



Science and Technology Daily

VOL.4-NO.157

SEPTEMBER 7-8, 2024

China-Africa Collaboration for a Shared Future

By YU Haoyuan

The 2024 Summit of the Forum on China-Africa Cooperation, held in Beijing from September 4 to 6, centered on "Joining hands to advance modernization and build a high-level China-Africa community with a shared future." The summit highlighted how China and Africa's partnership has been growing, while demonstrating their goals for future collaboration.

Since 2013, China and Africa have made remarkable progress in their development and cooperation through the Belt and Road Initiative (BRI). The BRI has sped up Africa's development, opening up high-level market opportunities and showcasing diverse prospects. It has also boosted China's high-quality economic growth and addressed the needs of its population. By the end of 2023, trade between China and Africa accounted for over 20 percent of Africa's total foreign trade.

Complementarity creates perfect partnership

China seeks worldwide cooperation and to build a community with a shared future with modern technology. Africa, with its pressing technological needs and diverse landscape, is the perfect partner. Their complementarity creates a strong opportunity for cooperation, with infrastructure development as a top priority.

Road infrastructure is crucial. As the saying goes, "If you want to be wealthy, build roads first." Chinese enterprises have embraced this and helped Africa by constructing and renovating over 10,000 km of railways, nearly 100,000 km of roads, around 1,000 bridges, and almost 100 ports. They've also set up 66,000 km of power lines and 150,000 km of communication networks.

By June 2024, China had provided assistance to 53 African countries, supporting projects in food security, water supply, maternal and child health, and education. These efforts have benefited over 10 million people.

In healthcare, China has built over 130 hospitals and clinics in Africa, sent medical teams to 45 countries, and partnered with 46 hospitals to improve healthcare standards. In science and culture, China has agreements with 16 African countries to boost the development of this sector, and the China-Africa Science and Technology Partnership Program, launched in 2009, promotes technology transfer and collaboration between China and Africa.

Regarding meteorological and environmental cooperation, China has supported 12 African countries with meteorological infrastructure and trained personnel from 51 countries in ecology and wildlife conservation.

See page 3



The logo of the 2024 Summit of the Forum on China-Africa Cooperation (FOCAC) near the China National Convention Center in Beijing, China. The FOCAC summit is held in Beijing from September 4 to 6. (PHOTO: XINHUA)

Editor's Pick

Sci-tech Drives Eco-conservation on Roof of the World

By Staff Reporters

In August, China's second scientific expedition and research project on the Qinghai-Xizang Plateau produced a series of major landmark achievements in ecological environmental protection on the plateau, according to the expedition team.

Some of the highlights are carbon sink function analysis, systematic management of mountains, forests, fields, lakes, grasses, sand and ice, and optimizing the construction of national ecological security barrier system, fully demonstrating the important role of sci-tech in ecosystem conservation there.

The process has taken place over a number of years, as Chinese researchers took action to improve the ecological and environmental quality in the Zoige wetland, northeast of the Qinghai-Xizang Plateau. Serving as an important ecological

security barrier, the largest alpine peatland in the world plays a key role in carbon storage and climate mitigation. However, the region is facing biodiversity loss and a weakened wetland ecosystem against the backdrop of global climate change.

To promote wetland conservation, the Zoige Wetland Ecology Research Station of the Chinese Academy of Sciences (CAS) was called in, in July. The station is also expected to provide sci-tech support and policy recommendations for regional ecological protection and sustainable socio-economic development in southwest China.

The station has established environmental monitoring and data-sharing platforms, global climate change research platforms, as well as wetland grassland degradation and restoration research platforms. It also features observation facilities that improve the accuracy of data monitoring, helping researchers study

how the carbon sink capacity of alpine meadow ecosystems responds to global climate changes.

The Shannan wide valley section of the Yarlung Zangbo River was once an area severely affected by sand hazards. Since the 1980s, locals have planted over 45 million trees, building a "Great Green Wall" that stretches over 160 kilometers in length and 1.8 kilometers in width.

In recent years, researchers from the Institute of Mountain Hazards and Environment (Chengdu) of CAS have optimized these protective forests. By comprehensively investigating the sandy land conditions in the middle and upper reaches and considering factors such as climate, topography, soil, vegetation and the degree of sandiness, they have implemented an ecological management model based on a "burying-paving-blocking-storing" approach.

See page 2

New Graphic

China-Africa Robust Trade Cooperation

Bilateral trade in 2023

\$282.1 billion

China's stock of direct investment in Africa by the end of 2023

> \$40 billion

Source: National Development and Reform Commission
Designed by YAO Yilu / Science and Technology Daily

WECHAT ACCOUNT



E-PAPER



China-Latin America Sci-tech Cooperation Puts People First

By QI Liming

The 2024 Summit of the Forum on China-Africa Cooperation brings together members of the Global South to build a community with a shared future. However, the Global South evokes thoughts of another region at the same latitude as Africa, which too has very close ties with China. It is Latin America.

"The China-Latin America relationship has a sound non-governmental foundation. Their sci-tech cooperation is mutually beneficial. As a developing country, China shares many commonalities with the countries and regions in Latin America," Xiao Junyong, executive director of the Center for Science, Technology and Human Rights Research of Beijing Institute of Technology, told *Science and Technology Daily*.

The sci-tech cooperation between China and Latin America has improved the lives of people in Latin America, and jointly promoted the development of human rights around the world, Xiao said.

Since 2012, China has remained the second largest trading partner of Latin America. In 2023, their trade volume exceeded 489 billion USD. From 2005 to 2020, more than 100 Chinese infrastructure projects began construction or were put into use in Latin America, creating more than 600,000 local jobs.

Xiao shared two tangible examples of how the sci-tech cooperation between the two sides has improved local lives and provided strong support for human rights protection.

Oasis of new energy in the desert

In 2024, Power Construction Cor-

poration of China built a 480MW solar power station in the Atacama Desert in Chile. There were many challenges during the construction, from the hot and dry climate with strong ultraviolet radiation, to frequent sandstorms and labor shortages.

The project team worked together with the locals to overcome the obstacles and finally achieved full capacity grid connection, showing engineering strength. When the project is completed and put into operation, it will provide 400,000 households with clean energy every day and reduce about 280,000 tons of carbon dioxide emissions each year. It will be of great significance for improving the local environment and promoting Chile's energy transformation.

See page 3

Setting Examples for Agricultural Cooperation

International Cooperation

By WANG Jing

As a major agricultural country in West Africa, Cote d'Ivoire has been involved in extensive agricultural cooperation with China, among which cocoa processing plants, rice cultivation bases and rubber processing plants are successful examples.

Cocoa processing plants developed

Cote d'Ivoire is the world's largest producer and exporter of cocoa, producing and exporting nearly 40 percent of the world's supply. However, the cocoa industry in Cote d'Ivoire faces an urgent need to improve the added value of products and achieve industrial upgrading.

According to the statistics of the International Cocoa Organization (ICCO), the global chocolate market is worth about 100 billion USD, of which only six percent of the output value flows to cocoa exporting countries, and two percent of it returns to cocoa farmers. Most Cote d'Ivoire cocoa farmers still live below the poverty line.

In 2018, Cote d'Ivoire's President Alassane Ouattara visited China to attend the FOCAC. Guided by the important consensus reached by the two heads of state, the two sides began cooperation in the field of cocoa processing.

In 2019, China Light Industry Nanning Design Engineering Co., Ltd. signed two general contracts with Cote d'Ivoire: two new cocoa processing plants each with an annual processing capacity of 50,000 tons in Abidjan and the southwestern coastal city of San Pedro, and two cocoa warehouses in each location, with a storage capacity of 140,000 tons and 160,000 tons, respectively.

See page 2

WEEKLY REVIEW

New Remote Sensing Satellite Group Launched

China launched a Long March-4B carrier rocket on September 3 to place a new group of remote sensing satellites in space. The Yaogan-43 02 group of satellites were launched from the Xichang Satellite Launch Center in the southwestern province of Sichuan and entered the preset orbit. They will be mainly used for carrying out tests on new technologies of low-orbit constellations.

First AI Model for Lunar Exploration Unveiled

The world's first professional, multimodal large-language model for lunar science has been released to accelerate the processing speed of massive amounts of data from the moon. The model from the Chinese Academy of Sciences' Institute of Geochemistry and Alibaba Cloud Intelligence Group made its debut at the China International Big Data Industry Expo in Guiyang, Guizhou province.

New Record in Offshore Oil Exploration Drilling Speed

China National Offshore Oil Corporation has set a daily drilling record of 2,138 meters at a drilling project in Hainan province, achieving a new milestone in offshore drilling. It underscores China's commitment to advancing its offshore oil exploration capabilities.

NASA Spacecraft Collision May Cause Meteor Shower

When NASA's DART spacecraft intentionally slammed into the tiny asteroid Dimorphos in 2022, it caused rocky debris. This could create the first human-made meteor shower that will last for 100 years, according to a new study.

Bacterial Cells Can Transmit 'Memories'

Bacterial cells can "remember" brief, temporary changes to their bodies and immediate surroundings, according to a new study conducted by the Northwestern University and University of Texas-Southwestern in the U.S. The discovery could be used for new medical applications, such as altering disease-causing bacteria to avoid the emergence of drug resistance in their offspring.