-regulation initiative is expected to play a crucial role in guiding the global AI industry towards safe, ethical, and sustainable development. It is a testament to China's commitment to leading the world in AI governance, contributing both expertise and understanding to the global AI landscape.



The workshop of a textile company at the Sino-Uganda Mbale Industrial Park in Mbale, Uganda. (PHOTO: XINHUA)

Power-short Africa Finds 'Rafiki' in China

Opinion

By LI Li

In July, I set foot on the African continent for the first time in my life. Before leaving, my mind was filled with memories of African overseas students experiencing power outages and Internet disconnections during my online or hybrid lectures. Therefore, I purchased a batch of portable solar charging devices before departure, just to be ready for potential emergencies.

This precaution was not without reason. Out of 7.95 billion people in the world, 9 percent (around 685 million) of them lack access to electricity. Among them 570 million live in sub-Saharan Africa. Additionally, 2.1 billion people still rely on polluting fuels for cooking, leading to 3.2 million premature deaths annually.

During my visit to Tanzanian cities Dar es Salaam, Morogoro, and Dodoma, I found Dar es Salaam's power supply generally reliable but capital Dodoma occasionally experienced power shortages.

Though rapidly improving, basic rural electricity needs had not been fully met yet.

Challenges to Africa's power transition

Tanzania's power system faces two main challenges. Reducing electric wire loss remains a tough mission. From 2008 to 2019, the government allocated about 8.8 billion RMB for rural electrification projects. A large proportion of the money was used to reduce power losses in the distribution and transmission system by replacing traditional meters with smart meters, and constructing 400 kV high-voltage transmission lines.

Consequently, the line loss decreased from 17.47 percent in 2015 to 16.19 percent in 2019, and will be below 12 percent after 2026.

The other challenge is insufficient financing and a lack of green values. About 70 percent of Tanzania's power funding comes from debt financing. The main power provider, Tanzania Electric Supply Company, has been in operational difficulties and significant debt. Tanzania is exploring renewable energy options and includes wind and solar energies in national planning, but seldom

takes carbon trading into consideration. By fuel substitution (like from diesel or firewood into biogas, or from single crop into intercropping), the lowered emission could be valued through carbon trading system, which is still rarely explored.

China-Africa power cooperation: pathways to green transition

China has been Africa's *rafiki* — meaning friend in Swahili — not only in enabling energy coverage, but also in renewable energy transition. Since the Forum on China-Africa Cooperation (FOCAC) was established in 2000, one-third of the new grid-connected renewable energy capacity in sub-Saharan Africa has been built by China.

In 2021, the *Declaration on China-Africa Cooperation on Climate Change* adopted at the eighth Ministerial Conference of the FOCAC supported 10 green energy projects in solar, hydropower, wind, and biogas, and training for 10,000 African professionals.

China has implemented hundreds of clean energy projects in Africa, many of which have become landmark projects for local development. In South Africa, the De Aar Wind Power Station provides 760 million kWh of stable clean

electricity, meeting the power needs of 300,000 households, and reducing greenhouse gas emissions by 619,900 tons annually.

In Tanzania, China has been deeply engaged in the Central Standard Gauge Railway and the Nyerere Hydropower Station. In Kenya, the Garissa Solar Power Plant constructed by a Chinese company helped locals switch from diesel to electric vehicles. Similar stories are heard in Rwanda, Ethiopia, Côte d'Ivoire, Morocco, Egypt, Uganda, and elsewhere in Africa.

Currently, people in Kiteete Kiteete village in Tanzania's Morogoro Region are purchasing solar charging equipment, waiting for the new round of power line installation. They are very optimistic about both electrification and soybean processing for both are now connected with Wachina (meaning China in Swahili) through FOCAC's nine major projects.

LI Li is an associate professor from China Agricultural University. This article is supported by National Social Science Fund of China (No. 23GJ00438): China's Rural Development Experience and Scaling-up Mechanisms under the Perspective of the Global South.



Photo shows robotic human-like fingers at the 2024 Artificial Intelligence Conference. (PHOTO: XINHUA)

China-Latin America Sci-tech Cooperation Puts People First

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Cooperative projects like this not only promote the development of local renewable energy, but also provide a market for the export of Chinese technology and equipment.

With an oasis of new energy in the vast desert, information and communication technology (ICT) also has great market potential.

Blue ocean in ICT

AI and 5G networks are the core areas of the future digital economy, and China's rapid development in these technologies offers important opportunities for Sino-Latin American cooperation.

Latin America has a good user base. The region has the longest mobile Internet usage time in the world. The Internet penetration rate, average daily online time, youth rate and enterprise cloud usage intention are all higher than the global average. The continent is the blue ocean of ICT.

Latin America is an industrial hub of global significance, and industries such as mining, manufacturing, seaports, airports, warehouses and energy plants are developing innovative solutions and looking forward to leveraging the new opportunities of 5G networks to drive digital transformation.

An AI traffic management system developed between Argentina and China has significantly improved the efficiency of traffic flow management and reduced the incidence of traffic accidents, demonstrating the great potential of AI

in optimizing public services and improving urban governance.

Rooted in people, benefiting the people

The year 2024 marks the 50th anniversary of the establishment of diplomatic ties between China and Brazil. In 1999, the first satellite in the China-Brazil Earth Resources Satellite program was launched, which was a fundamental turning point in China-Latin America sci-tech relations, consolidating the foundation of bilateral cooperation in space science and technology. The success of China-Brazil satellite cooperation has a very good radiation effect, accelerating the pace of sci-tech cooperation between China and Latin America.

"The ultimate purpose of sci-tech progress is to better serve human society and improve the happiness index of people's lives. Only by following this principle can sci-tech cooperation be stable and long-term. The sci-tech cooperation between China and Latin America has always adhered to this concept, and therefore has become more popular," Xiao said.

China-Latin America sci-tech cooperation has great prospects in the future, and China can apply the China-Africa sci-tech cooperation model to sci-tech cooperation with the rest of Latin America according to local conditions, Xiao said. In the future, cooperation could be carried out in areas such as jointly responding to global climate change, improving employment levels, and capturing carbon sinks.

China-Africa Collaboration for a Shared Future

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Sci-tech support for Africa

Scientific and technological cooperation between China and Africa has flourished.

South Africa has joined the international lunar research station project led by China, becoming the third country involved in it. In addition, the Chinese Academy of Sciences is partnering with South Africa to build a remote sensing satellite receiving antenna, China's only such facility overseas.

Ethiopia, in collaboration with China, has advanced technology and green energy cooperation. Belete Molla, Ethiopia's minister of innovation and technology, highlighted how China's commitment to mutual benefit has enhanced Ethiopia's technological capabilities and

improved livelihoods. Working together on such projects as satellite technology development has advanced Ethiopia's space science immensely. Moreover, Chinese scholarships and training programs have played a big role in Ethiopia's progress in science and technology.

The BRI has yielded notable results in Nigeria as well. Africa's most populous country and a major economy, Nigeria is a key partner of China. Major BRI projects in Nigeria such as the Lekki Deep Sea Port and the Abuja Rail Mass Transit have become symbols of China-Africa cooperation. Nigerian presidential spokesperson Ajuri Obari Ngelale emphasized that China-Nigeria collaboration not only creates jobs and boosts tax revenue but also supports Nigeria's development.

Future expectations

Looking ahead, China and Africa will work together in areas such as:

- They will focus on health cooperation by enhancing public health partnerships, hospital exchanges, and establishing friendly hospitals. Medical assistance and traditional Chinese medicine will be provided across Africa based on local needs.

- Green development will be advanced with renewable energy projects, such as solar and wind power, using environmental protection funds, carbon finance, and green bonds. The China-Africa energy partnership will be strengthened, while support will be provided for the "Great Green Wall" initiative, which aims to combat desertification, land degradation, and climate change

in the semi-arid Sahel region in western and north-central Africa. Besides, low-carbon and climate adaptation demonstration zones will be established in Africa.

- The Digital Silk Road will improve digital infrastructure, expand high-speed Internet, and develop smart cities. Specifically, this involves cooperation in 5G, big data, and cloud computing technologies, as well as creating joint labs and research institutions.

- China and Africa will explore new technological innovations through the BRI and establish innovation cooperation centers, while sharing technological expertise. China will also support high-tech talent training in Africa and promote a fair environment for technological progress.

The growing partnership will strengthen mutual friendly relations and lay a solid foundation for future success.