



## Bridging Through Agriculture: Practical Explorations of Rural Revitalization and Mutual Development in the Global South

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The year 2025 marks the 80th anniversary of the victory of the World Anti-Fascist War and the founding of the United Nations, a pivotal moment that established the postwar international order. To commemorate this victory and to respond to the severe contemporary challenges, such as geopolitical conflicts, the rise of a "new Cold War," and the erosion of the postwar order, the **2025 Global South Academic Forum** was held in Shanghai from November 13 to 14. The forum, themed "**The Victory of the World Anti-Fascist War and the Postwar International Order: Past and Future**," aimed to strengthen solidarity, exchange, and cooperation among Global South countries, jointly safeguard a fair and just postwar world order centered on the UN, and actively prevent the resurgence of neo-fascism. More than 200 renowned scholars, government



representatives, and media practitioners from more than 30 countries and regions across Asia, Africa, Latin America, and Europe participated in the event.

The two-day forum was structured around six main panels and a special panel dedicated to various dimensions of the postwar order and Global South development.

**Panel 6, "Sharing Rural Stories from the Global South: Development and Peace,"** was a crucial session that focused on using agricultural cooperation as a link for South-South learning. The panel's significance was rooted in the premise that "Achieving rural modernization is a shared vision of the Global South", to explore paths of mutual assistance and find solutions to the "three rural issues" (agriculture, rural areas, and farmers) commonly faced across the developing world.

### **Historical Echoes and Practical Resonance: The Win-Win Path of China-Brazil Family Farming Cooperation**

The first half of Panel 6, themed "Historical Land Struggles and Contemporary Rural Revitalization: The Story of China-Brazil Family Farming Cooperation," focused on the long-term cooperation between China and Brazil in the agricultural field. The core proposition of land rights and agrarian reform is a timeless common principle for countries in the Global South, a conclusion profoundly reinforced by the historical experiences of China and Brazil. Specifically, the arduous struggle of farmers in the Global South for land rights has created a shared memory, which serves as the spiritual foundation for their contemporary cooperation.



Group photo of the first half of Panel 6: "Historical Land Struggles and Contemporary Rural Revitalization: The Story of China-Brazil Family Farming Cooperation"

Adalberto Martins, a PhD holder from the Landless Workers' Movement (MST) of Brazil, systematically reviewed the colonial origins of Brazil's land system. He pointed out that historical factors, including the massacre of indigenous peoples, Black slavery, and the high concentration of land, are the roots of today's inequality in Brazil. Also, China's land transformation is magnificent. Professor Wang Chunyu from China Agricultural University detailed China's evolutionary path from the land reform that "enabled 300 million farmers to obtain 50 million hectares of land," to the Household Responsibility System that "firmly placed land contract rights in the hands of farmers," and then to the reform of the "separation of three rights" in land. This confirms the universal truth that "the protection of land rights is the prerequisite for agricultural development."



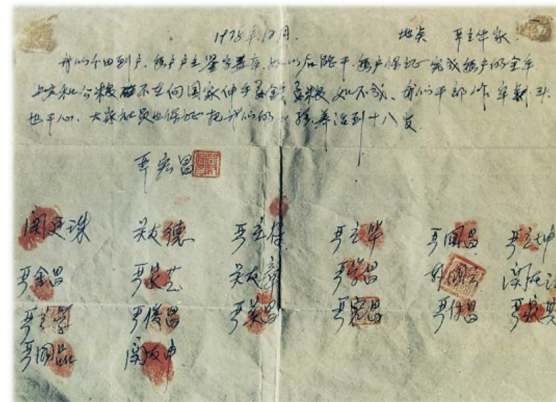
Screenshot of MST's peasant land movement, from the PPT shared by Dr. Adalberto Martins of MST

1978/1982    1993/1997    2023/2027    2053/2057

## HRS

The HRS reform shifted the Chinese economy from a planned system to a market-oriented system,

and turned agriculture from a collective system back to a family-based system.



An agreement of contracting the land from the collective, with fingerprints of villagers in XG Village, Anhui Province.

China's Household Responsibility System, from the PPT shared by Professor Wang Chunyu



Historical threads ultimately converge in practical cooperation. The three core demands of "Land, Food, Ecology" proposed by Tuíra Tule, Coordinator and Political Leader of MST, perfectly align with the goals of China's rural revitalization. The China-Brazil cooperation projects shared by Professor Li Ji from China Agricultural University are a vivid response to this appeal: China's agricultural technologies, such as microbial agents and trench composting systems have been deeply aligned with the actual needs of Brazilian family farming, taking root in Brazilian experimental fields and realizing the sustainable development vision of "transforming waste into wealth and restoring soil health." As Tuíra Tule stated: "International solidarity is not an empty slogan, but a practical action to allow farmers to gain dignity and benefits on their own land." Through technology sharing, variety improvement, and market linkage, China-Brazil family farming cooperation has transformed the smallholder economies of both countries from "individual struggles" to "joint development," becoming a typical example of "promoting prosperity through agriculture and achieving win-win results through cooperation" in the Global South.

## Achievements of the China Agricultural University Team: Microbial Inoculants and Trench Composting System

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- VT compost inoculant has been applied in **557** organic fertilizer companies in China.
- Usage exceeds **8,000 tons**, with a market share of over **10%**.

- In 2009, a continuous dynamic trough composting system (CDB) was successfully developed.
- **104** composting projects have been built nationwide.

Map for the Promotion and Application of Microbial Agents

List of microbial agents for sale

Establish a 5t/d compound microbial agent production line

Partial product photos

销售清单

Guangxi Jinsui Biotechnology Co., Ltd.

Schematic diagram of advanced composting technology

- Annual output: **10tons**
- Raw material : **Chicken manure, etc.**
- Factory area: **139.3mu/~8.5ha**
- Total investment: **35.8355 million yuan**
- Commissioning date: **2010**

Schematic diagram of advanced composting technology. Source: the PPT shared by Professor Li Ji of China Agricultural University

roots-iapc.org

5/x



MST operates in 24 out of 27 states in Brazil. Source: the PPT shared by Tuíra Tule of MST

## Chinese Practices and South-South Insights: The Wisdom of Collaborative Development in Paired Assistance

The second half, themed "From Erhai to Southern Xinjiang: The Path of Paired Assistance and Chinese-style Collaborative Development," demonstrated the innovative practices of China's "paired assistance" mechanism through two typical cases, Erhai Lake governance and the Xinjiang cotton industry, providing a replicable collaborative model for the Global South. Ms. Liu Xin, the host, emphasized in the transition: "Chinese-style collaborative development is not just simple financial assistance but comprehensive support and sharing of technology, talents, and concepts, which provides important insights for solving global development imbalances."



Group photo of the second half of Panel 6: "From Erhai to Southern Xinjiang: The Path of Paired Assistance and Chinese-style Collaborative Development"

## Erhai Lake Governance: Technology Empowers Win-Win Results for Ecology and Income Growth

Erhai Lake is on the southwest plateau, Yunnan Province, China, which is called the "Pearl of the Plateau". However, many years ago, blue-green algae broke out on a large scale, and agricultural non-point source pollution—pollution from many small fields became very serious. Professor Kong Hainan from Shanghai Jiao Tong University has been rooted in Erhai Lake for over 20 years, leading a Major Science and Technology Program on Water Pollution Control and Treatment with his team. Their work is dedicated to resolving the issues of rapidly increasing pollution and eutrophication caused by the high-speed socio-economic development of the Erhai Lake basin. The once "Pearl of the Plateau", plagued by cyanobacterial blooms, now witnesses the beautiful bloom of *Ottelia acuminata*. In 2024, tourism income exceeded 60 billion yuan, accounting for over 40% of Dali's GDP.



Hydrilla verticillata blooming in Erhai Lake in October 2023. Source: the PPT shared by Professor Kong Hainan of China Agricultural University

Achieving the win-win of ecological protection and increased farmer income is inseparable from the hands-on practice of the Science and Technology Backyard (STB)<sup>1</sup> model. Researcher Jin Kemo of China Agricultural University and his team rooted themselves in Gusheng Village for over 300 days a year, sharing the lives and labor of the villagers. Besides, by building a "six-vertical and seven-horizontal" monitoring network<sup>2</sup> and implementing a systematic solution of "source emission reduction - process interception - nutrient recycling," Erhai Lake's water quality has improved from Grade V to Grade II, with a reduction of about 20% in total nitrogen and over 50% in total phosphorus entering the lake.

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<sup>1</sup> The Science and Technology Backyard (STB) is an innovative agricultural extension model pioneered by China Agricultural University (CAU), where graduate students and professors live and work alongside farmers in rural areas to solve practical, on-the-ground problems and co-innovate technology. Click here see more: <http://www.chinastb.com/chinastb/>

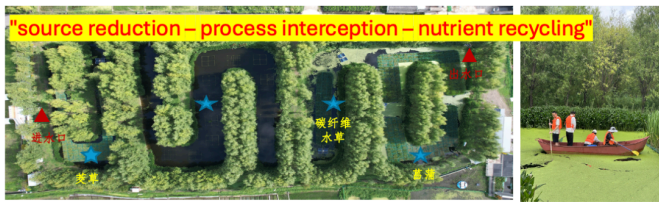
<sup>2</sup> The "six vertical and seven horizontal" monitoring network is part of a comprehensive system implemented in the Erhai Lake basin to manage pollution and reverse eutrophication.



- Established a comprehensive monitoring and control system for the entire process of pollution emissions, transport, and entry into the lake, known as the "Six Verticals and Seven Horizontals" system.



1700+ personnel were deployed for routine monitoring and monitoring during heavy rainfall events, 3000+ samples and analyzed 20000+ relevant indicators



- Established a demonstration engineering for non-point source pollution control in the Erhai Lake Basin.

24.0% reduction in TN and 53.2% reduction in TP in the pollution load

Schematic diagram of the Erhai Lake pollution monitoring system. Source: the PPT shared by Jin Kemo, Director of the Science and Technology Backyard in Gusheng Village, Dali, China

## Xinjiang Cotton: Cooperation Forges a Modern Industrial Miracle

In Bachu County, Kashgar, Xinjiang, 1.66 million mu of cotton fields outline another picture of cooperation. The Shanghai aid team for Xinjiang has promoted the transformation of assistance from "Blood Transfusion Poverty Alleviation" to "Blood Production Poverty Alleviation", investing funds to improve cotton industry infrastructure, carry out technological transformation, and provide talent training. This has increased Bachu's cotton output by 20% and exports by 30%. Nurmemet Ruzi, a cotton farmer, manages 2,100 mu of cotton fields. With technologies such as BeiDou-guided seeding, drone-based crop protection, and smart irrigation, the average yield per mu reached 510 kg, an increase of 30 kg compared to last year. The cooperative he founded has various agricultural machinery and equipment, with 30 members covering positions such as agricultural machinery operation and field management. "Mechanization saves us effort and increases income. The so-called 'forced labor' claimed by the West is a false slander."



## Xinjiang's cotton fields stand as a microcosm of modernisation in Western China's development.



### Technological Empowerment

As of 31 October 2025, cotton harvesting progress in Xinjiang had reached 94.9%, ahead of the national average. This remarkable efficiency results from the widespread application of mechanisation and intelligent technologies.



### Efficient Agriculture

Technologies such as BeiDou-guided seeding, drone-based crop protection, and smart irrigation have been widely applied. The overall mechanisation rate of cotton cultivation, planting, and harvesting in Xinjiang has reached 97%, with an average yield exceeding 460 kg of seed cotton per mu.



### Economic Meaning Behind the Data

According to the China Cotton Association, Xinjiang's share of national cotton output continues to rise, injecting strong momentum into regional economic growth and consolidating China's position in the global cotton market.



### Outlook and Insights

The success of Xinjiang's cotton fields demonstrates that technological innovation and policy support are key drivers of agricultural modernisation, offering a replicable model for other regions.

Overview of Xinjiang cotton fields under China's characteristic assistance system (Shanghai's aid to Xinjiang). Source: the PPT shared by Leng Wei of the Convergence Media Center of Shanghai Radio and Television Station

## Uniting Through Agriculture to Build a New Development Order for the Global South

Centered on the core theme of "development and peace," the entire panel outlined the cooperative landscape of rural revitalization in the Global South through historical reviews and practical cases. The land stories of China and Brazil, as well as China's paired assistance practices, all tell us that the unity of the Global South is not an accidental choice but a dual drive of historical necessity and practical needs.

The diverse successes across the Global South confirm a powerful consensus. These achievements range from the MST securing land for 450,000 families in Brazil and China's rural momentum stimulated by land system reform to successful China-Brazil agricultural technology docking and cooperative models in Erhai Lake governance and the Xinjiang cotton industry. Agriculture is not only a basic industry to ensure food security and improve people's livelihood but also an important bridge connecting the emotions of Global South countries and deepening solidarity and cooperation.

Professor Li Ji emphasized in his outlook for the future: "China and Brazil are joining hands to lead a sustainable agricultural revolution; we do not only aim to empower farmers and achieve food sovereignty but also share this cooperation experience with more African and Asian countries, allowing South-South cooperation to bear more fruitful results." The Science and Technology Backyard model in Erhai Lake and the industrial cooperation experience in Xinjiang also provide replicable models for the



Global South. Through technological innovation, mechanism innovation, and solidarity and mutual assistance, it is possible to resolve the contradiction between development and protection and achieve common prosperity.

The exchange results of this panel provide practical references for Global South countries to further deepen agricultural cooperation and promote rural development. In the future, only by continuously inheriting and carrying forward the Bandung Spirit, based on mutual trust, taking technology as the wing, and people's livelihood as the foundation, and constantly exploring new paths and models for South-South cooperation, can the rural stories of the Global South bloom with more win-win splendor, laying a solid livelihood foundation for building a more fair, inclusive, and peaceful new international order.

Through in-depth sharing in two sessions, it demonstrated the mutual assistance practices of Global South countries in rural revitalization, land reform, and ecological civilization construction, and provided a replicable path for South-South cooperation through vivid cases of China's domestic collaborative development, injecting fresh vitality into the unity of the Global South.



Group photo of the opening ceremony of the Global South Academic Forum