

Contents

Policies.....	1
China issues No. 1 central document for 2023, highlights rural vitalization tasks.....	1
Statistical communiqué of China 2022	1
China issues white paper on green development in new era	1
China further supports foreign-funded R&D centers.....	2
China to expand pilot area for GM soybeans, corn, will strengthen supervision	2
Science, Technology and Environment.....	2
Chinese researchers find new way to synthesize starch, proteins from corn stalk	2
China's agricultural sci-tech innovation strengthened.....	3
China unveils new plan for wider robot use from manufacturing to agriculture.....	3
Global partners cooperate to boost food security	3
Clones of super cows born in NW China.....	3
Researchers unveil soybean nutrients distribution map in China	4
China makes progress in development of "plant factories"	4
Smart farming advances China's modern agricultural development.....	4
China's major grain producer develops high-standard farmland	5
China makes plan to ensure summer grain, oil harvest against drought.....	5
China's soybean output tops 20 million tonnes for first time.....	5
China's grain barn province plans soybean planting expansion for 2023	6
Trade and Business	6
China asks slaughter houses to help stabilize hog prices.....	6
Rural China to see robust consumption	6
China logs increasing online retail sales of agricultural products in 2022	6
China remains an investment paradise for foreign capital.....	7
Henan faces first population drop in 62 years	7
China has great potential for stimulating rural demand.....	7
Investing in China's meat industry: trends and opportunities	8

Policies

China issues No. 1 central document for 2023, highlights rural vitalization tasks

[Xinhua, 13-02-2023] China unveiled its "No. 1 central document" for 2023 on 13 February outlining nine tasks in comprehensively promoting rural vitalization this year.

The document called for enhanced efforts to stabilize production and ensure supply of grain and important agricultural products, to boost the construction of agricultural infrastructure, to strengthen support for agricultural science, technology and equipment, to consolidate and expand the achievements of poverty alleviation, and to promote the high-quality development of rural industries.

It further highlighted tasks needed to broaden the channels for farmers to increase their incomes and promote their ability to secure wealth, to solidly promote the building of a beautiful and harmonious countryside that is desirable to live and work in, to improve the rural governance system led by Party organizations, and to strengthen policy guarantees, and structural and institutional innovation.

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Statistical communiqué of China 2022

[NBSC, 28-02-2023] The National Bureau of Statistics of China published the official statistical communiqué on 28th February. In 2022, the agriculture sector achieved the following outputs:

- The sown area of grain was 118.33 million hectares, an increase of 0.70 million hectares compared with that in 2021.
- The total output of grain in 2022 was 686.53 million tons, an increase of 3.68 million tons over the previous year, up by 0.5 percent.
- The output of cotton was 5.98 million tons, up by 4.3 percent over the previous year, the oil-bearing crops was 36.53 million tons, up by 1.1 percent.
- The total output of pork, beef, mutton and poultry in 2022 was 92.27 million tons, up by 3.8 percent over the previous year.
- The total output of aquatic products in 2022 was 68.69 million tons, up by 2.7 percent over the previous year.

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China issues white paper on green development in new era

[GOV.CN, 19-01-2023] China's State Council Information Office released a white paper titled "[China's Green Development in the New Era.](#)"

The 18,000-character white paper mainly focuses on seven aspects of China's green development, including the country's commitment to green growth, a green territorial configuration, adjustment and improvement of the industrial structure, application of green production methods, eco-friendly living, institutions and mechanisms for green development and efforts to build the earth into a beautiful home.

From 2012 to 2021, China planted 64 million hectares of trees, carried out desertification prevention and control over 18.53 million hectares of land, and added or restored more than 800,000 hectares of wetland, data from the paper showed.

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China further supports foreign-funded R&D centers

[GOV.CN, 18-01-2023] The State Council issued a circular on Jan 18, requesting departments concerned and regional authorities to further support foreign investors in setting up research and development (R&D) centers in China.

The circular said scientific and technological innovations call for improved services, highlighting favorable tax policies, improved verification procedures, simplified declaration materials, and more convenience for qualified foreign R&D centers.

Basic research should be encouraged, with more support for R&D centers in legally using large scientific research instruments, scientific and technological reports, and related data of major national science and technology programs. For new-type foreign-invested institutions providing services for key technologies, local authorities should assist with infrastructure construction, equipment acquisition, talent support services, and operation funds.

The introduction of overseas talent is indispensable as well, the circular said.

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China to expand pilot area for GM soybeans, corn, will strengthen supervision

[GT, 21-02-2023] China's Ministry of Agriculture and Rural Affairs vowed to further expand the scope of pilot projects for the industrialization of genetically modified (GM) corn and soybeans, in what industry observers called a significant step to the legalization of GM crops in the world's second-largest economy amid efforts to bolster its food security.

The ministry also stressed efforts to strengthen supervision of the technology in accordance with the law.

The remarks were made in a statement on the ministry's website on 21 February, which outlined priorities of the ministry's work in 2023.

Efforts such as accelerating breakthroughs in key agricultural technologies and expanding soybean production areas are highlighted in the statement.

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Science, Technology and Environment

Chinese researchers find new way to synthesize starch, proteins from corn stalk

[China daily, 16-01-2023] Chinese researchers recently developed a method of high efficiency for synthesizing artificial starch and microbial proteins from corn stalk. This method can cut the production cost of artificial starch and provide a new way to produce food.

The researchers from the Biotechnology Research Institute under the Chinese Academy of Agricultural Sciences and other China-based institutions, used a multi-enzyme molecular system and baker's yeast to convert cellulose in corn stalks to artificial starch, and to produce microbial protein by fermentation under aerobic conditions.

The study was published in the journal [Science Bulletin](#).

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China's agricultural sci-tech innovation strengthened

[Xinhua, 17-01-2023] The Chinese Academy of Agricultural Sciences (CAAS) said it will continue to promote scientific and technological innovation to support the construction of a strong agricultural sector in China.

According to the CAAS, innovation efforts in 2023 will focus on six fields. These fields are: seed research and development, arable land conservation, agricultural machinery and equipment, agricultural bio-security, green agriculture, and rural development.

CAAS will continue to promote the building of global alliances in agricultural sci-tech innovation. Joint research and technology demonstrations will be carried out in cooperation with neighboring countries, as well as key countries related to the Belt and Road Initiative.

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China unveils new plan for wider robot use from manufacturing to agriculture

[SCMP, 20-01-2022] China has published a new action plan laying out 10 industries where it wants to use more robots, as the country rushes to automate sectors from manufacturing to agriculture after recording its first population decline in six decades.

Under the “Robot + Application Action Plan” released by the Ministry of Industry and Information Technology and 17 other government agencies, Beijing will accelerate the application of robotics in manufacturing, agriculture, logistics, energy, healthcare, education and elderly services, among other areas.

Policymakers aim to achieve more than 100 innovative robotics applications and over 200 model use cases where the technology can be applied, as the country works towards transforming into a global robotics power by 2025.

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Global partners cooperate to boost food security

[China daily, 19-01-2023] The Chinese Academy of Agricultural Sciences (CAAS) signed agreements with 19 global partners to share germplasm knowledge last year as part of a broader effort to bolster international collaboration in agricultural science and technology, CAAS President Wu Kongming said.

The increase in the sharing of the genetics of food species is part of a national effort to seek breakthroughs in germplasm to improve food security. Germplasm are genetic resources such as seeds or animal tissue that can be used to aid in the breeding of crops or livestock.

Last year also saw the creation of the CAAS-Food and Agriculture Organization Innovation Platform, which Wu said was one of the major moves the government made to implement the Global Development Initiative proposed in 2021.

The Global Agricultural Science and Technology Innovation Alliance championed by the academy, which is still undergoing a deliberation process by the China Association for Science and Technology, has received applications from 34 domestic and 21 foreign institutions looking to participate, Wu said.

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Clones of super cows born in NW China

[GT, 30-01-2023] Scientists with the Northwest A&F University successfully saw the births of three cloned cows with highly desired traits in Northwest China's Ningxia Hui Autonomous Region recently, marking the first successful effort by Chinese scientists to

collect, restore and conserve the germplasm resource of "super cows" in China with the somatic cell nuclear transfer method and efficiently reproduce them.

The first calf weighs 56.7 kilograms and was 76 centimeters tall and 113 centimeters long at birth, and it bore the exact shape and skin pattern of its cloned target, read a press release from Northwest A&F University.

The calf, along with two others, came from cloned targets raised in different farms in China. These are super cows, capable of producing 18 tons of milk a year and over 100 tons of milk in a lifetime.

For dairy cows, China is 70 percent reliant on overseas purchases, the press release said.

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Researchers unveil soybean nutrients distribution map in China

[Xinhua, 02-02-2023] Researchers from the Chinese Academy of Agricultural Sciences (CAAS) recently mapped the geographic distribution of soybean nutritional compositions in China.

To clarify the spatial patterns of soybean seed compositions, researchers collected 1,792 soybean samples from a vast range of soybean planting areas across 29 provincial-level regions in China, spanning the period from 2010 to 2017.

Through quantifying and analyzing the crude oil, protein, and 11 categories of functional components of the samples, researchers unveiled a visual geographical distribution map of different nutrients in soybeans.

Based on the nutrients distribution map, weather conditions, and cultivation systems, researchers divided the soybean production areas in China into three regions and 10 sub-regions. They then proposed a regionalization scheme of soybean seed quality for guiding high-quality edible soybean production.

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China makes progress in development of "plant factories"

[People's daily, 15-02-2022] Plant factory is an efficient way of agricultural production realized via high-precision environmental control that offers appropriate lighting, temperature and nutrition needed by the growth of plants. The factory-like facility enables all-year-round production of crops.

China, though a latecomer in the area, has witnessed rapid development in key technologies and commercialization of plant factories. It has become a major player in the industry and is home to 250 commercial plant factories.

The industry enjoys bright prospects, but also faces a bottleneck that needs to be shattered - high operational costs caused by big energy consumption.

China is currently working to lower the energy consumption in artificial lighting and air conditioning systems and to achieve intelligent management of plant factories, aiming to further promote research and industrialization of the sector and build a production system that's low-carbon, smart and efficient.

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Smart farming advances China's modern agricultural development

[Xinhua, 17-02-2023] China is pursuing modernization in its agriculture and rural areas at a fast pace.

A key official document, the "No.1 central document" for 2023, said China will strengthen support for agricultural science, technology and equipment this year.

According to the document, China will continue to pursue digital development in rural areas, explore different scenarios for the application of digital technology, accelerate big data development, and advance smart agriculture.

The smart agriculture strategy is part of China's move to go digital in major industries including manufacturing, service and agriculture.

China views the digital economy as a strategic choice in the new round of technological and industrial revolution. The scale of China's digital economy has grown into the world second largest.

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China's major grain producer develops high-standard farmland

[13-02-2023] North China's Inner Mongolia Autonomous Region, one of the country's major grain-producing regions, has so far developed 49.89 million mu (around 3.3 million hectares) of high-standard farmland, local authorities said.

The figure represents 29 percent of the total arable land area and supports more than two-thirds of the grain production capacity of the region, according to the regional agriculture and animal husbandry department.

Of the total high-standard farmland, the high-efficiency water-saving irrigation area in Inner Mongolia has reached 32.73 million mu, saving 3.3 billion cubic meters of water annually and achieving a win-win result between high grain yield and green ecological agriculture development.

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China makes plan to ensure summer grain, oil harvest against drought

[Xinhua, 24-02-2023] China will step up efforts in preventing drought and ensuring summer grain and oil harvest, the Ministry of Agriculture and Rural Affairs said.

All localities are required to implement preventive measures in advance to ensure water for crop irrigation, according to a plan issued by the ministry and three relevant government agencies recently.

Drought relief water sources should be reserved, and water conservancy facilities should be timely repaired and built, the plan said, adding that efforts should be made in stockpiling and distributing supplies for agricultural production such as seeds and fertilizers.

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China's soybean output tops 20 million tonnes for first time

[SCMP, 20-01-2023] China's soybean output and cropland area reached record highs in 2022 as a result of Beijing's heightened efforts to bolster domestic food security amid geopolitical tensions.

Attaining larger soybean yields while reducing China's dependency on external sources has been high on the government's agenda as it seeks to ensure there is enough food for 1.4 billion people.

The domestic output of soybeans – a major oilseed and animal feed – reached 20.28 million tonnes in 2022, marking a year-on-year increase of 23.7 per cent. It was the first time the country produced more than 20 million tonnes.

Soybean cropland amounted to 10.2 million hectares (25.2 million acres) in 2022 – an increase of 1.82 million hectares, or about 21 per cent, from 2021.

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China's grain barn province plans soybean planting expansion for 2023

[China daily, 12-01-2023] China's major agricultural province of Heilongjiang has set aside 14.5 million hectares for crop planting this year while placing emphasis on expansion of soybean planting, according to sources associated with the on-going annual session of the Heilongjiang Provincial People's Congress.

As China's grain barn, the province saw its total 2022 grain output reach 77.63 billion kg, ranking first in the country for the 13th consecutive year.

In 2023, the province plans to continue boosting soybean planting, to develop 560,000 hectares of high-standard farmland, while also protecting and making good use of black soil resources.

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Trade and Business

China asks slaughter houses to help stabilize hog prices

[Reuters, 14-01-202] China's top planning body has asked slaughter firms to increase commercial stocks of pigs to help revive market demand and drive up sluggish hog prices.

The National Development and Reform Commission (NDRC) also said it would take timely measures, such as increasing meat reserves, if needed to promote hog market stability.

The NDRC made the suggestions in a meeting held recently with some large slaughter firms in response to weak hog prices, the agency said in a statement on Saturday.

Participants at the meeting said hog prices had suffered rapid falls due to weak consumption and increased supplies, according to the statement.

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Rural China to see robust consumption

[Xinhua, 07-01-2023] China is unleashing the consumption potential of rural areas, Minister of Agriculture and Rural Affairs Tang Renjian has said.

Along with a rising income for rural residents, rural consumption is expected to accelerate upgrading, and it is expected that about 2 trillion yuan (about 290 billion U.S. dollars) of new consumption demand will be created annually.

The ministry will input more on rural construction, Tang said. It is estimated that investment demand for rural construction, such as high-standard farmland and facilities, will hit nearly 15 trillion yuan in the next five to 10 years, and this will boost sectors such as building materials, cement, reinforcement, and machinery, he said.

More efforts will be made to build a number of storage and fresh-keeping facilities, cold chain distribution centers, and large cold chain logistics bases in the production areas, and further improve rural water, electricity, gas, living, and other conditions, he said.

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China logs increasing online retail sales of agricultural products in 2022

[China daily, 30-01-2023] Online sales of China's farm produce rose 9.2 percent year-on-year to 531.38 billion yuan (\$78.58 billion) in 2022, data from the Ministry of Commerce showed.

The growth rate improved by 6.4 percentage points from that of 2021, said the ministry.

The industry's rapid development can be largely accredited to the country's booming e-commerce market. In 2022, China's online retail sales in rural areas reached 2.17 trillion yuan, up 3.6 percent year-on-year.

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China remains an investment paradise for foreign capital

[Xinhua, 17-02-2023] Foreign enterprises remain adamant in ramping up investment in the Chinese market, as the immense potential in economic vitality and consumption backed by an optimized COVID response strengthened their confidence in the world's second-largest economy.

Data released by the Ministry of Commerce shows that foreign direct investment in the Chinese mainland, in actual use, expanded 6.3 percent year on year to 1.23 trillion yuan in 2022. In U.S. dollar terms, the FDI inflow went up 8 percent year on year to 189.13 billion U.S. dollars.

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Henan faces first population drop in 62 years

[China daily, 23-02-2023] Henan province has experienced a population shrink for the first time in 62 years, indicating the fertility of rural people is declining as well, according to leading population scientists.

A statement from the Henan Province Bureau of Statistics on Feb 20 showed the total population of the province continued to decline in 2022. At the end of 2022, the total permanent residents in Henan was 98.72 million, a decrease of 110 thousand compared to the end of 2021.

"For a long time, Henan was a populous and major agricultural province with a high fertility rate. The negative natural growth rate indicates the fertility of rural people is declining. Combined with the export of labor, it aggravates the situation," said a professor at Nankai University.

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China has great potential for stimulating rural demand

[Xinhua, 24-02-2023] From 2016 to 2022, the per capita consumption expenditure of rural residents rose 6.5 percent on average each year, 3 percentage points higher than that of urban residents, said the official with the Department of Development and Planning of the Ministry of Agriculture and Rural Affairs, stressing vast opportunities in rural consumption.

Demand for improving rural living conditions and the quality of life and services for farmers, such as elderly care, will become new drivers for rural consumption in the future, said the official.

In the fields of rural infrastructure construction and public services, around 15 trillion yuan (about 2.18 trillion U.S. dollars) of investment demand will be released in 5 to 10 years as the country advances the building of high-standard farmland, as well as the development of modern protected agriculture and rural construction, according to experts.

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Investing in China's meat industry: trends and opportunities

[China Brief, 28-02-2023] China's meat industry has expanded to become the world's largest, accounting for 20 percent of global sales. Chinese meat consumers across the country are now starting to experiment with new trends, such as premium and organic products, presenting high growth opportunities for foreign investors interested in entering the market.

To succeed in China's meat industry, foreign investors and businesses must be prepared to navigate a complex and constantly evolving landscape.

Investing in innovation and technology is a way to stay ahead of the competition, which can improve the efficiency, quality, and sustainability of industrial operations. For example, some companies have begun using blockchain technology to improve supply chain transparency and food safety, while others are exploring new production methods, such as lab-grown meat.

In addition, as concerns about the environmental impact of the meat industry grow, investors should be prepared to embrace sustainable practices and technologies. This includes reducing waste, minimizing energy consumption, and adopting more environmentally friendly production methods.

In addition, investors should be prepared to develop products and marketing strategies that resonate with local consumers and reflect the unique cultural and culinary traditions of each region.

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