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Deutsch-Chinesisches Agrarzentrum



Sino-German Agricultural Centre (DCZ) 中德农业中心



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Sino-German Agricultural and Food Update

中德农业与食品通讯

No. 15 June - July 2021

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Sino-German Agricultural and Food Update

Foreword

Dear partners and friends of the Sino-German Agricultural Centre,

Balancing the urban-rural divide, increasing the income of farmers, creating a rural environment that attracts businesses as well as young people at times of an ageing population have been goals in China's development policies for long time. After it has been declared that the goal of poverty eradication is achieved, "rural revitalization" is promoted as a key policy for rural areas. A five-year plan on a "rural vitalization strategy" outlines the "key tasks for the 2018-2022 period towards the strategy's overall goal of building rural areas with thriving businesses, pleasant living environments, social etiquette and civility, effective governance, and prosperity" (http://www.xinhuanet.com/english/2018-09/26/c_137494476.htm). China's 14th Five-Year Plan (FYP) for 2021-2025 further elaborates and sets the goals to be achieved by 2035, and the Document No. 1 released on 21 February 2021, incorporates the goal in its title "Comprehensively Promoting Rural Revitalization and Accelerating Agricultural and Rural Modernization 2021".

Our cover story in this edition shows that rural revitalization is not only a top-down policy formulated at highest levels in Beijing but has been a reality in some areas of rural China due to private initiatives with similar goals. The Indian filmmaker Anusha Venkatachalam Iyer not only tells us about her first-hand experiences in a village in Sichuan Province, but also gives a vivid description of the background and history of the establishment and development of the so-called "Walden Farm, a family farm business in the countryside of Mianyang".

In other sections of this edition, you also will find evidence of the importance of this subject, e.g. the establishment of the Institute of Rural Vitalisation in CAAS, in the "Good to Know" section.

We also look back at events in the recent months, like the DCZ's "Sino-German Agribusiness Conference Held in Nanjing" and the "Leipzig Agricultural Talks", organized and moderated by IAK Agrar Consulting GmbH.

As a regular reader of our newsletter, you are aware that Sino-German cooperation in agriculture is not limited to the DCZ. The "Sino-German Animal Breeding and Husbandry Project" held its final event of which you find a report by Gerret Fredewess of ADT Project Consulting GmbH. The experts of the "Sino-German Crop Production and Agrotechnology Demonstration Park (DCALDP)" also had a very active time and contribute to this newsletter with two reports on their excursion to Harbin where they attended the HORSCH field day and on the Sino-German Field Day in Inner Mongolia, a cooperation of the Hulunbuir State Farm, the VDMA (German Mechanical Engineering Association) and DCALDP as well as other business partners.

On 22 May 2021, China's "Father of Hybrid Rice", Yuan Longping, died at the age of 90. Our expert, Dr. Eva Sternfeld, reminds us of this renowned and highly awarded researcher and practitioner whose name is known to every Chinese school kid.

As always, I hope you find some interesting and valuable information in this edition of our Newsletter and wish you happy reading.

With best wishes

Dr. Jürgen Ritter
Managing Director
Sino-German Agricultural Centre (DCZ)

Cover Story

Introduction

Since 2018 China is implementing the Rural Revitalization Plan, an ambitious governmental program to narrow the gap between booming urban areas and stagnant rural areas. How is this policy actually adapted in the Chinese countryside and how can local people benefit from it? To answer these questions DCZ asked Anusha Venkatachalam Iyer to write a cover story. Anusha, an independent writer and filmmaker originally from India, first visited the Sichuan countryside as a volunteer in 2018 before deciding to live and work at the Walden Farm, a family farm business in the countryside of Mianyang. In her article, Anusha provides an overview of her village and the philosophy of the owners of the Walden Farm, the Lin family. One of the protagonists is Mr. Zhao Lin, the coordinator of Walden farm's international volunteer program and deputy head of the village committee of Shuangshi. In 2020, he was selected as a participant of the Sino-German Exchange Programme for Young Experts in the Agricultural Sector (AEP), a programme funded by the Federal Ministry of Food and Agriculture (BMEL) and the Chinese Ministry of Agriculture and Rural Affairs) (more about AEP <https://www.dlg.org/en/membership/newsletter/2020/dlgs-international-project-portfolio>).

Walking the Chinese Countryside – a Foreigner's Perspective on Life in Rural Sichuan Against the Backdrop of China's Rural Revitalization Scheme

By Anusha Venkatachalam Iyer

On a warm summer afternoon in 2018, a local bus eased to a halt on the side of a highway. 'Jiuling!' the bus driver signaled, while the passengers stared wide-eyed following

my every move. It was my first time in China, and I assumed a girl of colour with a boy cut lugging a backpack was an unusual sight for them. I thanked the driver in English and hesitantly stepped out of the bus. It's been three years since. Today, I bicycle to the local village market, waving at the locals and pausing to make small talk with them. We've been through a lot together - people have come and left, new businesses have crept in, town names have changed, so has the local government; and somewhere in this whirlwind of change, I've found a place like home.

Sichuan is a landlocked province in South-west China; its capital city Chengdu sits at the centre. 120 km north of Chengdu, deep in the countryside, lies a small town called Qinglian. It's the hub for eight rural villages, one of which is Shuangshi. Enveloped by dramatic mountains and subtropical greenery, Shuangshi is a beautiful village of 3,042 registered citizens. Most of them are small-scale farmers producing rice, corn, vegetables, fruits alongside raising pigs, geese, and chicken in small backyard cages.

On top of the mountain stands Walden Farm (三一国际共享农场), a monolith towering over the village. The farm is unlike anything you'd expect in the countryside - a sprawling property of 1,680 acres. Tall pine trees, Chinese ginkgo, and maple trees adorn the place, surrounded by several lakes. The natural beauty contrasts opulent buildings - a British-style café, a wooden hut in the woods, and a white villa with a swimming pool. Young Chinese staff goes about their day, and guests zoom by in their BMWs.

Surprisingly, the farm wasn't always this way. Home to four generations of the Lin family, the farm was a quintessential family home until 2005 when pig farming came into play. Around this time, today's CEO of Walden Farm, Lin Qiang, quit his job and returned to his hometown. Being the most educated

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Pictures: Walden Farm

member of his family, Lin Qiang worked for China National Petroleum Corporation. His long days in the harsh desert of Xinjiang led to an epiphany about living a life of meaning. Influenced by the book 'Walden' by American author Henry David Thoreau, a 19th century naturalist and early mentor of modern-day environmentalism, Lin encouraged his family to adopt sustainability. Consequently, he chose a name for the farm, referring to Thoreau's book.

In 2008, Walden Farm introduced its first biogas system, converting pig waste into energy,

later used as cooking fuel. These were the years when there were no national policies regarding the treatment of animal waste. The move changed the trajectory of Walden.

Hopping on the sustainability train, Lin Qiang's nephew Zhao Lin followed suit. In 2012, he registered the farm on international volunteering websites, opening Shuangshi village to the world. Volunteers from all corners of the globe flocked to Walden Farm, contributing to the ideas of sustainability, art, architecture, and design. With help from the international community, profits from farming



Pictures: Walden Farm

Picture: Walden Farm hosted over 300 volunteers from 45 countries (A. Venkatachalam)

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Pictures: Walden Farm employs more than 200 people, mostly elderly (A. Venkatachalam)

over 5000 pigs, and a few bank loans, Walden Farm began to expand. Buildings of varying styles were constructed. A chicken yard was built to sell high-quality free-range eggs, quickly followed by a goat yard. Grape vineyards and peach orchards were planted, leading to the famous 'Walden Wine.' Dams were constructed for water management, and a compost factory was built.

Much to the farm's surprise in 2018, the national government of China introduced the implementation of a new strategy called 'Rural Revitalization.' After years of urban migration and neglect towards the countryside, the aim was to rebalance the urban-rural relationship. The national announcement came as a blessing for farms like Walden, who until then were the sole champions of the cause. A door of opportunities opened, and the regional government recognised Walden Farm as a possible example of sustainable rural revitalization. Sadly, this honeymoon period didn't last long.

Since August 2018 and through 2019, the African Swine Flu swept across China, shutting down hundreds, if not thousands of pig farms. Due to its hygiene and security, Walden Farm managed to sail through this difficult time, making profits from the rising prices of pork. Over the years, Walden Farm has gradually eased out of sustainable farming and moved towards fair farming. Its 3-1 philosophy aims to maintain a balance be-

tween Nature, Business, and Community. The farm is now scaling up its facilities by constructing three enormous pig factories. In the future, they aim to produce 1 million piglets every year. The factories will introduce rooftop farming, as well as automation and artificial intelligence to the countryside. The farm works with various international companies in Denmark, Germany, Singapore, and the Netherlands to improve pig breeding, power production, water purification, and finances. Profits from the business are invested in social development projects like building roads, which occasionally are co-funded by the government. In the current climate of Rural Revitalization, there is no denying the power of private companies. Their autonomy and profits enable change at a much faster pace than public sectors. Walden Farm remains the most prominent agribusiness in the area, now employing over 200 workers. Due to their initiatives, a road was constructed that connects Shuangshi village to the town. Businesses have opened on either side of the road, and new enterprises are taking shape.

It isn't the end of the story at Shuangshi. Downhill from Walden Farm, a quiet building bustles with a new kind of energy. It's the Village Committee of Shuangshi. In rural China, every village has a local committee in charge of its development, measured by six yardsticks - electricity, gas, irrigation system,

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Picture: A new pig factory under construction (A. Venkatachalam)

roads, internet access, and a recent addition, e-commerce. The committee is run by one Village Head and two Deputy Heads, selected after two rounds of elections - first, by the Communist Party of China and then by the citizens. These elections typically take place every 3 to 5 years.

In 2020, after a gripping election, the village of Shuangshi elected an unlikely Deputy Head, Zhao Lin, from Walden farm. After running the farm's international volunteer programme for nine years, he had decided to part ways with his uncle and devoted his time to politics and public service. As a man in his early thirties, who speaks English and is abuzz with international ideas, Zhao Lin breaks every stereotype associated with local leaders and politics. He now aims to re-envision the countryside with new and innovative programmes. His priority is to keep internationalism and cultural exchange alive. COVID-19 has caused a drop in foreigners who travel to China, but Zhao Lin is hopeful about next year. The Village Committee has already rented a small piece of land with a rural-style house for foreigners looking to experience authentic countryside life. This space will run a 100% organic farm, paving the path for rural tourism and cultural exchange. Zhao Lin believes an international community will attract investors to the area and inspire

young Chinese talent to work in the countryside.

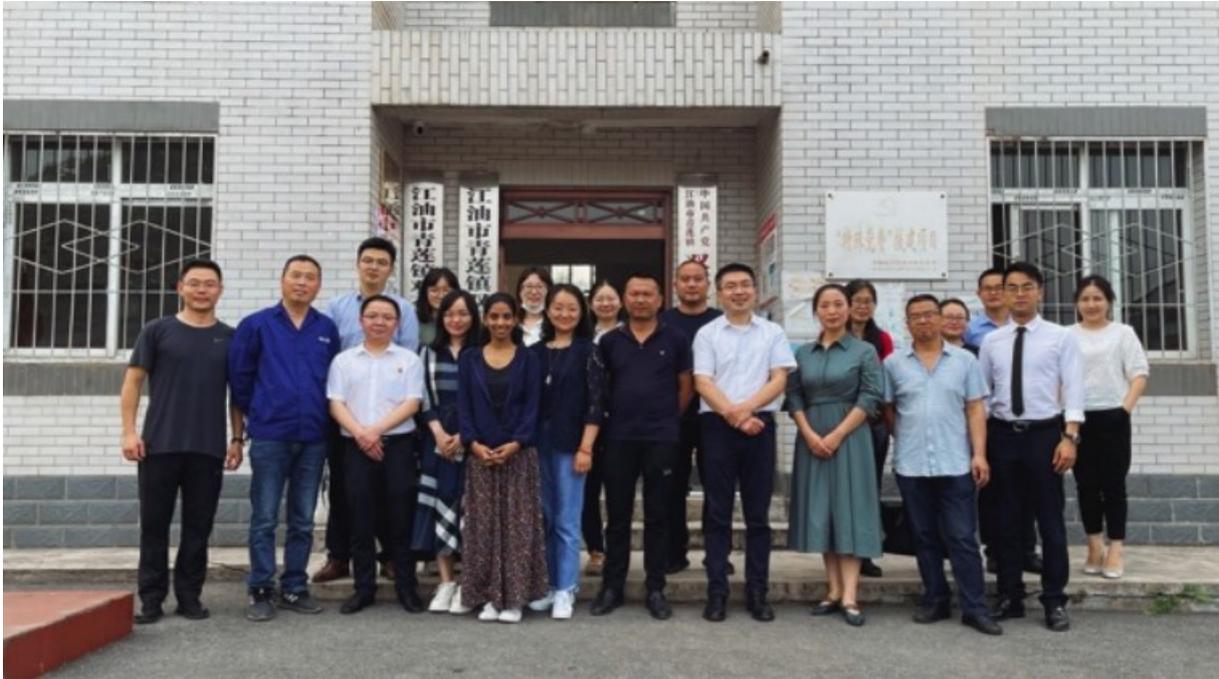
The recent popularity of Chinese vlogger Li Ziqi has shed light on the simplicity of life in rural China, which was previously just shrugged off as poverty. The vlogger creates beautiful videos with her grandmother, teaching audiences about countryside skills. Her videos have impressed millions of urban dwellers who are yearning for more natural life. This new wave of romanticism toward the countryside has led to increased rural tourism, specifically Airbnbs. Yet, the social life and conveniences of urban areas are incomparable to rural China. While most youngsters wouldn't mind spending a weekend or two snapping WeChat-worthy pictures, very few wish to relocate.

The lack of youth isn't the only challenge for the Village Committee. On the other end of the spectrum lies the issue of an ageing population. A majority of rural citizens are old farmers living away from their urban families. Ever so often, Zhao Lin gets notified about the passing away of a senior citizen. He worries that with it go years of rural tradition and knowledge.



Picture: Zhao Lin promotes traditional hand-crafts (A. Venkatachalam)

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Picture: Mr. Zhao Lin (left) and the author (center) with Chinese participants of the AEP Programme in front of Shuangshi village committee (A. Venkatachalam)

Several decades ago, the people of rural China lived in unison with their land, practicing traditional farming techniques. Years of Cultural Revolution, Industrialization, and Modernization put an end to whatever traditions existed. Younger generations of Chinese have been raised in a world devoid of these traditions, and the people who practice it are now gradually dying. To find a solution, Zhao Lin teamed up with his 74-year-old grandmother and conducted an experimental workshop for foreigners, where she taught them how to create a pair of straw sandals. Following its success, he now intends to chalk out a community space for workshops, thereby creating financial avenues for aged citizens.

Zhao Lin's enthusiasm and passion for the countryside have caught the attention of government officials and the national media. Earlier this year, his story featured on CCTV, the national network of China. He was also selected to participate in the Sino-German Exchange Programme for Young Experts in

the Agricultural Sector (AEP), a government-led initiative to encourage changemakers at a grassroots level. Unfortunately, COVID restrictions led to the programme being conducted virtually; yet Zhao Lin seized the opportunity to share his ideas with fellow experts from Germany and other regions of China. Subsequently, Chinese officials and participants of the AEP programme visited the Shuangshi Village Committee to learn about its plans. The village of Shuangshi, which previously was of no significance, is now at the forefront of change.

Here, the two sectors of public and private form the yin-yang of rural development. Despite their differing approaches, both Walden Farm and the Village Committee are tackling common ground. Issues of land, depopulation, ageing population, technology, governance, preservation of culture, food security; all exist within the purview of the Rural Revitalization Scheme.

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Interestingly, the two spheres also face similar drawbacks. First is the threat of "Greenwashing", which looms large in the countryside. Terms like "organic", "eco-friendly", and "sustainable" are interchanged much like the term "farmer", which has an emotional connotation, rather than a technical one. The approach to environmental conservation in rural China appears to be a bottom-up approach, where individuals and businesses decide to go the "green way". The problem, however, is the lack of education, awareness, and genuine interest. Most CEOs and entrepreneurs have no educational background in Agriculture, Organic Farming, or Sustainable Businesses.

As a result, green initiatives become mere money-making models rather than climate action. In addition to that, China's market for organic or green businesses is minuscule. Perhaps, one approach could be a top-down model where the national government enforces strict guidelines on land use, animal farming, deforestation, water purification, use of plastic, and appropriate carbon taxes. Special incentives for sustainable businesses and nationally recognised organic certifications would also help regulate the up-and-coming industry.

The second issue I find myself contemplating is the role of foreigners in the Rural Revitalization Scheme. As more rural citizens migrate to urban areas, the countryside has chanced upon an unlikely ally, that of the international community. Global nomads, backpackers, and volunteers often prefer natural habitats to urban cities. The availability of space and freedom in the countryside has led to a boom in volunteer programmes. Walden Farm itself has hosted over 300 volunteers from 45 countries. Having been a volunteer myself, I can only testify to the importance of sharing ideas and cultural knowledge. However, most volunteers are crunched for time and only end up staying a week or two. As a result,

they are mainly successful with execution-based projects such as writing, painting, and construction. Creating a significant community change remains almost impossible.

The issue again boils down to the approach, which in this case, is a top-bottom model. Foreigners are encouraged to initiate their projects without the understanding that real change takes time. Social development is more nuanced than a one-size-fits-all. Merely implanting ideas from Europe or North America without fully understanding the Chinese context is an unsustainable approach. What we truly need are professional international exchange programmes that encourage the active participation of locals. Training modules offering global exposure, technical know-how, ethics, and critical thinking will empower locals within their social structures. That way, we create a community-led project supported by the international community. It would be the true revitalization of rural China that is not just another replica of Paris, London, or California, but a China that is in and of itself.



Picture: Behind the scenes. Anusha Venkatachalam while filming her latest film Walking the Chinese Countryside (with the film's presenter Lin Xi, also a member of the Lin family) (A. Venkatachalam)

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More about Walden Farm:

To learn more about Walden Farm, please check their website <https://www.waldenfarm.org>

To get a visual impression and to learn more about the Lin Family and the Walden farm's 3-1 approach you are invited to watch Anusha's amazing films

Walden Farm and its history: <https://www.youtube.com/watch?v=ipkU42zxSsl>,

Walden Farm & its volunteer programme: <https://www.youtube.com/watch?v=jThv6ohp5WE&t=20s>

as well as her latest film, 'Walking the Chinese Countryside' here <https://c-makers.de/entry/walking-the-chinese-countryside/>

Good to Know

Politics and Law

China to Step Up Financial Services for New Agricultural Businesses

The rural inclusive financial reform experiments will be expanded, while pilot zones for financial service supporting rural vitalization will be built, according to a document jointly released by the People's Bank of China (PBOC), the central bank and five other government departments [Central Agricultural Office, Ministry of Agriculture and Rural Affairs, Ministry of Finance, China Banking and Insurance Regulatory Commission and CSRC.

New types of rural business entities such as family farms and farmers' cooperatives have gradually become a vital force in ensuring farmers' income growth, the supply of agricultural products and the transformation and upgrading of the agricultural sector, it said.

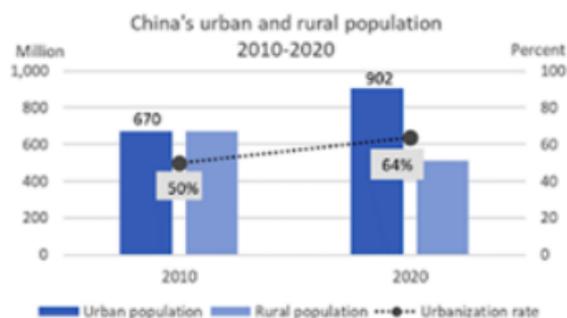
The document has specified requirements on strengthening information sharing, promoting the development of credit loans, the innovation of exclusive financial products and services and expanding and diversifying financial channels, as well as improving agricultural insurance service, among others. Financial services for new types of rural businesses will be taken into account in assessing the financial institutions' service performance on rural vitalization, according to the document. Most notably, it calls for an expansion of the "scope of collateral" that farmers can use to secure loans. Meanwhile, it says banks and financial institutions are encouraged to issue special bonds and increase their tolerance for bad loans.

Source: Xinhua 2021-05-25

Growing Cities, Shrinking Rural Population

China is urbanizing at a rapid pace, while at the same time the rural population is shrinking. The results of the recently published 7th population census revealed that the share of urban population in 2020 stands at 64% (902 million people) compared to 50% (670 million people) in 2010 and 20% in 1980. In the past 10 years the rural population shrank by 164 mio and in 2020 had a share of 36% (about 500 mio. people). This also implies that China's growing urban population needs to be fed by a decreasing number of people employed in the agriculture sector and shrinking farmland.

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Source: Dimsums blogspot

Economy and Trade

Registration of Overseas Manufacturers of Imported Food

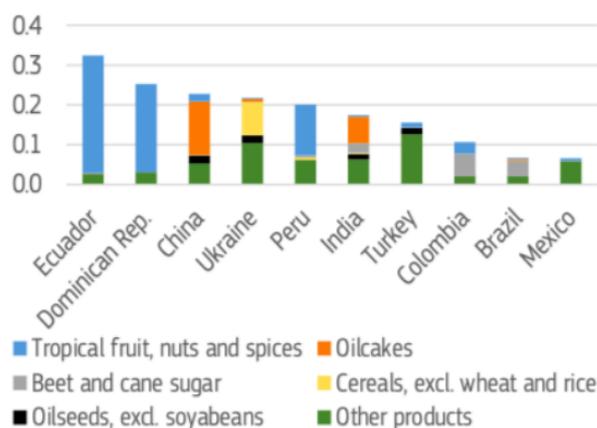
From January 2022 new regulations regarding the registration of manufacturers of imported food issued by the General Administration of Customs (GACC) will come into force. According to these regulations, manufacturers who are engaged in the production, processing and storage of imported food need to be registered with GACC. Producers need to prove that products are applying to the Chinese food regulations and to obtain a recommendation from the relevant authorities of their own country. Prior to approval the GACC may organize review teams to evaluate applicants through written forms, videos and onsite inspections. After successful registration with the Chinese customs, the inner and outer package of each product should indi-

cate the registration. The registration is valid for five years. The Chinese customs will publish a list of the registered foreign food manufacturers.

<https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Overseas%20Facilities%20Registration%20Regulation%20-%20Decree%20248%20Beijing%20-%20People%27s%20Republic%20of%20China%20-%2004-11-2021>

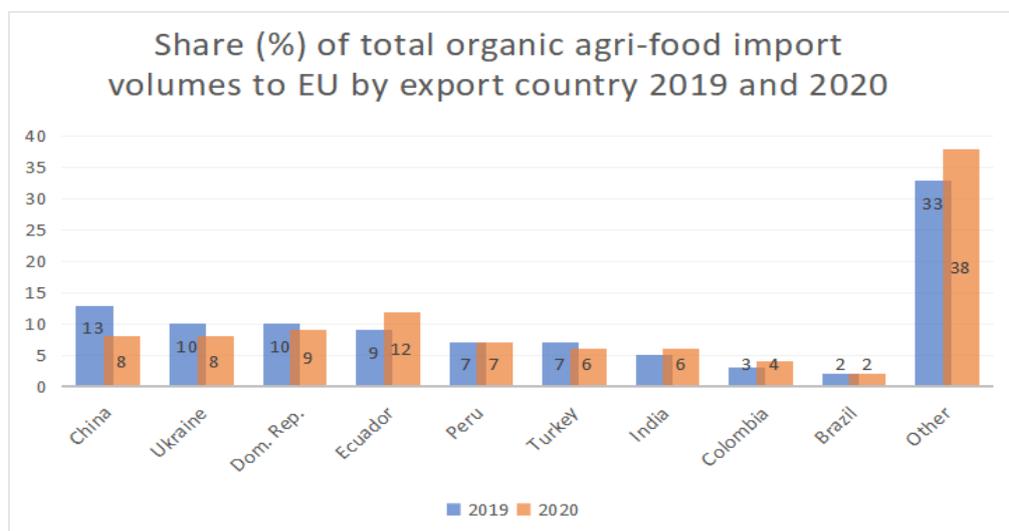
Sharp Decline of Organic Food Exports from China to the EU in 2020

Despite an ongoing growth in demand for organic food in the EU, in 2020 imports from China declined by 36% compared to the previous year. As EU Agricultural Market Brief No. 18 reported in June 2021, China lost its position as leading exporter country to the EU. In 2020, 8% of the total organic agri-food import were imported from China (compared to 13% in 2019). The change was mainly caused by a sharp decline of import of oilcakes (-47%) from China, which is mainly used for livestock feed.



Main product categories of organic agri-food imports to EU by exporting countries 2020 (million tons). Source: EU Agricultural Markets Brief, 2021

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Share of total organic agri-food import volumes by export country in 2019 and 2020.

Source: European Union, 2020 and EU Agricultural Market Briefs, 2021

https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/farming/documents/agri-market-brief-18-organic-imports_en.pdf

EU-China Agrifood Trade – Increasing Export – Slight Decrease in Imports

For the period January-April 2021 EU27 export values for agri-food to China increased by 16% (912 million EURO) compared to the same period in 2020. The increase was driven by exports of pig meat (increase by 337 million EURO), coarse grains (increase by 217 million EURO) and rapeseed and sunflower oil (increase by 157 million EURO). During the same period there was a slight decrease (0.1%) in imports from China has been reported.

More: https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/trade/documents/monitoring-agri-food-trade_apr2021_en.pdf

Natural Disasters

Henan Agricultural Sector Affected by Severe Flooding

Since July 17th Henan province suffered from unprecedented flooding caused by torrential rainfalls. On July 20th within only one hour the provincial capital Zhengzhou observed a record-breaking maximum rainfall of 201 millimeters (one third of the annual average rainfall). As of August 2, at least 302 people had lost their lives, 815,000 persons were evacuated and an estimated 9.3 million people in the province were affected. The disaster not only caused great losses in human lives and urban infrastructure, but also had serious impacts on Henan's agriculture, which is one of China's so-called granaries and accounts for almost a third of the national wheat supply and a tenth of China's corn, vegetable and pork production. The provincial agricultural authorities estimated that about one million hectares or 9 percent of the province's crop area have been affected by the floods. The provincial government estimated that harvest yield of about 40 percent of the affected fields will fall by at least one third, while it is expected that 100,000

hectares will lose 80 percent and more. Although at the time of the flooding the summer grain harvest was basically completed, the disaster impacted processing, storage and transportation of summer grain. For example, it was reported that several mills had to shut down because machines and equipment had been damaged. It is further reported that in many areas autumn grains such as corn, peanuts and soybeans are affected.

Agricultural authorities further reported that at least 1678 large livestock farms have been affected by the floods and about one million animals died in the floods. Disturbing video footage of Wangfang village, 90km from Zhengzhou featured desperate farmers, wading through knee-deep water, pulling dead pigs behind them. In that village alone, farmers lost 200,000 chicken and 6000 pigs. As carcasses of dead animals were rotting in the villages, China's animal husbandry association urged companies to donate disinfectants. There are also concerns that the damage of pig farms will potentially spread fresh cases of African Swine Fever.

According to Pan Wenbo, head of MARA's plantation department, about 100 million RMB will be allocated from the national budget for the recovery of Henan's agricultural production. Governmental authorities dispatched 2,000 water pumps, 100 drones and 50 working teams as well as other equipment and seeds to the disaster-stricken counties. The ministry further asked enterprises to donate fertilizer and pesticides. Once the water has withdrawn from the flooded fields, farmers will be supported to plant short term crops such as mung beans and vegetables.

Sources: <https://www.globaltimes.cn/page/202107/1229687.shtml>
<https://www.reuters.com/world/china/sky-has-fallen-chinese-farmers-see-livelihoods-washed-away-by-floods-2021-07-26/>
<http://www.chinadaily.com.cn/a/202107/30/>

[WS6103a913a310efa1bd6658fb.html](http://www.chinadaily.com.cn/a/202106/18/WS6103a913a310efa1bd6658fb.html)

Science

CAAS Launches Institute of Rural Vitalization

The Institute of Rural Vitalization under the Chinese Academy of Agricultural Sciences was unveiled in Beijing on June 18. According to Tang Huajun, president of the CAAS, the new institute aims to combine research with education, nurture agricultural talents and promote the development of scientific achievements in the process of rural vitalization.

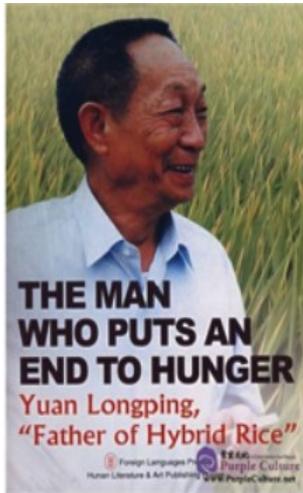
Since work began on the new institute in 2018, it has organized a sizeable teaching team including 16 researchers. Around 2,000 post-graduate students have studied the pilot curriculum in China -- Theory and Practice of Rural Vitalization. The college located in the Institute of Agricultural Economics and Development, CAAS, will set up eight teaching and research groups including industrial development, environment, rural culture, rural governance, and village planning.

Source: http://www.chinadaily.com.cn/a/202106/18/WS60cc38aca31024ad0baca01a_2.html

China's "Father of Hybrid Rice" Yuan Longping Dies at the Age of 90

Yuan Longping (1930-2021), China's so called "father of hybrid rice" hailed for his contributions to the country's food security, died on May 22nd in his hometown Changsha. He was 90 years old. The Chinese agronomist was known for developing the first hybrid rice varieties, which tend to have yields about 20 percent higher than conventional rice and by this making a great contribution to overcome famine and poverty in rice cultivating countries. His discoveries made him national hero in China and hundred of thousands of

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mourners paid tribute and left flowers at the funeral home.

After his graduation from the South-Western Agricultural University in Chongqing in the early 1950s Yuan for many years worked as a teacher at an agricultural school in Qianyang, a remote town in Western Hunan. Here, he and his co-workers conducted in the 1960s and 1970s most of the experiments on hybrid rice. Even though China as a non-aligned communist country found itself at that time in a quite isolated position and could not benefit from the “Green Revolution” sponsored by USAID including hybrid rice research by the International Rice Research Institute (IRRI) in the Philippines. However, Yuan and his team independently were able to develop Chinese hybrid rice varieties. Although Yuan achieved his major breakthrough to develop hybrid sorghum and hybrid rice already in the early 1970s, his personal contribution to hybrid rice research became only known to the public during the reform period. A biography phrased Yuan’s contribution to China’s food security like this: *In resolving our food problems, we have relied on ‘two Pings’. We rely on Deng Xiaoping (for the responsibility system) and we rely on Yuan Longping (for hybrid rice).*” (Deng Xiangzi, Deng Yingru (2007):

The man who puts an end to hunger. Yuan Longping, “father of hybrid rice. Foreign Language press, p. 87)

In the course of the opening and reform policy, Yuan’s achievements became also an interesting commodity for international agricultural companies. In 1979, an US delegation led by the industrialist Armand Hammer visited China and on this occasion were informed about China’s hybrid rice. The visit led to an agreement between Armand’s company Ring Around Products and the China National Seed Corporation on the exchange of US hybrid cotton for China’s hybrid rice. With this deal the American company secured the right to grow and market the China hybrid rice internationally. When Yuan Longping received the World Food Prize in 2004, the organisation’s website stated that meanwhile about one fifth of the rice that is grown worldwide originates from Yuan’s work. Yuan Longping continued his research until lately. In 2017, in view of the severe heavy metal contamination of soils in his home province Hunan he initiated a research project to develop a rice variety with low Cadmium content. Yuan and his researchers reportedly have been able to reduce the Cadmium content by 90 percent compared to conventional rice varieties. After a fall while visiting a rice breeding site in March 2021, Yuan reportedly felt increasingly unwell and died on May 22 due to multiple organ failure.

(Eva Sternfeld)

Sources: Sigrid Schmalzer: Red Revolution, Green Revolution. Scientific Farming in Socialist China, The University of Chicago Press 2016, p.73-99

Xi Dexiang: The Man who Puts an End to Hunger – Yuan Longping, “Father of Hybrid Rice”. Peking University Press 2015

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DCZ Activities

Sino-German Agribusiness Conference held in Nanjing

From 2nd to 3rd of June 2021, the Sino-German Agricultural Centre organized its yearly Agribusiness Conference under the theme of “Approaches to Modern and Sustainable Agriculture” in the city of Nanjing, Jiangsu Province. The event brought together representatives from government institutions, various private companies and academics from agricultural research facilities in China and Germany.

The Parliamentary State Secretary to the German Ministry of Food and Agriculture, Mr. Hans-Joachim Fuchtel, and Mr. Sui Pengfei, Director General, Department of International Cooperation, Chinese Ministry of Agriculture and Rural Affairs (MARA) represented the two ministries in their opening speeches to the conference. The conference focused on the topics “Modernization of Animal Husbandry” and “Modernization of Crop Farming”, complemented by on-site and online presentations on digitization in agriculture and examples of modern agriculture from various Chinese provinces. Representatives from various companies showcased their solutions to agricultural modernization and sustainability. Panel discussions, including ques-

tions from the audience, provided a platform for further – and lively – discussions with experts from China and Germany. The hybrid event was attended by about 200 participants at the conference site of the Nanjing Dongjiao State Guesthouse, and over 10000 persons followed the conference in the live-streaming or via Zoom.

The conference was finalized with a visit to Nanjing Baima National Agricultural Demonstration Park, Jiangsu Province where the latest digital technologies are used to produce high quality agri-products like blueberries, beef and mutton. The event was covered by various Chinese traditional and digital media outlets. People’s Daily which is the largest paper in China, covered the event in a short news as well.



Activities of Other Bilateral Cooperation Projects

Second Phase of the Sino-German Animal Breeding and Husbandry Project Ends with Final Event in Beijing

10 years ago, BMEL and MARA signed a memorandum of understanding on the cooperation in animal breeding. On this basis, the "Sino German Cooperation in Cattle Breeding", the first joint project for technical cooperation between the two countries in cattle breeding and farming was established. In 2015, the project was expanded to include a pig component and was designed with the involvement of German partner companies. During the 2nd project phase, which has been running since 2018, a total number of 19 firms from Germany participated in the cooperation.

The objective of the bilateral cooperation project was to contribute to the sustainable development of the thriving livestock sector in China, thereby enabling Chinese cattle and pig farmers to improve the performance, quality and resource efficiency of modern livestock production using German know-how, genetics and technologies.

The project entailed a close cooperation with ten cattle-keeping demonstration farms and two pig-keeping demo farms in a total of six Chinese provinces, covering the topics of breeding and mating, feeding and forage production, herd management, animal health, profitability, fertility and hygiene, animal welfare and environmental sustainability.

With the support of Chinese livestock experts, under the leadership of the National Animal Husbandry Service (NAHS), the German project participants were able to conduct a variety of trainings, conferences and seminars, forming an innovative Sino-German



Picture: Participants of the final event (ADT)

knowledge platform. This was substantiated by annual study trips to Germany, directly linking German and Chinese expertise.

On June 16th, the final event of the 2nd project phase took place in Beijing. Representatives of MARA, FECC and the German Embassy welcomed all participants on site and online. Dr. Liu Chousheng, Department Head of Animal Breeding Consultancy, together with long-term expert and team leader Dr. Ferdinand Schmitt, led the event. Mr. Shi Jianzhong (Secretary of the Party Committee of NAHS), Prof. Wang Yachun (CAU), Prof. Dr. Wang Aiguo (CAU) and project expert Henrik Delfs summarized the excellent results of the fruitful bilateral cooperation in their presentations.

(Gerret Fredewess, Project Manager, ADT Project Consulting GmbH; gerret.fredewess@adt.de)

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DCALDP Excursion to Harbin

On July 5th, Alex Figueroa, Patrick Paziener, Liu Tianxing, Jin Xiaoqi and Gao Mingmin, team members of the Sino-German Crop Production and Agrotechnology Demonstration Park (DCALDP) – went to Harbin to participate in the “HORSCH Field Day”. They were invited to be there not only as a cooperation partner, but also to provide support and to share know-how of German agricultural practices.

The field day was held at the duty-free zone of Harbin and about 300 people participated, including agricultural experts, farm owners, students from universities, etc. The DCALDP-Team met Ms Lu, the CEO of HORSCH China and shared ideas of the importance of sustainable agriculture, which is also the direction that HORSCH is heading to.

To contribute to the event, the DCALDP Green Book of Modern German Agriculture was presented to students of the Heilongjiang Bayi Agricultural University. (More information about the DCALDP Green Book at <http://www.huanghai-demopark.cn/en/news-dail-26.html>)

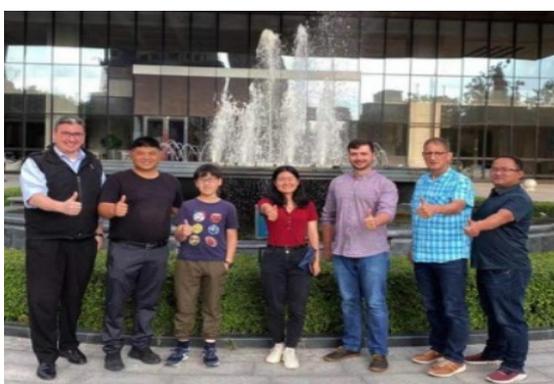
In the afternoon of the Field Day, the team visited the machinery working demonstration from HORSCH, such as drilling, soil preparation, spray machine, etc. CLAAS Tractors were performing the tasks and were also introduced by CLAAS Team. (DCALDP)



Pictures: Visiting machinery from Horsch in the hall



Pictures: Exchange with the students from Heilongjiang Bayi Agricultural University



Picture: DCALDP team and Jürgen Simon from CLAAS (DCALP)

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Pictures: Manager Hou from HORSCH is explaining spraying volume test and machines are being presented (DCALDP)

First Sino-German Field Day in Inner Mongolia

On July 20th, as a cooperation of the Hulunbuir State Farm, the VDMA (German Mechanical Engineering Association) 德国机械设备制造业联合会, DCALDP, many of DCALDP's Business partners as well as the local machinery dealer Hulunbuir Agtopmach Agricultural Machinery Co., Ltd., (Dealer for Claas, Lemken, Amazone, Bednar, Novak no tillage) the first Sino-German field day in Inner Mongolia was successfully held.

The field day included speeches from Mr. Wu (Chief agronomist of HBSF), cultural program as well as a demonstration of advanced agricultural machinery. From the DCALDP Team,



Team leader Alejandro Figueroa, Huanghai Farm director Mr. Chen Shoujun, long time expert (LTE) Patrick Paziener, DCALDP Assistant Mr. Liu Tianxing and project PR assistant Ms. Gao Mingmin joined the event. Before the event, Figueroa and Mr. Paziener were



Pictures: HBSF Field Day and participants at opening ceremony (DCALDP)

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involved in the planning and organizing the field demonstration and setup.

Unfortunately, after two days of heavy rain just before the field day, it was not possible to demonstrate the soil preparation and drilling machines as planned. However, advanced fodder production technologies from CLAAS and some advanced spraying technologies were demonstrated in the field.

Additionally, HBSF presented their own products, like dairy products, fruit and vegetables, canola oil, different types of flour and other products. Although the weather was not as expected, the event was considered a big success and future field days will follow. The ambitions are big from both sides. For future events, one day will be not enough. (DCALDP)



Picture: DCALDP team leader was checking soil conditions



Picture: DCALDP team members and Mr. Chen Shoujun from Huanghai Farm

Other Events

Leipzig Agricultural Talks

IAK Agrar Consulting, which is also implementing DCZ, regularly organizes webinars on topics related to German and EU agricultural politics. On June 24, 2021, the third edition of the Leipzig Agricultural Talks (Leipziger Agrargespräche) moderated by IAK managing directors Mr. Künstling and Dr. Schneider, featured four presentations by German lawyers and agro-economists. The talks covered a wide area of topics providing information about impacts of the new fertilizer act, a lawsuit against a pesticide cartel, sustainability assessment for farms and forecasts for global trade of agricultural commodities.

1) Lawsuit against the declaration of "Red Zones" in new fertilizer regulation (Dr. Reinhard Mecklenburg, BTR law firm)

The first presentation by Dr. Mecklenburg provided some legal insights on a current lawsuit of his law firm.

In May 2021, a new regulation regarding the application of manure on crop fields came into effect in Germany. It mandates the federal states to declare so-called red zones within its jurisdiction where special limitations with respect to the time and amount of permissible application of nutrients (organic and mineral fertilizers) are coming into force.

Dr. Mecklenburg's firm currently represents a group of farmers from the northeastern town of Greifswald who sued the higher administrative court in Berlin on grounds of incompatibility of the regulation with the German Constitution. As the new regulation regarding the application of fertilizer and the declaration of the red zones is highly controversial among the farming community in the whole country, Dr. Mecklenburg explained in detail the legal background of this lawsuit.

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The judges at the higher administrative court need to check whether the new regulation violates existing laws which are of superior significance. The lawmakers had argued that the interference with the farmers businesses is justified as the new regulations protects the citizen from adversary health effects due to contaminated drinking water. As public health is particularly protected by the German Constitution it has much higher priority than other legal aspects.

The law firm representing the farmers in this lawsuit argues that the new regulation is not effective as the regulation targets only one group of people which are causing alterations to the condition of the drinking water and therefore is inappropriate and should be withdrawn.

2) Class Action Lawsuit against companies of the pesticide trading cartel (Mr. Lars Maritzen, Orth and Kluth law firm)

In his presentation Mr. Maritzen informed about another ongoing lawsuit and encouraged farmers to be part of this class action lawsuit.

Last year, the Federal Anti-Monopoly Office convicted eight German companies which had formed a cartel on the trade of pesticides from 1998 until 2015, causing financial damage to its customers due to inflated prices.

Several law firms, including Orth and Kluth are now suing the eight companies for compensation of damages on behalf of affected farmers. Farmers might be eligible for compensation not only for the inflated prices, but the compensation would also include a yearly interest rate of 10%, counting from the beginning of the first purchases.

3) Measuring Sustainability (Mrs. Katrin Kraft, IAK Agrar Consulting)

Mrs. Katrin Kraft from IAK Leipzig gave an in-depth introduction into the subject of sustainability of farm enterprises and its meas-

urement.

The topic of sustainability is becoming increasingly important especially in the context of international tenders where no project will be implemented without the inclusion of sustainability. As the topic might not yet be at the forefront of most farmers minds, it should be seen as a good opportunity to distinguish oneself from other farms. The agriculture industry should not fall behind other industries which have already strategies in place to ensure the sustainability of their production.

Since the food retailing industry has already begun to introduce its first Eco schemes, farmers should be ahead of the upcoming developments and avoid being forced to accept certain standards which have been developed by the food retailing industry.

When it comes to financing of investments in agriculture the banks must already implement criteria given by the Federal Financial Supervisory Authority (BAFIN) to ensure that the recipients of the loans comply with a set of sustainability indicators.

In her presentation, Mrs. Kraft briefly introduced the German Institute for Sustainable Agriculture (Deutsches Institut für Nachhaltige Agrarkultur), a joint venture between two agricultural consulting companies which provides tools and methods for the assessment of sustainability of agricultural production. Sustainability is divided into three areas, namely ecology, economy, and social aspects. There are ecological measurement indicators, economic measurement indicators and social measurement indicators to measure sustainability. Assessing sustainability through a set of measurable indicators will enable producers to effectively manage their farm business with regard to sustainability.

The presenter was citing examples where farmers can already reap benefits from being

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certified as a sustainable enterprise like the dairy farmers who receive a 2 EURO cent per Kg premium for their greenhouse gas-neutral milk production.

4) Forecast of price developments for selected global agricultural commodities (Markus Wolf, DLG Mitteilungen)

Mr. Markus Wolf, editor of the *DLG Mitteilungen*, the monthly journal of the German Agricultural Society (DLG), provided an overview of the expected price developments of corn, wheat, rape seed, pork and dairy on the international markets.

Grains

The yearly global surplus production in grains has been reduced in the last 5 years and there is an almost even balance now between demand and supply of grains. Global grain stocks were decreased by about 50 mio tons in the last 4 years. Together with unfavorable weather conditions in some leading producer countries, this has led to near record price levels for grains and other commodities in May this year. The situation was very pronounced for corn, which comprises nowadays more than 40% of global grain production. Price fluctuations for corn have an immediate impact on prices for other grains as well. Corn imports in China have increased from 4 mio tons per year to 25 mio tons in 2020/21. China has now a total share of the global grain trade of 14%. On a global scale grain imports have increased by about 30 % in the last 10 years resulting in a market with high price fluctuations. If imports in China are not increasing any further and the expected high yields in the Ukraine and US will materialize, prices could go down again. Global corn and wheat harvests are expected to increase considerably this year, however the prices will most likely not diminish to the extent of previous levels as stocks are still relatively low.

Oilseeds

Prices for rape seeds have increased dramatically this year in April and May as the exports from Canada, one of the leading producer nations, strongly decreased on a large scale. Analysts believe that this had only a short-term impact: cultivation areas have increased already, and prices have decreased but are still on a higher level than before the recent price hike. Germany imports yearly about 5 Mio t of rape seed, most of it coming from within the EU and from Ukraine. Rape seed oil has a market share of about 35 - 40% in the EU biodiesel market. Canada, Australia and Ukraine are dominating the global export market for rape seed.

Pork

Prices for pork meat decreased already last year during the beginning of the COVID 19 pandemic and were further exacerbated later that year when China imposed an import ban for German pork meat due to incidences of African Swine Fever in wild boars in north-eastern Germany. Prices are under further pressure as the meat consumption in Germany is decreasing in general and in particular for pork meat, which is increasingly substituted by chicken or other meat. Pork meat consumption in Germany decreased by about 700.000 t in the last 10 years. The Chinese domestic pork market is almost back to its former volume and does not anymore require the large amount of imports like in 2020. As Spain has increased its exports of pork meat to the EU, prices are not expected to rebound any time soon. But as the high costs of feed will also likely reduce pork meat production, a new cycle of increasing prices might be seen in the near future as well.

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Dairy

Dairy production in Germany has slightly decreased in the past year, the expected economic recovery and a gradual loosening of Corona restrictions will boost the demand for dairy products and could lead to a price increase in the second half of the year. At 50% of the total production, the export share of German dairy products is even higher than that of pork. For milk powder the export share is 100%. Just like cheese consumption, cheese exports have risen steadily in the past years.. As for all the other commodities, the role of the Chinese market for the global market is very prominent. While a quarter of global cheese exports are destined for China, this value goes up to more than 50% for drinking milk and milk powder.

(Andreas Hansen, DCZ)

Recordings of the presentations (in German) can be accessed at <https://www.iakleipzig.de/de/workshopseminare.html>

To receive invitations to the events please contact: info@iakleipzig.de

DCZ Publications

Microchips for Agriculture

An article by Eva Sternfeld “Mikrochips der Landwirtschaft” (“Microchips for Agriculture”) on the Chinese seed and animal breeding sector was published by DLG-Mitteilungen 2021, issue 5, p. 82-83. The article can be downloaded from the DCZ website.

<https://dcz-china.org/dcz-publications.html>

China’s Organic Agriculture and Food Sector. DCZ study by Eva Sternfeld

This study provides an overview over the development and present status of China’s organic agriculture and food sector including relevant standards and the certification system. The study can be downloaded at

<https://dcz-china.org/dcz-publications.html>

Publications

UNEP Food Waste Index Report 2021

Food waste has substantial negative environmental, social and economic impacts. Moreover it is estimated that 8-10% of global greenhouse gas emissions are related to food waste. Aiming to support the Sustainability Development Goal (SDG) 12.3 the latest UN Environment Program Food Waste Index Report provides a comprehensive food waste data collection, which allows countries to assess and report national progress towards 2030.

<https://www.unep.org/resources/report/une-food-waste-index-report-2021>

Last but not least

Zhu Jianqiang, the Pig that Survived the 2008 Earthquake Dies at Age of 14

According to a museum where it resided Zhu Jianqiang (strong willed pig), the legendary pig that survived 36 days after being trapped under debris after a magnitude 8 earthquake hit Wenchuan in Southwest China's Sichuan province, died on 16th June 2021 due to old age and exhaustion. The survival of the pig was seen as a symbol of hope and resilience in the wake of the tragedy that left nearly 90,000 people dead or missing. In 2011 scientists cloned the pig, producing six piglets who looked identical to their father.



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Upcoming Events 2021-22

With the ongoing Corona crisis all dates of conferences and trade fairs tbc.

Date	Location	Event	Contact
August			
12	Hong Kong	Hong Kong International Tea Fair	Hong Kong Convention and Exhibi-
16	Kunming	China Animal Husbandry and Feed Industry Expo	Kunming Dianchi Convention & Exhibition Center ynxmzh@126.com
21-22	Kunming	China Agricultural Science and Technology Expo 2021	Kunming International Convention and Exhibition Center www.kmsame.com
25-28	Guangzhou	World Food Guangzhou	Guangzhou Poly World Trade Center
25-27	Shanghai	SIFCE Shanghai International Trade Show	http://www.ffb2b.com/
September			
09	Guangzhou	Guangzhou World Agricultural Expo	Guangzhou – Poly World Theater
15-17	Qingdao	VIV China International Exhibition for Animal Husbandry and Animal Processing	Qingdao International Expo Center
24-26	Guangzhou	Fruit Expo Guangzhou China International	http://www.fruit-expo.com/
27-29	Shanghai	FBIE China Shanghai International Import and Export Food & Beverage Exhibition	
October			
11-13	Shanghai	AgroChemEx & CIFE &Agrotech	Shanghai World Expo Exhibition and Convention Center
11-24	Kunming	UN Biodiversity Conference COP 15 of Convention on Biological Diversity (tbc)	https://www.cbd.int/article/new-dates-cop15-october-2021
15-17	Shanghai	FMA China International Food, Meat and	http://www.fmachina.cn/expo/cn/
18-20	Chengdu	EuroTier China	Chengdu Century City New International Convention Exhibition Center
26-28	Qingdao	CIAME Exhibition	Qingdao International Convention
28-30	Shenzhen	SIAL China South	Shenzhen World Exhibition & Convention Center
29-31	Yantai	International Fruit and Vegetable Food Expo	Yantai International Expo Center www.iofexpo.com/cn

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November			
9-11	Shanghai	iFresh Shanghai Fru&Veg Expo	Shanghai New International Expo Center (SNIEC) celine@ifreshfair.cn
9-11	Shanghai	ProWine China 2021	Shanghai New International Expo Center (SNIEC) Messe Duesseldorf GmbH / Informa Markets E-mail: ProWein@messe-duesseldorf.de
9-11	Shanghai	SME Shanghai Meat Exhibition	Shanghai New International Expo Center (SNIEC) http://www.meatexpo.com.cn/
12-14	Shenzhen	Sino-German Agricultural Week	www.dcz-china.org
12-14	Shenzhen	World Expo on Digital Agriculture	fecctzj@126.com
16-18	Shanghai	CBST 10th China International Beverage Industry Exhibition	http://www.cbst.com.cn/
25-27	Fuzhou	Food & IT China 2021 China International Food Processing & Packaging Equipment Exhibition	Fujian Strait (Haixia) International Convention and Exhibition Center http://www.fm-nc.com/
March 2022			
30-1	Beijing	China International Wisdom Agricultural Equipment Exhibition	Beijing National Agricultural Exhibition Center
May 2022			
11-13	Shanghai	Biofach Shanghai	Shanghai World Expo Exhibition and Convention Center www.biofachchina.com/en

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About DCZ

The **Sino-German Agricultural Centre's** (DCZ) activities are bridging the interest between politics, academia and businesses between China and Germany in the spheres of agriculture and food.

As a joint initiative of the **German Federal Ministry of Food and Agriculture (BMEL)** and the **Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA)** the DCZ was established in March 2015 as a central contact and information office to foster a dialogue between Germany and China in the agricultural and food sector. In April 2018, the project entered its 2nd phase.

In charge of project execution are the **IAK Agrar Consulting GmbH** (leadership) and the **Leibniz Institute of Agricultural Development in Transition Economies (IAMO)**. Operative project partners in China are the **Foreign Economic Cooperation Center (FECC)** and the **Chinese Academy of Agricultural Sciences (CAAS)**.

With its specific key issues, the DCZ intensifies the dialogue with and among relevant stakeholders of the agriculture and food sectors.

For more information and regular updates please check the dcz-website: www.dcz-china.org

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Imprint

This issue was compiled by the international DCZ team. For enquiries and subscription please send an email to info-dcz@iakleipzig.de

Any news about upcoming events and conferences to share? Please send your information to e.sternfeld@iakleipzig.de

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