POLICY REVIEW

Steps taken to ensure food security

'All-encompassing approach' to bolster supply chains and protect against international disruptions

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China has outlined detailed policy measures to underpin its "all-encompassing approach" to food and to build a diversified food supply system, which analysts said will contribute to ensuring food security and building up the country's strength in agriculture.

The guideline on speeding up the building of a diversified food supply system, issued by the General Office of the State Council in September, said the country will take measures to effectively promote the development of new food varieties, fields and technologies.

Efforts will be made to expand food resources through multiple channels, boost sci-tech innovation to improve the quality and effectiveness of food development, and enhance the entire industrial chain, in particular the value chain of the food industry, according to the document.

Both the report of the 20th National Congress of the Communist Party of China and the No 1 document of 2024 proposed an all-encompassing approach to food and the expansion of food resources, which analysts said indicates the strong emphasis China has put on the issue.

"The adoption of an all-encompassing approach to food can not only better meet people's growing diversified food consumption needs, but also constitute an inevitable choice to address food security challenges confronted by China," said Tang Wei, an associate professor at Sichuan Agricultural University's Law School.

According to official data, last year China's total meat production was 97.48 million metric tons, its milk production was 42.81 million tons, and poultry and egg production reached 35.63 million tons. Tang said these figures reflect changes in people's diets and that there should be higher requirements for the diversity of food supply.

The all-encompassing approach to food emphasizes moving beyond traditional staple crops to address food security, and instead expanding to a broader category that includes meat, eggs, dairy, fruits, vegetables, fish, mushrooms and bamboo shoots.

Despite having only nine percent of the world's arable land and six percent of its freshwater resources, China feeds nearly 20 percent of the global population.

"In the context of increasing constraints on resources and the environment, embracing the approach will help ensure food security and sustainable development," Tang said.

The document issued last month called on expanding from arable land resources to encompass the entire territory's resources under the premise of protecting the ecological environment, encouraging exploring new food resources from natural resources, including forests, grasslands, rivers, lakes, seas and facility-based agriculture.

"Expanding the spatial scope of agricultural production and diversifying supply channels can reduce the pressure on arable land, further consolidating the foundation of food security," Tang added.

Zheng Fengtian, a professor at the School of Agricultural Economics and Rural Development at Renmin University of China, underscored the necessity to fully tap resources in accordance with local conditions and highlighted the importance of substantial investment in scientific and technological innovation in boosting agricultural modernization.

He gave the example that the vast majority of western China, which may not be suitable for large-scale farming, is endowed with abundant forest resources. The region can support the development of the understory economy and the cultivation of various cash crops, he said.

The understory economy refers to the development of industries under the forest canopy such as animal husbandry and planting suitable crops.

Official data shows that beyond arable land, China has over 267 million hectares of forest, a similar amount of grassland, and abundant rivers, lakes and seas.

More importance should be attached to these resources, and research and development into corresponding varieties and technologies to foster diversified food supply channels, Zheng said.

Expanding agricultural production space does not mean unlimited extraction, rather, it is about the reasonable use of natural resources, he added.

Zheng warned that the sources of China's grain imports and transportation capacity of import channels are relatively concentrated, making the country susceptible to geopolitical and shipping risks.

Adopting an all-encompassing approach to food could enhance the resilience of China's food supply chains, allowing it to actively respond to external instability and uncertainty, he said.

"If China can achieve significant agricultural technological breakthroughs, it will not only facilitate addressing its food security but also set an example for other developing countries," Zheng said, calling for shoring up innovation in areas including breeding technology and strengthening the leading role of enterprises.

Sheikh Ahaduzzaman, a representative for China at the United Nations Food and Agriculture Organization, said at an event held last year he expects China's food industry to become more powerful, upgraded, innovative and sustainable. "This will not only benefit the Chinese people, but also make a significant contribution to the positive progress of the 2030 Agenda for Sustainable Development," he said.

According to the State Council's September document, China will accelerate breeding innovation to cultivate high-yield, high-quality and stress-resistant new varieties, and encourage enterprises to collaborate with universities and research institutes in a bid to develop and promote new technologies and equipment.

Sun Shujing, a senior agriculture researcher at Fujian Agriculture and Forestry University, highlighted the significant roles of scientific and technological innovation in nurturing competitiveness in agricultural products and industries.

Sun has previously researched white fungus, with the aim of improving production technologies and increasing yields. "Influenced by the all-encompassing approach to food, research priorities will be given to innovation across the entire industry chain to promote the healthy development of the industry," she said.

The document specifically mentions developing and expanding the edible mushroom industry, and creating edible mushroom products, which Sun said will strengthen researchers' confidence in engaging in the industry and motivate them to meet the significant national demand for the product.

Zhong Yu, a researcher at the Institute of Agricultural Economics and Development of the Chinese Academy of Agricultural Sciences, said efforts should be made to achieve a virtuous cycle of mutual adaptation between demand and production to promote the high-quality development of agriculture and better meet the people's aspiration for a better life.

"We should accelerate the establishment of a comprehensive food safety standard and inspection system, proactively align domestic standards with international standards, and expedite the construction of a traceability system for the entire agricultural product supply chain to effectively reduce food safety risks," he said.

Zhong underscored the need to match supply with demand, saying technologies such as big data should be fully leveraged to understand what consumers want in a timely manner so that production can be adjusted effectively.

As the all-encompassing approach to food emphasizes nutritious and healthy consumption, he said China should keep improving its system for nutritional health standards while continuing to promote food saving and reducing food waste.

'Capital of edible fungi' digs deep to develop industry

By **ZHAO JIA** in Beijing
and **HU MEIDONG** in Fuzhou

Gutian county, China's "capital of edible fungi", has gone to great lengths to develop its namesake industry, so much so that it has even sent a new strain of white fungus into space to explore how radiation and microgravity might positively affect its characteristics.

When the fungus seedlings, developed by researchers from Fujian Agriculture and Forestry University in Gutian, Fujian province, returned to Earth after spending five months aboard the Shenzhou XVI, they surprised researchers.

"The new strain shows the medicinal potential of white fungus as it has antibacterial, anti-inflammatory and antioxidant properties," said Sun Shujing, dean of the Fujian Agriculture and Forestry University's Gutian Edible Fungi Research Institute.

The university intends to cultivate improved varieties and new products, and promote the application of research outcomes in actual production.

Optimizing the breeding and development of white fungus is a testament to Gutian county's practice of an "all-encompassing approach" to food.

Gutian is China's largest producer of edible fungi, having cultivated 38 varieties with white fungus becoming a specialty and a pillar industry.

In recent years, the county has used modern agricultural technology and equipment to develop a rich variety of white fungi, extending the industry chain, enhancing the value chain and building out the supply chain to promote the high-quality development of the white fungus industry.

Gutian's cultivation of fungi has become a high-tech affair, with smart mushroom sheds that optimize growing conditions all year round.

Such sheds feature a mist system that uses ultrasonic waves to break water molecules into a mist. As a result, white fungi can better absorb moisture and humidity. Carbon dioxide and temperature levels can also be adjusted during the entire growth cycle.

On top of maximizing efficiencies at the growth stage, workers in the Gutian edible fungi industry are extending the product range with deep processing, as well as promoting their products via livestreaming.

Zhang Jiaqiao, a general manager of an agricultural company in Gutian, told media earlier that deep processing now accounts for the majority of the company's production, and has enhanced the added value of white fungus.

The enterprise has introduced more convenient and delicious ready-to-eat products such as instant freeze-dried white fungus soup, to meet market needs, she said.

Zhang is also using live broadcasts to promote white fungus products online. "I believe livestreaming can market products from factories to millions of households at the lowest cost and the fastest speed."

Official data shows Gutian has the largest white fungus deep processing production line in China, producing 200,000 packs of freeze-dried white fungus soup every day. Over 40 products, such as freeze-dried ultrafine powders, in 10 categories using edible fungi as raw materials have been developed.

According to statistics, the output value of the entire industry chain of Gutian edible fungi last year exceeded 25.5 billion yuan ($3.61 billion), with 70 percent of farmers' income coming from edible fungi. The output value of white fungus alone in Gutian last year reached 1.84 billion yuan, accounting for over 90 percent of total national production.

"The white fungus industry has increased farmers' incomes, stabilized employment and boosted rural vitalization," said Sun from Fujian Agriculture and Forestry University. "With government attention and scientific research support, the industry will have even greater development potential."

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Policy Digest

Trade-in program sees home appliance sales soar

The ongoing trade-in scheme for home appliances has led to a surge in sales, which have topped 33.5 billion yuan ($4.78 billion) since August, the latest data from the Ministry of Commerce showed.

Since the ministry increased its support for the scheme in August, around 5.11 million consumers have benefited from the central government providing more than 6.4 billion yuan in subsidies, the ministry said on Sept 30.

The ministry's data showed that green and smart home appliances have been favored by consumers, with top-rated energy-efficient products accounting for 92.53 percent of the sales during the period.

Regions such as Hubei province, Shanghai and Chongqing municipalities have expanded the categories of home appliances eligible for subsidies according to local conditions, incorporating green and intelligent products such as water purifiers, dishwashers and robot vacuum cleaners, the ministry said.

Sales in eight major categories of home appliances in online and offline markets have surged 44.9 percent and 47 percent year-on-year, respectively, the ministry said.

The ministry said it will continue to encourage various regions to speed up the implementation of subsidy policies and guide home appliance manufacturers as well as distributors to seize consumption boom periods such as the National Day holiday and "Double Eleven" shopping festival so as to make a greater impact on consumption growth under the trade-in scheme, it said.

Guideline calls for cleaning up coal sector

The National Development and Reform Commission and five central departments have jointly issued a guideline on strengthening the clean and efficient use of coal, aiming to establish a system for coal use that is compatible with the country's efforts to advance its green energy transition.

The guideline aims to optimize coal usage across the entire supply chain, focusing on reducing pollution, enhancing energy efficiency and supporting low-carbon development.

It outlines 15 key tasks and measures that cover four aspects of coal development, production, storage and transportation, as well as efficient usage and reducing emissions.

The measures include promoting green exploration technologies, optimizing coalfield layouts and encouraging the development of smart and safer coal mines.

The guideline also calls for improving the cleanliness of coal storage and transportation by expanding rail networks and reducing reliance on road transportation, along with increasing the efficiency of coal use in key industries and promoting the adoption of new coal-based materials.

Administration pushes for standards in data industry

The National Data Administration has drafted a guideline on promoting the high-quality development of the country's data sector for driving the formulation of standards in areas such as data technology, data circulation and utilization, and infrastructure related to data.

According to the guideline, which was issued on Sept 27 to solicit public opinion, the data industry, as an emerging industry that harnesses modern information technology for data resource development, includes areas such as data collection and aggregation, computing and storage, circulation and transactions, and security governance.

The guideline outlines goals for the industry, including achieving a compound annual growth rate of over 15 percent by 2029, a significant optimization of the industry's structure, and fostering a range of new products, services and business models in the field of digital intelligence.

Efforts will also be made to cultivate innovative small and medium-sized data enterprises while encouraging leading enterprises to provide small and medium-sized enterprises with easier access to resources such as data, algorithms and computing power.

To ensure compliant data circulation and transactions, the guideline emphasizes exploring diversified data transaction models and promoting the mutual recognition and interconnection of data trading institutions and platforms.

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