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Policies

China and UK strengthen cooperation in agriculture

[MARA, 05-08-2022] Vice Minister Zhang Taolin met with Tamara Finkelstein, Permanent Secretary of the Department for Environment, Food and Rural Affairs of the UK, in London on Aug 2, 2022. The two sides had an in-depth exchange of views on strengthening China-UK agricultural cooperation and signed the Memorandum of Understanding on China-UK cooperation in green agricultural development.

Vice Minister Zhang expressed the willingness of China to work with the UK to improve cooperation mechanisms and deepen collaboration in agricultural S&T. The two sides reached consensus on cooperation in green agricultural development and signed the MOU. China and the UK will collaborate in areas such as the development and utilization of renewable energy in rural areas, comprehensive utilization of agricultural wastes, and agricultural nonpoint-source pollution control under the MOU. With cooperation in these areas, China and the UK will usher in a new chapter in green agricultural development cooperation.

Permanent Secretary Finkelstein praised the pragmatic measures adopted by China to deepen bilateral agricultural cooperation, emphasizing that Vice Minister Zhang's proposals on cooperation are constructive. Finkelstein also stated that the UK stands ready to enhance exchanges with China and bring bilateral agricultural cooperation to a new high.

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Chinese premier stresses importance of agricultural science, technology

[GOV.CN, 25-08-2022] Chinese Premier Li Keqiang on 25 August stressed the importance of agricultural science and technology, calling for efforts to promote the innovation and application of agricultural science and technology.

Science and technology are fundamental and decisive forces of agricultural modernization, Li said.

Li urged efforts to fine-tune the agricultural science and technology innovation mechanism and better stimulate the innovation vitality of enterprises and talent.

Li also underscored the importance of achieving breakthroughs in core technologies, talent cultivation, and achievement transformation.

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Report on green agricultural development in China 2021 released

[MARA, 06-07-2022] The Report on Green Agricultural Development in China 2021 was released by the Chinese Academy of Agricultural Sciences (CAAS) and the China Green Agricultural Development Research Association in Beijing on June 25, 2022.

The Report covers the overall development of China's green agriculture as well as key actions and major progress in the sector from 2020 to 2021.

According to the Report, China overcame adverse effects posed by a once-in-a-century epidemic and extreme weather, achieving remarkable results in the transformation towards green agricultural development. China also saw steady improvement in its green agricultural development, which provided fundamental support for national food security, ecological security, and rural revitalization.

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China food security: ‘astonishing’ food loss, wastefulness worsen grain situation

[SCMP, 29-07-2022] China cannot afford to pull any punches in tackling its “astonishing” food loss and waste as the nation strives to ensure grain security in a time of bleak yield growth, a state media commentary said amid lingering concerns over the pressure facing the global agricultural system.

In the face of rising food-security challenges, realising just a 1 per cent rise in this summer’s wheat harvest from last year’s record-high level came at a massive cost to the central government, local governments and hundreds of millions of farmers, according to commentary in the official *Economic Daily* newspaper.

“This also shows that it is becoming more and more difficult for our country to increase grain output,” the piece warned while also saying that “reducing grain loss and waste is equivalent to increasing grain production”.

The official measure published two years ago also showed that China was losing more than 35 million tonnes of grain each year during storing, transportation and processing.

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China’s agriculture ministry coordinates drought-relief for autumn grain harvest

[GT, 20-08-2022] China's agricultural authorities will implement key technical measures to ensure autumn grain harvest, amid fermenting drought in the south of the country, the Ministry of Agriculture and Rural Affairs said during a national meeting on 19 August aimed at coordinating drought-relief work for agricultural production in the south.

Autumn grain harvest accounts for 75 percent of the annual grain production in China.

According to the meeting, since July, the country's southern region has continuously suffered high temperatures, and has recorded the highest number of days with high temperature, the biggest areas with 40 degrees Celsius and above, and the least amount of rainfall since 1961, which has brought serious challenges to autumn grain production.

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Timely action to ensure autumn harvest

[China daily, 22-08-2022] The autumn grain harvest accounts for about 75 percent of the annual grain production in China, and August and September are always the key months for the autumn harvest. The high temperatures in the middle and lower reaches of the Yangtze River and South China are posing a serious challenge to the autumn grain yield.

The drought has affected about 821,333 hectares of farmland in six provinces and municipalities.

Local governments in the affected areas need to act decisively and promptly allocate the funds provided by the central government to support the construction of drought-resistant emergency water source projects and strengthen their drought-resistant support capacity.

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China to strengthen prevention, control of floods, droughts

[GOV.CN, 20-08-2022] Chinese authorities have urged efforts to enhance the prevention and control of floods and droughts, as recent overlapping events have posed severe challenges for disaster control.

Efforts should be made to closely monitor and guard against the new round of heavy rainfall, the State Flood Control and Drought Relief Headquarters and the Ministry of Emergency Management said on Aug 19.

Regions, especially Inner Mongolia, Shanxi, Shaanxi, Hebei, Tianjin and Beijing, should be on high alert for mountain torrents and other latent risks, the authorities said.

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China's new law on black soil protection comes into force

[Xinhua, 01-08-2022] A law on black soil protection, formulated as part of efforts to ensure China's grain security and protect the ecosystem, took effect on 1 August.

The law, passed by the country's top legislature on June 24, consists of 38 provisions, and specifies the responsibilities of the government and "agricultural production operators" to protect the black soil.

It also stipulates harsher punishment for those who cause pollution or soil erosion in black soil areas in accordance with relevant laws and regulations, and calls on state farms to make greater contributions to black soil protection efforts and set a fine example.

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China issues sci-tech action plan to support carbon reduction

[China daily, 19-08-2022] China has published an action plan from 2022 to 2030 on supporting the country's carbon reduction goal by science and technology measures.

The action plan, compiled by nine central departments including the Ministry of Science and Technology and the National Development and Reform Commission, proposed the sci-tech innovation actions and safeguard measures to support the goal of peaking carbon dioxide emissions by 2030 and make research preparations for realizing carbon neutrality by 2060.

The plan features specific actions to promote technological breakthroughs and innovation in green and low-carbon energy transformation, low and zero carbon industrial process reengineering, low-carbon construction and transport, negative carbon and non-carbon dioxide greenhouse gas emission reduction, global cooperation, among others.

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Science, Technology and Environment

Chinese scientists identify evolution of H5N1 avian influenza virus

[Xinhua, 11-07-2022] A Chinese research team has systematically identified the origin, evolution, and propagation of the H5N1 virus, which has caused avian influenza outbreaks globally.

The research, conducted by the Harbin Veterinary Research Institute under the Chinese Academy of Agricultural Sciences, found the currently circulating H5N1 virus emerged in the Netherlands in October 2020 as an H5N8 avian influenza-virus recombination with subtypes such as H1N1 and H3N8.

The researchers performed a detailed phylogenetic analysis of 233 representative H5N1 strains isolated from 28 countries. They found that the virus has encountered complicated gene exchange with different viruses circulating in wild birds and formed 16 genotypes since its emergence.

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Chinese scientists find gene boosting grain yield

[Xinhua, 22-07-2022] Chinese scientists have found a gene in crops such as rice and wheat, which can improve the efficiency of photosynthesis and nitrogen utilization and significantly boost grain yield.

Scientists believe the discovery could provide a potential solution for increasing agricultural productivity and efficient utilization of resources, and contribute to human food security.

The discovery made by a team led by researchers with the Institute of Crop Sciences under the Chinese Academy of Agricultural Sciences (CAAS) was published online in the academic journal, Science.

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Development of bio-agriculture provides strong support for China's bio-economic growth

[CGTN, 13-07-2022] Bio-agriculture refers to the cultivation of various crops by using biological methods to control pests and diseases and achieve ecological balance. Biological breeding is one of the most promising fields. The advanced plant-breeding technologies are improving grain yields and making a big difference for farmers across the country.

Official data shows that the total number of crop varieties in China has increased significantly, with the coverage rate of improved varieties of major food crops exceeding 96 percent. With the rapid development of plant breeding technology, disease-free crops have been cultivated, which helps to solve a series of problems concerning food security in China.

Food security is all the more important due to the surging uncertainties brought about by the COVID-19 pandemic and geopolitical tensions. Biological breeding technology plays a key role in developing the modern seed industry and solving the problem of food security, as it breaks the limitation of traditional agriculture.

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Companies selected to help boost seed sector

[MARA, 12-08-2022] The Ministry of Agriculture and Rural Affairs has selected dozens of seed industry enterprises and organizations to provide support for efforts to further cultivate the country's seed sector.

According to a notice published on Aug 4, 69 crop seed companies, 86 domestic animal and fowl genetic resources companies and 121 centered on aquatic germplasm resources were chosen from more than 30,000 companies nationwide to pioneer China's seed industry vitalization.

The move is a key step in the nation's efforts to achieve self-reliance in seed technology and ensure that its germplasm resources are independent and controllable, the notice said.

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New variety may break reliance on imported breeding beef cattle

[China daily, 11-08-2022] Chinese scientists have independently bred a new cattle variety, named the "Huaxi Cattle", which should help break the country's reliance on importing beef cattle for breeding purposes, the Chinese Academy of Agricultural Sciences said.

The new variety was approved by the National Livestock and Poultry Genetic Resources Committee in December.

By 2025, 400 Huaxi bulls should be available for breeding each year, which will cover 70 percent of beef breed stock in the country.

Although China already had a variety of cattle and breeding stock by the 1980s, meat production was not able to meet domestic demand because for a long time, when it came to breeding cattle, their usefulness as beasts of burden was prioritized over their ability to produce meat.

At the moment, the country's beef cattle varieties are not being sufficiently promoted, contributing little to the development of the sector.

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China to build international agricultural breeding center in Hainan

[Xinhua, 14-07202] An international agricultural breeding center will be built in south China's tropical province of Hainan, with aims to meet the global challenge of climate change and ensure food security, according to the Chinese Academy of Agricultural Sciences (CAAS).

The CAAS, the International Rice Research Institute, and the International Maize and Wheat Improvement Center signed a letter of cooperation to establish the breeding center at a science and technology park in Sanya city, Hainan Province.

By using the free trade port policy of Hainan and the advantages of Sanya in agricultural breeding, the international breeding center will integrate breeding research resources, create a new breeding system, and promote scientific research innovation, to contribute to the sustainable development of the economy, society, and ecology, according to the CAAS.

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China makes way for constructing AI application scenarios

[China daily, 16-08-2022] In a move to accelerate the application of artificial intelligence and foster a new growth point of national economy, China's Ministry of Science and Technology released a notification on Monday to support the construction of pilot AI application scenarios, with new technologies integrated and R&D cooperation strengthened between upstream and downstream.

The first batch of scenarios are related to smart application in farming, port, mining, factory, home electronics, education, autonomous driving, medical service, court and supply chain.

Backed by the national new generation AI innovation and development pilot zone, China will give full play to the enterprises from the open innovation platform, and continuously support the construction of AI-related scenarios, according to the Ministry of Science and Technology.

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CAAS unveils smart agriculture initiative

[China Daily, 16-08-2022] The Chinese Academy of Agricultural Sciences launched an initiative to improve the technology of agricultural machinery and promote the mechanized, smart, and green development of agricultural production and ensure national food security.

The academy will carry out scientific and technological research on efficient, smart and green agricultural machinery, focusing on smart equipment for grain production and self-sufficiency of core technology in producing cash crops.

Scientists are expected to make breakthroughs in key technologies applied in large-scale grain production, facility agriculture, and operations in hilly areas.

The initiative projects by 2023 the problem of lacking equipment in the production of major cash crops, especially in hilly areas, will be basically solved.

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China launches new remote sensing satellite group

[GOV.CN, 20-08-2022] China on Aug 20 launched a Long March-2D carrier rocket to place a remote sensing satellite group in space.

They will be used to conduct science experiments, land resource surveys and yield estimation of agricultural products as well as disaster prevention and reduction.

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China launches innovation alliance to promote use of saline soil

[Xinhua, 20-07-2022] A national agricultural innovation alliance on the comprehensive use of saline soil was jointly launched by the Institute of Agricultural Resources and Regional Planning of the Chinese Academy of Agricultural Sciences (CAAS) and related units.

The alliance aims to accelerate the sci-tech innovation and comprehensive utilization of saline land, and fully explore its potential for agricultural production.

The improvement and use of such land for agricultural purposes once made outstanding contribution to increasing grain output in China, said Liu Xianwu, vice president of the CAAS.

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China's farms face climate change challenge, official says

[Reuters, 20-07-2022] China's massive agricultural sector is facing growing risks as a result of extreme weather and shifting planting conditions brought about by climate change, an official with the agriculture ministry said on 20 July.

China's farming belts have been hit by record temperatures and rainfall this year, as well as drought in the north, and Liu Lihua of the Ministry of Agriculture and Rural Affairs said the country is facing a surge in "extreme meteorological disasters".

"The disasters have become more and more abnormal and unpredictable, bringing more and more challenges to agricultural production," she told a press briefing.

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China's record-breaking heatwave hits power supplies and threatens agriculture

[SCMP, 24-08-2022] China's heatwave, stretching past 70 days, is its longest and most widespread on record, with around 30 per cent of the 600 weather stations along the Yangtze recording their highest temperatures ever .

The southwestern city of Chongqing has been hit especially hard. Chongqing's agriculture bureau also drew up emergency measures to protect livestock at more than 5,000 large-scale pig farms, which have faced "severe challenges" as a result of the heat, state media said.

China has warned it is especially vulnerable to climate change and natural disasters are expected to proliferate in coming years as a result of more volatile weather.

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Chinese Paddlefish and wild Yangtze Sturgeon extinct - IUCN

[Reuters, 22-07-2022] The extinction of the Chinese Paddlefish and wild Yangtze Sturgeon, declared by the International Union for Conservation of Nature (IUCN), unleashed a torrent of comments on China's social media platforms on Friday urging more environmental protection.

The IUCN's latest list of threatened species, published on its website, showed that 100% of the world's remaining 26 sturgeon species are now at risk of extinction, up from 85% in 2009.

"The assessments are based on new calculations which show their decline over the past three generations to be steeper than previously thought," the conservation group said, adding that the reassessment had also confirmed the extinction of the Chinese Paddlefish.

Both the Chinese Paddlefish and the Yangtze Sturgeon were common species in the Yangtze river basin which has been plagued by heavy shipping traffic, overfishing and water pollution.

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Fall armyworm occurrence in China more serious than last year

[Reuters, 29-07-2022] China's agriculture ministry said the current occurrence of the fall armyworm in several provinces this year is more serious than the last, as the pests' northward expansion has accelerated since the end of June.

The Ministry of Agriculture and Rural Affairs in a statement on 29th July named Yunnan, Hunan, Anhui, Sichuan, Guizhou, Henan, Shaanxi and seven other provinces as seeing more serious armyworm occurrences. It said the pest had reached as far north as Hebei province and Tianjin city.

The fall armyworm pest first arrived in China in January 2019 and can affect such crops as sugar cane, corn, sorghum and wheat. It has previously hit Liaoning province in China's northeastern cornbelt and wheat crops in the southwestern Sichuan province.

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Digitalization invigorates China's rural revitalization

[Xinhua, 09-08-2022] China's digital transformation has not only revolutionized the lives of urbanites with emerging technologies, but has also transformed the country's rural areas. According to a report on China's digital development released in July, the country's Internet penetration rate in rural areas stood at 57.6 percent.

Meanwhile, the popularity of mobile networks has enabled more Chinese farmers to embrace digital life.

As rural infrastructure improves, many villages in the country are going digital, and with the integration of digital technology and rural areas accelerating, the mode of agricultural production is also changing.

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Trade and Business

China's food supplies remain sufficient in H1

[Xinhua, 20-07-2022] China's food supplies remained sufficient during the first half of the year, said Zeng Yande, an official with the Ministry of Agriculture and Rural Affairs.

China's hog production has returned to a reasonable range, with the number of breeding sows reaching 42.77 million at the end of June, Zeng told a press conference.

Pork output jumped 8.2 percent year on year in the first half, while milk production rose 8.4 percent from a year ago.

The output of aquatic products reported slight growth, and the vegetable and fruit markets had adequate supplies during the period, the official said.

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China's agricultural exports up 21.7% in H1, helping ease global shortages

[GT, 13-07-2022] China's exports of agricultural products expanded by 21.7 percent to 303.1 billion yuan (\$45.06 billion) in the first half of 2022, according to official data on Wednesday, reflecting China's significant contribution to helping stabilize global food market amid a series of challenges.

China's General Administration of Customs (GAC) data showed that export values for aquatic products were up 14.9 percent to 72.52 billion yuan, vegetable and edible mushrooms export value rose by 5.5 percent to 37.79 billion yuan and canned food realized 55 percent growth to 13.75 billion yuan.

China's vegetables and aquatic products are often exported, while grain is mainly used for domestic demand.

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China to import Indonesia's crude palm oil, agriculture products

[ANTARA, 27-07-2022] China agreed to import one million tons of crude palm oil and other agricultural products from Indonesia, State-Owned Enterprises Minister Erick Thohir stated.

The minister remarked that Indonesia and China were strategic partners that had conducted mutually beneficial cooperation.

The minister believed that Indonesia, with abundant natural resources and a large market, must be able to clock similar accomplishments in a bid to promote economic growth as well as provide job opportunities for the citizens.

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China reaps bumper summer grain harvest in 2022 with output of 147.39 mln tons

[GT, 14-07-2022] China reaped another bumper summer harvest in 2022, the country's National Bureau of Statistics (NBS) said, citing a summer grain's output of 147.39 million tons, an increase of 1 percent than previous year.

Despite rising agriculture prices and sporadic epidemic flare-ups, and the late sowing of winter wheat, China's summer grain output has reached an all-time high, NBS said.

This has laid a solid foundation for ensuring the total grain output this year, and provided solid support to cope with the uncertainty of the external environment, the NBS said.

The national summer grain yield was 5,555.6 kg/hectare, an increase of 0.6 percent over the previous year.

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China's sow herd at end-June up for second straight month

[Reuters, 20-07-2022] China's sow herd at the end of June rose for the second consecutive month, as farmers increased production amid rising pig prices.

The sow herd at the end of June was at 42.77 million head, said Zeng Yande, chief agronomist and director of the development planning department at China's agriculture ministry.

The figure was a 2% monthly increase from 41.92 million reported at the end of May, but down 6.3% from a year earlier, according to Reuters' calculations. China's end-May sow herd saw its first monthly increase in a year.

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China's pesticide and fertilizer market seeks biological alternatives

[CGTN, 13-07-2022] Biopesticides and biofertilizers – those made from natural sources like animals, plants, bacteria, and certain minerals – are gaining popularity in China, as the government pays more attention to safety and low-carbon development.

China's Ministry of Agriculture and Rural Affairs said pesticide companies and dealers nationwide are already using the "one bottle-one code" identity system to keep track of quality, as well as keeping illegal pesticides – which are often highly toxic – out of the market. The agriculture regulator also called for cutting the amount of chemical fertilizers in use, in a recent carbon emission reduction plan for rural areas.

Farmer cooperatives in Shanghai suburbs have been adopting these green solutions since 2017. Some of them took advice from the local authorities and apply biopesticides four to five times a year to avoid rice blasts and sheath blight.

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China's booming ready-meals industry

[SCMP, 04-08-2022] The growing popularity of pre-cooked food in China – also known as the ready-meals industry – has made it a capital darling, with investors looking to cash in on the trend prompted by changes in people's lifestyles amid the pandemic.

Deloitte China, in cooperation with Mumian Capital and Inward Fund – two investment houses focusing on the country's new economy sector – said in a report that the pre-made food market is shaping up to be even more lucrative this year than during the first two years of the pandemic.

According to the report, China's pre-prepared dishes market generated about 550 billion yuan (US\$81.34 billion) in 2021, with an expected compound annual growth rate of 13 per cent over the next 5 years.

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