

Policy Brief

Key messages

- Two bottom-line tasks in the document: ensuring the national food security and preventing a large-scale return to poverty.
- Three key tasks for this year: rural development, rural construction, and rural governance.
- Weather related disasters in the food producing regions, geo-political instability, and COVID-19 lockdowns would make food security a more pressing issue for China in 2022.
- A new seed law and relaxation in GMO regulations would offer new opportunities in the seed sector development.
- Germany's climate-oriented environment and agriculture policies in the new coalition government could offer some important experiences to achieve sustainable agriculture and carbon neutrality in China and further bilateral cooperation in the climate change protection.

Policy Brief on Document No. 1, 2022: China focuses on food security and rural revitalization

By Dr. Aihemaitijiang (Ahmatjan) Rouzi

Introduction

The Central Committee of the Communist Party of China and the State Council jointly released the Central Document No. 1 on 22nd February 2022, also entitled “Opinions of the State Council on Comprehensively Promoting the Key Work of Rural Revitalization in 2022,” which consisted of 8 major sections and 35 passages. Document No.1 has been issued for 19 consecutive years since 2004. As an annually released document for Chinese agricultural policy, this year’s Document No. 1 laid out plans, tasks, and priorities for the agriculture sector in 2022, and it corresponds with goals in the “14th Five-Year Plan (2021-2025)” and the “Strategic Plan for Rural Revitalization 2018-2022”.

According to this year’s document:

- Two bottom-line tasks are clarified: ensuring national food security and preventing a large-scale return to poverty.
- Three key tasks are identified: rural development, rural construction, and rural governance.
- Promoting new progress in rural revitalization and modernization of agriculture and rural areas at a new pace is a priority.

1. Food security

In 2022, Chinese grain security faces grave challenges on multiple fronts. Heavy rainfall in the autumn of 2021 affected winter wheat regions in North and Central China which will significantly reduce the output of wheat in these regions this year. The ongoing Ukraine-Russia conflict would also pose new challenges to Chinese food security, because together, Russia and Ukraine account for 28% of global wheat and 16% of corn exports (Wong, 2022). Moreover, China imports a significant portion of these grains from these two countries, in addition to sunflower oil which is another essential food product. Furthermore, Russia is a major supplier of fertilizer and other agrochemicals to China. The supply chain disruptions and shortages from the war and subsequent sanctions imposed on Russia would increase the price of agri-food products and the additional increase in energy prices would also drive-up food production costs. Since the start of the war, wheat prices have increased by 21%, barley by 33% and certain fertilizers by 40% (Liu, 2022). Recent lockdowns to contain COVID-19 outbreaks in March 2022 in multiple Chinese provinces could also affect spring plantation in these regions, hence aggravating the overall food security situation. Under these circumstances, the Chinese leadership has reiterated their commitment to food security. At a recent Politburo Standing Committee meeting, President Xi said “Chinese people should hold their rice bowls firmly in their own hands, with grains mainly produced by themselves” (May, 2022) and, increasingly, food security is seen as an issue of national security as well. The soon to be enacted “Food Security Law” would provide Chinese policymakers with adequate tools to safeguard food security.

As in previous years, the following goals and redlines are outlined for food security with new urgency and emphasis in the Document No. 1.

- Ensure food security by keeping cropland area stable and sustaining grain production above 650 million tons;
- Strictly maintain the cropland area of 1.8 billion mu (120 million hectares) as in previous years;
- Promote the establishment of a national food security production belt;
- Improve the water use efficiency of agriculture along the Yellow River and keep the production stable;
- Promote the cultivation of corn and soybean intercropping in the Yellow River, Huaihe River, Northwest and Southeastern regions; Expand the soybean-grain rotation in Northeastern China; in water scarce parts of Heilongjiang, convert the rice plantation into soybean plantation; and develop the winter rape areas along the Yangtze River;
- Sustain the support policy for pork production and prevent the large-scale reduction in production;
- Implement the proper minimum price and subsidies for rice, wheat, and corn, and ensure coverage of the costs of production of these crops;
- Establish 100 million mu (6.6 million hectares) of high-quality farmlands and increase the accumulated water-efficient irrigated farmlands to 400 million mu (26.6 million hectares); and
- Realize the protection of black soil croplands areas to 80 million mu (5.3 million hectares).

Given the complexity of food security challenges, Document No. 1 stressed the importance of keeping food production levels above 650 million tons and the cropland area at a minimum of 120 million hectares. Corn and soy

plantation in the Yellow River, Huaihe River, and Northeastern provinces are promoted, probably to reduce the reliance on imports for these crops and satisfy the ever-growing demand for meat consumption in China. The proposed expansion for protection of black soil cropland area to 5.3 million hectares shows the importance of securing the feed crops. China would continue to implement subsidies for rice, wheat and corn to keep Chinese farmers competitive in the face of imports. The need to improve water efficiency in agriculture on croplands along the Yellow River shows that climate change induced water scarcity in these regions would be another challenge to Chinese agriculture. The growing Chinese perception of food security as a geo-political vulnerability drives the country to be self-sufficient in major agricultural products (May, 2022), which is reflected by the dire language of Document No. 1 and subsequent media coverage this year.

In 2021, Chinese agricultural imports stood at 219.8 billion USD, which increased by 28.6% compared to 2020; its exports, on the other hand, stood at just 84.3 billion USD, which increased only by 10.9% compared to 2020. Since 2007, Chinese agricultural imports have consistently exceeded its exports, which reflects greater Chinese demand for agriculture products from other countries (Fig. 1). The COVID-19 pandemic related shortages, the implementation of the US-China Phase One trade agreement and large-scale weather-related disasters in the food producing regions of China has accelerated Chinese agricultural imports from its various partners, with the USA comprising the largest source of agricultural imports with a value of 33 billion USD in 2021 (USDA, 2022). The European Union's agricultural exports to China stood at 17.6 billion Euro in 2020 (EU Commission, 2022). Latin America, Southeast Asia, Russia, and Australia are also major suppliers of agricultural products to China. Meanwhile, Chinese agricultural exports to other countries have remained stable in the same period. Recently enacted, the Regional Comprehensive Economic Partnership (RCEP), a trade pact that includes China and 14 other Asia-Pacific countries (Japan, ASEAN, Australia, etc.), could provide China with new opportunities to diversify and regionalize its agricultural trade (CGTN, 2022).

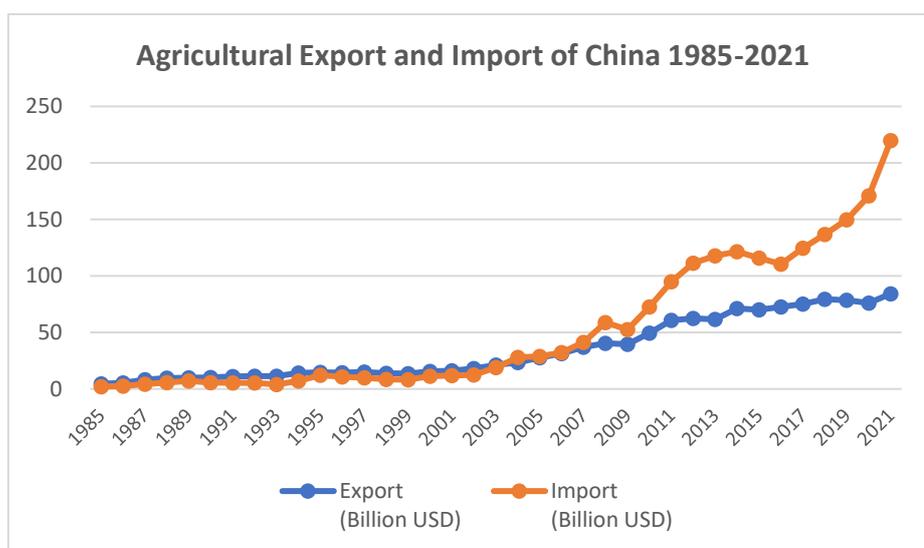


Fig 1. Agricultural trade of China 1985-2021 (NBS, 2021)

2. Seed sector development

As food security has become a top priority, Chinese policymakers are turning their attention to the seed sector to increase the production of crops, especially for feed crops like soybean and corn. China's 14th Five-Year Plan (FYP) for 2021–2025 and “economic goals set to be achieved in 2035” named “biological breeding”¹ as one of the eight forward looking projects for the upcoming five year (Rouzi, 2021). The Chinese Minister for Agriculture and Rural Affairs (MARA), Mr. Tang Renjian, declared that “seeds are the new ‘semiconductor microchips’ in agricultural technology” which shall be instrumental in securing grain output (Pandy, 2022). The establishment of the Nanfan Center for Seed and Animal Breeding, the so-called “Southern Silicon Valley” in Hainan province, aims to strengthen the seed sector development (Rouzi, 2021).

According to MARA estimates, China imports more than 80% of its soybeans from other countries. China is determined to become a self-sufficient in feed crops like soybean and corn in the long run. To accelerate the seed sector development and provide a clear regulatory and legal framework, the Chinese government passed a new seed law, which come into effect in March 2022 (Hansen, 2022). Document No. 1 also stated that further IP protection of the seeds should be ensured to boost innovation. Although GMOs have long been regarded as controversial in China, the recent relaxation of GMO regulations are seen as a means to boost the seed sector development (Sim & Rennie, 2021) to achieve food security. Results of the GM soybeans and corn pilot projects in China indicated a reduction in weeding costs by 50% and increased output by 12% (May, 2022). In January 2022, MARA also approved trial rules for gene-edited plants.

The Chinese seed market is valued around 21 billion USD – the second largest in the world – and there are more than 6400 companies are currently listed in the country (Hansen, 2022). Although acquisition of Swiss seed and pesticide company Syngenta in 2017 by state-owned chemical company ChemChina was a milestone in the development of the Chinese seed sector, Chinese companies still lag behind global heavyweights like Monsanto, Bayer, Dow, BASF and DuPont in GMOs and seed sector innovation (Wong, 2022).

3. Rural revitalization and rural development

Rural revitalization is another key theme of this year's No. 1 document, which is in line with the “*Strategic plan for Rural revitalization 2022.*” The following goals and suggestions were proposed:

- Implement social benefits and health insurance and other help mechanisms to the poverty prone regions in a timely manner;
- Expand the rural credit investment and insurance system to counties, which is the focus of national rural revitalization efforts;
- Promote rural village area tourism and ecommerce;

¹ Biological breeding is the use of modern breeding technologies such as gene editing or the genetic modification of organisms.

- Promote livestream sale and logistics of agricultural products;
- Promote digital rural development;
- Improve the digital skills of rural residents;
- Establish various rural talent initiatives to bring skilled youth to the rural areas;
- Further extend the experimental counties for the second round of household responsibility system of 30 years; and
- Expand the experimental areas for rural residential housing reform.

Since the “reform and opening up” policies in the late 1970s, a very large number of rural residents poured into the ever-expanding Chinese cities looking for factory and service sector jobs. Consequently, the rural population decreased from 82% in 1978 to 38% in 2020 (World Bank, 2021). Declining rural areas in the face of rapid urbanization and industrialization has led to many rural areas falling behind their urban counterparts, and rural poverty and decay are increasingly becoming a persistent problem in modern China (Rouzi, 2022). The Chinese government is increasingly aware of this problem and is proposing to address it via rural revitalization, agricultural modernization, and poverty alleviation initiatives. The “*Strategic Plan for Rural Revitalization 2022*” is a large component of such an effort.

Since China declared the elimination of extreme poverty in 2020 – which is defined as earning less than 1.9 USD a day for lower income countries – this year’s document emphasized the prevention of a large-scale return-to-poverty by consolidating prior achievements and laying out more social development programs (Rouzi, 2021). In a piece to the *Qiushi* journal, MARA minister Mr. Tang also stressed the importance of consolidating results of anti-poverty efforts and preventing a large-scale return to poverty through providing centralized support in the areas of finance, banking, infrastructure, and public services to counties that are instrumental in national rural revitalization and key counties designated by provinces (Tang, 2022).

According to Liu et al., Chinese rural development can be divided into the three distinct stages. The first stage comprises building a society with adequate food and clothing (1978-2005); the second stage is about poverty eradication and building a well-off society (2005-2020); the third stage is to achieve prosperity (2020-2035) (Liu et al., 2020) as shown in the Fig 2. After building a multi-functional rural system and eradicating extreme poverty, Chinese rural development has entered the third stage (2020-2050) where integration of rural and urban areas will be completed, and rural revitalization will be fully achieved.

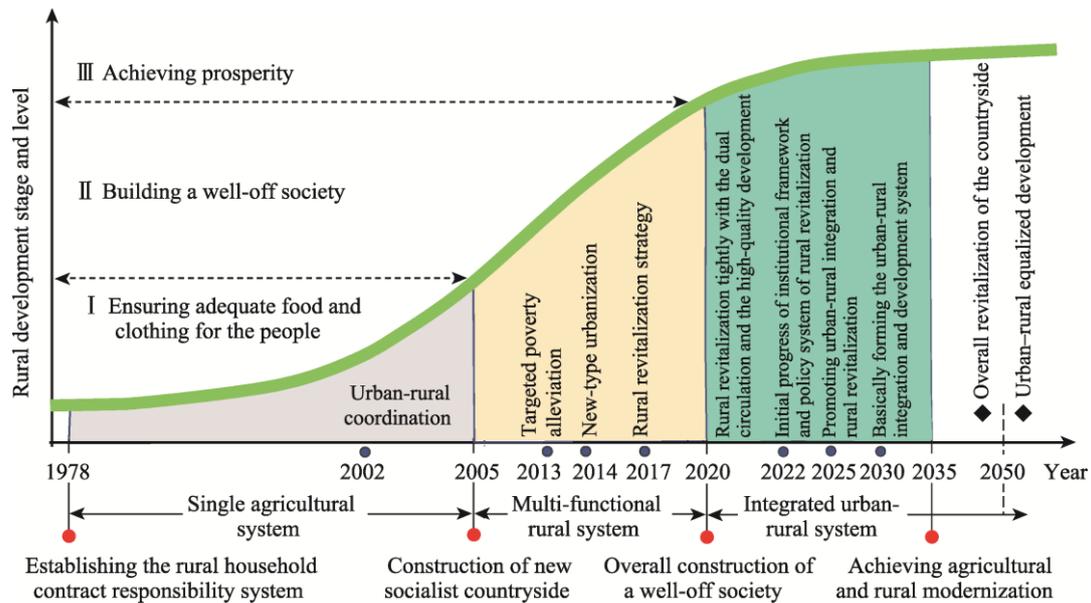


Fig 2. Three development stages for rural development in China. (Liu et al., 2020)

Since the publication of the “Strategic Plan for Rural Revitalization 2022” in 2018, the Chinese government has intensified its investment in building up its rural infrastructure such, as rural roads, drinking water systems, sanitation, clean toilets, digitalization, and improving social services in the rural areas with varying degree of success. 2022 is a crucial year to mark the initial achievements of rural revitalization as shown in Fig 3 (Xu et al.). Then, the next phase of rural development to achieve full agricultural modernization and urban-rural integration will be the focus of the national agriculture agenda in coming years. However, the centralized decision-making system which is prevalent in China would make it harder to integrate the voices of villagers and localities to shape rural revitalization more holistically and sustainably.

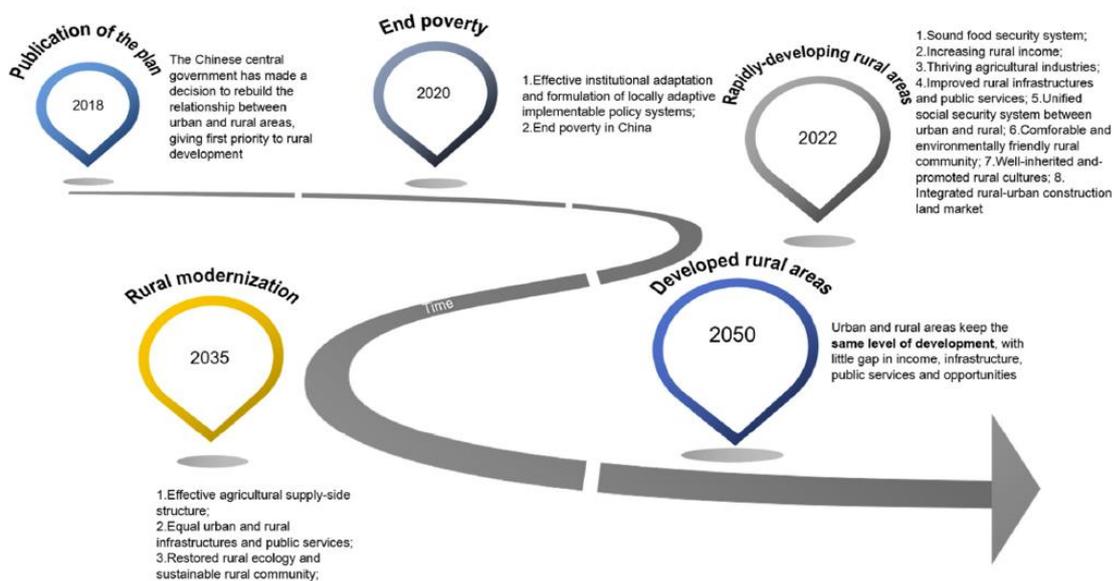


Fig 3. Milestones and goals of China’s rural development strategy (Xu, et al. 2022)

The policy measures outlined in Document No. 1 with regards to rural revitalization are generally broad and vague, which requires adaptation and creativity from the localities to achieve the intended goals. Many of these policy measures proposed in the document will disproportionately benefit large-scale farms and state-owned cooperatives and will squeeze out small-scale farmers, which comprise the vast majority of farmers in need of help. Without meaningful investment and assistance to small-scale farmers to catch up and modernize, it is inconceivable to realize the full rural revitalization.

4. Policy recommendations

- Fair and reciprocal access to the Chinese market under the WTO framework would ensure better agricultural trade and food security in China by balancing the needs of Chinese consumers and the various trading partners.
- It is recommended that the PRC signs the 1991 UPOV convention and fully implements the standard for plant variety protection to accelerate the seed sector development.
- Targeted infrastructure development in the rural areas of Western and interior China would reduce regional imbalances.
- Further protection of IP and more market access to foreign companies would also boost the cooperation and innovation in the seed sector.
- Further land and property rights reforms could guarantee the legal rights of farmers.
- Carbon neutral farming and climate smart agriculture solutions should be promoted to mitigate the impact of climate change in agriculture.
- Smart agriculture and digital village initiatives would increase the agricultural productivity and bring new industries and jobs to revitalize these areas and reverse rural decline.
- Digital training oriented extension services in the rural areas would improve farmer's digital literacy and increase their participation in the digital economy.
- More social policy reforms, like relaxing the Hukou household registry system and improving the social welfare in rural areas, would aid in achieving rural revitalization by keeping and attracting young talent.
- Achieving food security, rural revitalization, agricultural modernization, seed sector development, and carbon neutrality offers China and Germany many avenues to cooperate in the agriculture sector.
- Experienced German bio-tech companies could advance cooperation in seed sector development.
- Germany's climate-oriented environment and agricultural policies in the new coalition government could offer some important experiences to achieve sustainable agriculture and carbon neutrality in China, and further bilateral cooperation in climate change protection.
- Chinese government led efforts for rural revitalization and agriculture digitization with the help of big tech companies provides a valuable lesson and test case for Germany for similar endeavors.

References

- Rouzi, Aihemaitijing. (2021). From poverty eradication to rural revitalization: China's No. 1 Document of 2021 and implications for agricultural policy. <https://dcz-china.org/dcz-publications.html> (accessed on March 18, 2021)
- Rouzi, Aihemaitijing. (2022). Chinese "Digital village" initiatives and the digitalization of agriculture. <https://dcz-china.org/dcz-publications.html> (accessed on March 18, 2021)
- CGTN. (2022). China Agriculture: RCEP opening new doors for pineapple growers in Xuwen County. <https://news.cgtn.com/news/2022-03-17/VHJhbnNjcmlwdDYzNzA5/index.html> (accessed on March 18, 2021)
- EU commission. (2021). EU agri-food trade continues to show notable growth compared to 2020. https://ec.europa.eu/info/news/eu-agri-food-trade-continues-show-notable-growth-compared-2020-2022-jan-04_en#:~:text=The%20total%20value%20of%20EU,to%20reach%20%E2%82%AC94.2%20billion. (Accessed on March 15th, 2022)
- Andreas, Hansen. (2022). Policy Brief on the new Chinese Seed Law and its introduction of Essentially Derived Varieties (EDV). <https://dcz-china.org/dcz-publications.html> (accessed on March 18, 2021)
- Alexander Chipman, Koty. (2022). China's rural revitalization strategy: Opportunities for investment. <https://www.china-briefing.com/news/chinas-rural-revitalization-strategy-opportunities-for-investment/> (accessed on March 20th, 2022)
- Liu, Xuanmin. (2022). Russia-Ukraine conflict could trigger global food crisis, but China's agricultural security not threatened. *Global Times*. <https://www.globaltimes.cn/page/202203/1256802.shtml> (accessed on March 28th, 2022)
- Liu, Y., Zang, Y., & Yang, Y. (2020). China's rural revitalization and development: Theory, technology and management. *Journal of Geographical Sciences*, 30(12),1923-1942. <https://link.springer.com/article/10.1007/s11442-020-1819-3> (accessed on December 29, 2021)
- Genevieve, Donnellon May. (2022). China's Focus on Food Security. *Diplomat*. <https://thediplomat.com/2022/02/chinas-focus-on-food-security/> (accessed on March 15th, 2022)
- NBS (National Bureau of Statistics). (2022). China Rural Statistical Yearbook,2021. <http://cyfd.cnki.com.cn/N2019120190.htm> (accessed on March 20th, 2022)
- Aditya, Pandey. (2022). China's quest to secure its 'Rice Bowl': Challenges to its food security. <https://www.orfonline.org/tags/food-security/> (accessed on March 15th, 2022)
- USDA. (2022). American Agricultural Exports Shattered Records in 2021. <https://www.usda.gov/media/press-releases/2022/02/08/american-agricultural-exports-shattered-records-2021> (accessed on March 18, 2021).
- Andrew, Sim & Alanna, Rennie. (2021). Commercialisation of GMOs in China. <https://www.newfoodmagazine.com/article/155791/gmos-china-commercialisation/> (accessed on March 15th, 2022)
- State Council. (2022). No.1 document for 2022. http://www.gov.cn/zhengce/2022-02/22/content_5675035.htm (accessed on March 15th, 2022)
- Tang, Renjian. (2022). Steadily Advancing Rural Revitalization. *Qiushi Journal*. http://en.qstheory.cn/2022-01/18/c_699066.htm (accessed on March 20th, 2022)
- USDA. (2022). American Agricultural Exports Shattered Records in 2021. <https://www.usda.gov/media/press-releases/2022/02/08/american-agricultural-exports-shattered-records-2021> (accessed on March 18, 2021).
- Jacky, Wong. (2022). Ukraine Conflict Triggers China's Food Insecurities, *Wall Street Journal*. <https://www.wsj.com/articles/ukraine-conflict-triggers-chinas-food-insecurities-11646744329> (accessed on March 15th, 2022)
- World Bank (2021). Rural population of China. <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=CN> (accessed on December 29, 2021)
- Xu, H., Pittock, J., & Daniell, K. A. (2021). China: a new trajectory prioritizing rural rather than urban development? *Land*, 10(5), 514. <https://www.mdpi.com/2073-445X/10/5/514> (accessed on December 29, 2021)

Disclaimer

This policy brief is published under the responsibility of the Sino-German Agricultural Centre (DCZ), which is funded by the German Federal Ministry of Food and Agriculture (BMEL). All views and results, conclusions, proposals, or recommendations stated herein are the property of the authors and do not necessarily reflect the opinion of the BMEL.

About the author

Dr. Aihemaitijiang Rouzi obtained a PhD in Geography from the Catholic University of Eichstätt and an MS in Landscape, Ecology and Nature Conservation from the University of Greifswald, Germany. He works as an advisor on agricultural sustainability at the DCZ in Beijing. In his professional and academic career, Dr. Rouzi has worked on sustainable land management, sustainable agriculture, smart agriculture, climate change, water management and urban greening-related projects with a regional focus on China and Central Asia.

About the project

The Sino-German Agricultural Centre is 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). It was established in March 2015 as a central contact and information point and for coordinating bilateral cooperation between Germany and China in the agricultural and food sector. The DCZ brings together stakeholders from the public and private sector and the scientific community. It creates forums in which agricultural issues of common interest are addressed. The spectrum of Sino-German cooperation in the agricultural sector is reflected in the three components of the DCZ: Agricultural Policy Dialogue, Agri-Food Business Dialogue and Scientific Dialogue. Further information can be found on the project website.

<https://dcz-china.org/en/the-project.html>