

5-Year Plan to Accelerate Agricultural, Rural Modernization

Policy Express

By CHEN Chunyou

Agricultural and rural modernization is fundamental to overall Chinese modernization drive. China's State Council recently released a plan to provide scientific guidance for the high-quality development of agriculture and rural areas and accelerate agricultural and rural modernization during the 15th Five-Year Plan period (2026-2030).

During the 14th Five-Year Plan period (2021-2025), China made major progress in agricultural and rural development. Grain output rose to a new level of 700 million tonnes. Achievements in poverty alleviation were consolidated, and the bottom lines of national food security and preventing large-scale returns to poverty were firmly maintained.

Clear goals set

The new plan outlines the overall requirements for accelerating agricultural and rural modernization during the 15th Five-Year Plan period:

- Strengthening the foundation of food security and enhancing the capacity to ensure the supply of grain and other major agricultural products, with comprehensive grain production capacity reaching approximately 725 million tonnes by 2030;
- Improving agricultural quality, efficiency and competitiveness, with the value added of agriculture and related industries reaching 25.8 trillion RMB;

Integrated Ecological Compensation Plan Rolled Out

By YAO Yian

To enhance the comprehensive benefits of ecological protection compensation, the National Development and Reform Commission and the Ministry of Finance have issued an implementation plan.

According to the plan, by 2030, the integrated ecological compensation mechanism will be improved, key stakeholders in ecological conservation will have a greater sense of fulfillment, and the capacity for green and sustainable development in key regions will be improved. This will provide a strong foundation for accelerating the comprehensive green transition of economic and social development and building a "Beautiful China."



The scenery of Taihang Grand Canyon after rain. (PHOTO: XINHUA)

Marine Drugs and Functional Products Get Policy Boost

By LI Linxu

As part of efforts to build a marine powerhouse and promote the marine economy, China has released its first national policy document for the development of the marine biomedical industry.

The document highlights four characteristics: integration, differentiation, innovation and precision. It aims to strengthen the whole-chain innovation system that links the industry's resource, technology, industrial and application chains, and foster deep integration between technological innovation and industrial innovation.

It also sets the target of launching multiple marine innovative drugs and achieving an industry value added of more than 130 billion RMB by 2030.



A farmworker operates machinery at a wheat base in Heilongjiang province, May 29, 2026. (PHOTO: XINHUA)

• Enhancing self-reliance and strength in agricultural science and technology, and raising the contribution of sci-tech progress in boosting agricultural development to 67 percent.

To achieve these goals, seven priority tasks have been identified. For instance, to enhance comprehensive agricultural productivity, quality and efficiency, the plan proposes strengthening

the capacity to ensure the supply of grain and other major agricultural products, building a diversified food supply system, enhancing agricultural disaster preparedness and response, and boosting outbound agricultural investment and trade cooperation.

On the sci-tech front, greater emphasis is placed on strengthening original innovation and achieving breakthroughs in core technologies. Efforts include improving the capacity for agricultural sci-tech innovation and technology

application, accelerating the revitalization of the seed industry, developing advanced and suitable agricultural machinery and equipment, and advancing AI applications in smart agriculture.

Cultivating future industries

The plan places greater strategic emphasis on developing new quality productive forces in agriculture tailored to local conditions. For the first time, it proposes cultivating and expanding emerging and future industries in the agricultural sector. Efforts will focus on scaling up more pioneering industries, including intelligent design breeding, new-energy agricultural machinery, low-altitude agricultural economy, agricultural bio-manufacturing and novel food systems.

To support the development of new quality productive forces in agriculture, targeted actions will be taken, such as promoting the high-quality development of agricultural machinery and equipment, launching an agricultural biomanufacturing initiative, and implementing an "AI + agriculture" initiative.

Policy support includes implementing tax policies that incentivize sci-tech innovation, applying policies for the first sets or batches of agricultural equipment and materials in pilot projects, and encouraging local governments to explore policies for first-version application of agricultural software and related technologies.



support for areas with a high proportion of ecological conservation red lines.

Based on regional characteristics and advantageous resource endowments, support will be given to developing ecological industries in light of local conditions in the agro-pastoral ecotone in northern China, grassland and meadow areas on the Qinghai-Xizang Plateau, inland river basins in northwest China, karst rocky desertification areas in southwest China and key state-owned forest areas. The objective is to promote ecological and environmental protection and high-quality development.

Local production methods that overexploit natural resources will be transformed, and external compensation converted into self-accumulation and self-development capacity.

The plan also outlines requirements for fostering and expanding ecological industry business entities, increasing support for ecological protection entities, and improving the market-based allocation system for resource and environmental factors. Establishing an ecological protection compensation fund will be explored.



Case Study

Growing Green Ecosystems on Barren Mountains

By CHEN Chunyou & YANG Yuhang

Once described as a desolate, windswept, landscape devoid of vegetation, the north and south mountains of Lhasa in Xizang autonomous region, situated on the Qinghai-Xizang Plateau, have now taken on a completely different look. On both sides of the Lhasa River, patches of green spread across the slopes in terraces, a transformation achieved by the Lhasa North-South Mountain Greening Project.

In 2022, the policies on encouraging and supporting participation in the greening of the north-south mountains of Lhasa were issued, establishing a systematic support framework covering land, funding, carbon sinks and insurance, while guiding private capital to engage in the project.

In 2023, the Lhasa north-south mountain greening management regulations were introduced, providing a solid legal foundation for the construction and management of the greening project.

In 2025, a directive released by the head of Xizang forestry, suggested making the North-South Mountain Greening Project a demonstration initiative for science-driven afforestation across the region.

With all the policies and guarantees in place, the next challenge was to tackle afforestation on the barren, high-altitude Qinghai-Xizang Plateau, where the harsh climate makes it difficult for many tree species to survive.

Technology became the key to cracking this challenge, with researchers selecting species that could overcome low survivability.

The Institute of Tibetan Plateau

Research of the Chinese Academy of Sciences, together with Sichuan University and other institutions, conducted research on mixed planting of male and female poplar and willow trees to improve stress tolerance in forest stands, allowing these trees to live longer and grow better on the plateau.

Other teams simultaneously focused on tapping into local genetic resources, assisted by experts from Hubei province who selected eight native Tibetan tree species with excellent traits, such as cold resistance, drought tolerance and adaptability to poor soil. This included Quercus spinosa, also known as the spiny-leaf oak, which were scientifically cultivated to better withstand the plateau's extreme environment.

Yet having the right seeds was only half the battle. The next challenge was to plant them successively on the high-altitude slopes.

At altitudes above 4,000 meters, drones were used to deliver seedlings. Each drone carried 40-45 kilograms per flight, speeding up the planting process and greatly improving efficiency.

In Lhasa's Qushui county, Shanxi Construction Engineering Group Co., Ltd. dispatches drones in real time through a digital command-and-control system, increasing efficiency by 60 percent.

According to official data, the North-South Mountain Greening Project has planted a total of 932,400 mu (approximately 62,160 hectares) of trees, with over 125 million seedlings planted. The overall survival rate of seedlings remains stable above 85 percent, marking the successful achievement of the five-year goal to turn the mountains green.



A view of the Potala Palace and Lhasa city from Nanshan Park. (PHOTO: XINHUA)

China's Capacity for Sci-tech Innovation Greatly Enhanced

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New quality productive forces

By the end of 2025, China had cultivated over 600,000 tech and innovative small and medium-sized enterprises (SMEs), 504,000 high-tech enterprises, and over 140,000 specialized and sophisticated SMEs, according to the report.

Nearly 90 percent of industrial enterprises above designated size had undergone digital transformation by the end of 2025. The added value of the "three new" economy — new industries, new business formats and new business models — accounted for 18.01 percent of GDP in 2024, up 1.5 percent from 2020. The digital economy's share of GDP rose to 33.1 percent in 2024, with China having 101 world-leading manufacturing facilities or "lighthouse factories," the highest number in the world.

Broader economic and social impact

The 14th Five-Year Plan period witnessed a leapfrog improvement in China's sci-tech innovation capability, achieving

new breakthroughs in high-level technological self-reliance, the report said. It added that technological innovation has become the primary driver of high-quality development, fully integrated into all economic and social sectors.

Industrial robots are now used in 71 major industrial sectors, and the density of robot manufacturing in China far exceeds the global average, the report said. China's installed capacity of new energy storage accounts for over 50 percent of the global market, while the contribution rate of agricultural technology advancement surpassed 64 percent in 2025.

The report noted that remote medical service networks now cover all cities and counties, and cross-provincial direct settlement of medical bills has benefited over 560 million patient visits.

Looking ahead to the 15th Five-Year Plan period (2026-2030), the report called for deepening reforms of the sci-tech system, enhancing the overall efficiency of the innovation, and fostering new quality productive forces.

