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Policies

New law protects precious black soil

[China daily, 25-06-2022] China's top legislature passed the Law on the Protection of Black Soil, aiming to boost the sustainable use of land resources and ensure national food security.

The law will take effect on Aug 1.

Consisting of 38 provisions, the law specifies the responsibilities of the government and parties involved in agricultural production to protect the precious soil.

The fertile black soil in Northeast China, covering the provinces of Heilongjiang, Jilin, Liaoning, and parts of the Inner Mongolia autonomous region, is one of three major humus-rich regions around the world.

An essential agricultural production base, the black soil region produces about a quarter of the country's grain.

Click [here](#) for details

China releases action plan on rural construction

[GOV.CN, 24-05-2022] China published an action plan on rural construction on May 23 to improve people's livelihoods in rural areas and facilitate the country's rural revitalization drive.

The action plan will play a guiding role in advancing the rural construction initiative and making rural areas more attractive places to live and work, according to the Office of the Central Rural Work Leading Group.

The document lists 12 key tasks for promoting rural construction, including formulating a unified plan, carrying out major projects and improving relevant mechanisms in rural areas.

The projects will cover areas such as road transport, water supply, energy, logistics, informatization, comprehensive services, rural housing and living environment, it said.

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China issues certification standards for GM crops in major boost for commercialization

[GT, 08-06-2022] The Ministry of Agriculture and Rural Affairs on 8 June issued two variety certification standards at the national level for genetically modified (GM) crops, including soybeans and corn, in what industry observers said a significant step in China's legalization of GM crops as the country seeks to further bolster its food security.

The move reduces the approval period for such varieties, which will pave the way for further commercialization in one of the world's top crop-producing countries.

China has taken a relatively strict attitude on GM crops due to safety concerns and uncertainty over how they may affect people who eat them over long periods.

Standards for GM soybeans and corn include requirements on resistance to herbicides and insects, as well as increases in productivity, according to a notice on the ministry's website.

The board of the national crop variety approval committee was told to immediately implement the standards, according to the notice.

Click [here](#) for details

Efforts aim for healthy grain harvest

[China daily, 07-05-2022] China will step up efforts to coordinate agricultural production and COVID-19 epidemic prevention, stabilizing economic development in agriculture and rural areas amid rising uncertainties in the overall economy, a senior official with the agriculture ministry said recently.

Affected by rare autumn floods in five provinces last year, the late-sowing area of winter wheat reached 7.3 million hectares, resulting in a complicated seeding situation that hasn't happened in many years.

In addition, the prices of agricultural materials such as pesticides have continued to rise and many places are seeing flare-ups of domestic cases.

The central government has invested a record 6 billion yuan (\$900 million) to support summer grain production, including 1.6 billion yuan to subsidize the robust growth of wheat. A one-time subsidy of 20 billion yuan has been distributed to farmers to alleviate the impact of rising agricultural material prices, he added.

Click [here](#) for details

China pledges US\$1.5b in grain farmer subsidies to offset soaring production costs

[SCMP, 22-05-2022] China has pledged to distribute another 10 billion yuan (US\$1.5 billion) in subsidies to grain farmers, to help bring down the soaring cost of production as part of the government's latest attempt to manage the impact of rising commodity prices.

The one-off subsidies aim to support summer harvest and autumn sowing.

This comes as China looks to ensure farmers are incentivised to keep producing food for the world's most populous nation. In March, Beijing said it would provide 20 billion yuan from the central government budget to protect grain growers from rising prices of farming supplies.

Grain prices in China have spiked since the start of the year on lower wheat output forecasts, amid concerns over spring planting disruptions caused by tighter Covid-19 control measures, as well as the rise in global agricultural commodity prices following Russia's invasion of Ukraine – a major grain exporter.

Click [here](#) for details

Farmers urged to bolster nation's food security

[China daily, 29-06-2022] Xi hopes that large-scale grain growers can leverage their advantages, play exemplary role

In his letter to a large-scale grain farmer who won several national honors after setting up an agricultural cooperative in 2010, Xi expressed his hope that large-scale grain growers can leverage the advantages of scale operation, actively apply modern agricultural technologies and encourage small-scale farmers to contribute to the country's food security by expanding grain production and improving grain quality.

According to the Ministry of Agriculture and Rural Affairs, the nation has about 3.9 million large family farms and over 2.2 million agricultural cooperatives.

Meanwhile, small-scale farms account for over 90 percent of China's agricultural production, according to the latest national agricultural census, which was published in 2017. About 210 million rural households operate farms smaller than 0.67 hectare, according to the census.

Click [here](#) for details

Higher levels of self sufficiency in key staple foods encouraged

[China daily, 18-06-2022] Although global food price fluctuations only have a small impact on staple food costs in China, increasing self-sufficiency for such commodities is an important way to protect against price volatility, according to a report on China's agricultural development this year.

The report, released by the Chinese Academy of Agricultural Sciences at a forum, said the fluctuation of global food prices has a marginal impact on staples such as rice and wheat, but has a bigger effect on feed grains such as soybeans.

The research model shows that greater self-sufficiency will lead to a weaker correlation with global food price fluctuations and consumers will suffer less when prices rise.

China's overall self-sufficiency rate for three major oil crops has decreased from 103.84 percent in 1992 to 32.9 percent last year, with a corresponding increase in import reliance. Click [here](#) for detail

China allocates over \$200 mln to boost cold chain, logistics

[Reuters, 14-06-2022] China has allocated 1.4 billion yuan (\$207.35 million) to support cold chain and national logistics hub construction in the new year, the country's state planner said.

The money will be mainly invested in projects including cold chain logistical facilities for meat processing and distribution, and public cold chain warehouses, the National Development and Reform Commission said in a statement.

The move came as China battles its worst COVID-19 outbreaks since the early days of 2020, which has severely disrupted transport and logistics across the nation, leading to heavy damage to the economy.

Click [here](#) for details

China maps out measures to develop \$3.28t bioeconomy by 2025

[GT, 10-05-2022] From developing therapeutic vaccines to biotechnology breeding, China has mapped out measures to boost the country's bioeconomy to reach an estimated scale of 22 trillion yuan (\$3.28 trillion) by the end of the 14th Five-Year Plan (2021-25) period, according to a new development plan.

The plan will be crucial in bringing leaps in development in products and services in multiple sectors of the real economy ranging from healthcare to agriculture, experts noted.

National Development and Reform Commission (NDRC) listed the development targets of China's bioeconomy industries to be achieved by 2025. For example, the total scale of the bioeconomy will "reach a new stage," while the proportion of the bioeconomy's added value in GDP will experience stable growth.

The country should also see an "evident increase" in bioeconomy companies with annual revenue of over 10 billion yuan (\$1.488 billion), the document noted.

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Science, Technology and Environment

Soil quality both increases crop production and improves resilience to climate change

[Nature Climate Change, 09-06-2022] In a new study, [published in Nature Climate Change](#), the authors from China, the UK and Germany addressed how the interactions between soil quality and climate change influence food output productivity from croplands.

The team suggest that soil quality, defined as the capacity of the soil to provide nutrients and water, holds the solution to both resilience to climate change and future food security. In the paper, they warn that inadequate consideration of soil quality and interactions with climate change will impede general understanding of the food security challenge in the face of rapidly changing environmental conditions.

This research was supported by the National Key Research and Development Program and National Natural Science Foundation of China, Biotechnology and Biological Sciences Research Council (BBSRC) (through Newton Fund projects N-Circle and CINAg) and the UK China Sustainable Agriculture Innovation Network (SAIN).

Click [here](#) for details

Chinese scientists identify genes for more heat-tolerant rice

[Xinhua, 18-06-2022] Chinese scientists found two genes in rice that can make the staple crop more heat-resistant, providing a new way for breeding highly thermotolerant crops.

The researchers from the Shanghai Institute of Plant Physiology and Ecology under the Chinese Academy of Sciences and Shanghai Jiao Tong University revealed the mechanism by which the rice's cell membrane senses external heat-stress signals before communicating with chloroplasts. It is the organ where photosynthesis takes place to orchestrate heat tolerance.

The newly-found gene might also be used in other plants, including wheat, maize, bean, and vegetables, to cultivate heat-tolerant strains, according to the researchers.

Click [here](#) for details

China pig breeders go high-tech in self-sufficiency push

[Reuters, 27-05-2022] Tiny slivers of ear tissue snipped from hours-old piglets offer valuable clues for the team at Best Genetics Group (BGG) as it strives to improve the genetics of China's hog herd to produce cheaper meat for the world's top pork consumer.

Breeding pigs that have larger litters, reach slaughter weight quicker and require less feed can make a big difference in a market producing almost 700 million hogs a year.

BGG is among about 100 farms enrolled in just such a state-led endeavour to wean China off imported stock and breed a self-sustaining herd to feed its 1.4 billion people.

Click [here](#) for details

Chinese scientists produce world's first pigs cloned entirely by robot

[SCMP, 02-0-2022] The team at Nankai University in Tianjin says that removing humans from the time-consuming and complicated process has helped improve the success rate

The technique could benefit Chinese agriculture and consumers and help reduce the country's dependence on imported breeding stock.

Click [here](#) for details

Chinese scientists make breakthroughs in captive breeding of Malayan pangolins

[Xinhua, 04-05-2022] Chinese scientists have tackled the difficulties of the captive breeding of critically endangered Malayan pangolins to the third filial generation.

Pangolins are an important species that influences the structure, function and health of forest ecosystems. Due to excessive hunting and habitat loss, wild stocks of pangolins once plummeted sharply. Captive breeding has thus become a hopeful means to protect the species from extinction.

However, captive breeding cannot provide sufficient food and an adequate environment that can meet the long-term needs of pangolins. There also remains insufficient knowledge about the sexual maturity, estrus, sexual cycle and pregnancy of pangolins.

Click [here](#) for details

Hainan stands at forefront of seed industry innovation

[China daily, 26-05-2022] A modern complex on a tiny island in Hainan province is due to become part of a crucial platform for international exchanges in seed germplasm resources and also a themed tourist destination.

The complex on Moon Island, a 0.5 square kilometer sliver of land near Sanya Yazhou Science and Technology City, is due to start officially operating later this year.

The complex is the starting point of a global transit base for animal and plant germplasm resources.

The base will strive to boost the gathering, identification, evaluation and sharing of high-quality germplasm resources.

Click [here](#) for details

China releases first technology roadmap for intelligent agricultural machinery

[GT, 18-05-2022] China released the nation's first technology roadmap for intelligent agricultural machinery on 18 May guided by the Ministry of Industry and Information Technology (MIIT), according to a CCTV report.

The roadmap is based on unmanned agricultural machinery as a final product form and proposes nine frontier and key technologies including integrated operation tools and a new energy system.

The efficiency delivered by intelligent agricultural machinery when operating full-time has continuously increased by 20 percent to 60 percent, while the operation required less manual operation by 50 percent, based on previous testing sampling data.

Click [here](#) for details

China launches world's first giant floating fish farm

[MSN, 25-05-2022] China has launched the world's first giant floating fish farm that can produce 3,700 tonnes of fish every year - an output similar to Chagan, one of the country's largest freshwater lakes, state news agency Xinhua reported.

Guoxin 1, equipped with 15 tanks, each larger than two standard swimming pools, set sail from the eastern port city of Qingdao.

The mobile farm, the largest of its kind in the world, will travel to the Yellow Sea, East China Sea and South China Sea where different fish can be cultivated in their ideal temperatures. The first batch of yellow croakers bred in the East China Sea is expected to be on the market by the autumn.

Click [here](#) for details

Smart tech helps China's farmers with summer harvest, field management

[CGTN, 13-06-2022] China has adopted advanced technology to help farmers in their summer harvest, planting and field management, ensuring a high yield and bumper harvest.

Skilled agricultural technicians in east China's Anhui Province use mobile phones to control the route of unmanned harvesters.

At a wheat field in Weifang, a city in east China's Shandong Province, two unmanned wheat harvesters equipped with yield measurement software are working efficiently.

The agricultural command center uses a smart agricultural management platform, satellite remote sensing, unmanned aerial vehicle (UAV), sensors and other technologies to monitor the growth of crops, soil moisture and meteorological data to advise farmers in their summer farming with accurate data.

This year, more than 650,000 combine harvesters were put into wheat harvesting, including more than 130,000 with China's Beidou satellite navigation system, up 40 percent from last year.

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China restores over half of its desertified land

[Xinhua, 17-06-2022] China has restored over half of its manageable desertified land over the past decade, making great strides in addressing desertification, according to the country's forestry authority.

In total, 18.8 million hectares of desertified land have been harnessed and 1.77 million hectares have been sealed off for protection over the past decade, according to the National Forestry and Grassland Administration.

The area of desertified land in the country has shrunk by 4.33 million hectares since 2012, with significant improvement to the ecological environment in sand areas, said an official from the administration.

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China says a third of electricity will come from renewables by 2025

[Reuters, 01-06-2022] China will aim to ensure that its grids source about 33% of power from renewable sources by 2025, up from 28.8% in 2020, the state planning agency said on 1 June in a new "five-year plan" for the renewable sector.

China's total renewable energy consumption is set to reach about 1 billion tonnes of standard coal equivalent (TCE) by 2025, as the country bids to raise the share of non-fossil fuels in total energy use to 20%, the National Development and Reform Commission (NDRC) said.

Non-fossil fuels accounted for 15.4% of total primary energy consumption in 2020.

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Trade and Business

China's food industry notches steady growth in first 5 months

[Xinhua, 25-06-2022] China's food industry saw stable expansion in terms of production and sales in the first five months of the year, data from the Ministry of Industry and Information Technology showed.

The value-added industrial output of the agricultural and sideline food processing sector rose 4.1 percent year on year in the period, while that of the food manufacturing sector climbed 4.3 percent year on year, according to the ministry.

Click [here](#) for details

Measures taken to protect winter wheat harvest

[China daily, 20-05-2022] Measures to protect crops from diseases caused by pests and bad weather are being taken across major winter wheat production areas in China, in a bid to consolidate the foundation for a summer harvest in less than one month.

Growing conditions for winter wheat surveyed by agricultural authorities in Henan and Shandong provinces, two major winter wheat production areas, show the crops are now growing better than expected.

China has made great efforts to ensure winter wheat since early February, as more than 7 million hectares of the crop were planted late due to flooding in October in five major winter wheat production provinces.

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After a decade of achievements, China to further enhance food security, rural devt

[GT, 27-06-2022] After a decade of solid efforts to ensure food security, China will further expand food production capacity to stabilize domestic food production and supply, in a bid to cope with the uncertainty brought by the external environment and firmly hold the initiative of national food security, an official from the Ministry of Agriculture and Rural Affairs said on Monday.

China's grain production capacity has steadily increased, with output stabilizing at more than 1.3 trillion jin (650 million tons) for seven consecutive years, reaching a record high of 1.3657 trillion jin in 2021, with per capita grain resources reaching 483 kilograms, achieving basic grain self-sufficiency and food security.

Click [here](#) for details

Can fish farming solve China's food security issues and the planet's growing need for sustainable protein?

[SCMP, 10-05-2022] As the human population keeps growing so too does the need for nutritious food, raising the question of how to feed the billions more people projected to be added to the population by the end of this century.

Aquaculture – the farming of seafood – could be a beacon of hope, experts argue, and it could play a more vital role in improving the food system and combating climate change.

It may be even more important for China, the country with the biggest aquaculture industry, accounting for more than 60 per cent of the world's production. The importance of the industry will only grow given China's insatiable demand for food, its obsession with food security and the aggressive expansion of its ocean economy.

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Chinese drinkers popped record Champagne in 2021, and here's why

[Vino-joy, 13-05-2022] Known for their pursuit of the auspicious red wines, latest data seemingly shows that Chinese drinkers are embracing other wine styles, including Champagne, which used to be shunned for its razor sharp acidity and cold serving temperature.

Champagne exports to China last year have hit record levels since 2018 growing on the back of the French bubbles' global export boom.

In 2021, €66.7 million worth of Champagne were exported to the Chinese market, a stunning increase of 69.9% over 2019 while export volume saw a 14.8% growth to 2.1 million bottles compared to pre-pandemic 2019.

The growing streak is expected to continue.

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China lifts curbs on Canadian canola, demand seen muted

[Reuters, 19-05-2022] China has removed a three-year restriction on imports of Canadian canola seed, Canadian officials said in a statement on 18 May that didn't provide a reason for the lifting of curbs, but trade is likely to be limited by low stocks and high prices.

China, the world's top oilseed buyer, suspended two Canadian canola exporters in March 2019, alleging that pests had been detected in shipments.

"We welcome this decision to remove the restrictions and immediately reinstate the two companies to allow them to export Canadian canola seeds," said Canadian Trade Minister Mary Ng and Agriculture Minister Marie-Claude Bibeau in a statement.

Global edible oil prices, from palm oil to soybean oil, surged to milestone highs this year on tight supplies as production slumped and key producers curbed shipments.

Click [here](#) for details

New platform to enhance Sino-African trade

[China daily, 29-06-2022] A new platform to promote economic and trade cooperation between China and Africa was established in Beijing on 28 June.

The Asia-Africa Innovation Cooperation Center was jointly set up by the committee, the embassies of a number of African nations in China and Chinese companies including Asia-Africa Silk Road International Business Co.

It is set to become an important channel through which Chinese and African entrepreneurs can set up and develop business more efficiently, the zone's administrative committee said.

The committee said it will intensify cooperation with African countries and improve the business environment and services, with the center facilitating China-Africa cooperation in areas such as trade, investment, science and technology, environmental protection, culture, tourism and talent cultivation.

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Agreement to build China-Brazil agricultural industrial park signed

[Xinhua, 16-05-2022] An agreement has been signed to build the China-Brazil Agricultural Science Industrial Park in Paracatu, located in the state of Minas Gerais in Brazil, the department of commerce of central China's Hunan Province said on 16 May.

The agreement was inked on 13 May between China's Longping Agriculture Science Co., Ltd. (LongPing Agriscience) and the municipality of Paracatu. The park will be built by LongPing Agriscience and its subsidiary LongPing High-Tech Brazil.

Since last year, the park has expanded investment for the construction of two seed processing plants and three cold storage facilities of seed, all of which are expected to be operational by the second half of this year.

Chinese universities, enterprises and international organizations have also settled in the park.

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