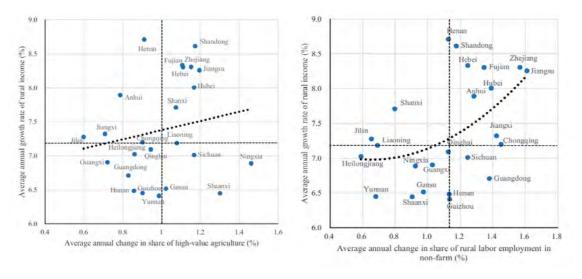
(January-September 2021)

1. News about research progress

(January 7, 2021) Prof. Jikun Huang and PhD student Pengfei Shi published a paper entitled "Regional Rural and Structural Transformations and Farmer's Income in the Past Four Decades in China" in the journal *China Agricultural Economic Review*

This paper analyzes the path and speed of rural transformation (RT) and explore the relationship between farmer's income and RT as well as structural transformation (ST) and typology of RT in the past four decades in China. They find that while China has experienced significant RT and ST, the levels and speeds of these transformations differed largely among provinces. Higher and faster RT and ST are often positively associated with the higher and faster growth of rural income. Based on this study, a general typology of rural and structural transformations and rural income is developed and the likely impacts of institutions, policies and investments (IPIs) on RT are discussed.



(July 2, 2021) Bulletin of National Natural Science Foundation of China published the paper of Prof. Jikun Huang and PhD student Pengfei Shi, entitled "The Path, Effect and Driving Force of the Rapid and Inclusive Rural Economic Transformation"

How to facilitate a rapid and inclusive rural transformation is of great importance to faster achieving prosperity for all, which has attracted great attention from scholars, international organizations and governments of various countries. This paper analyzes the pathway and the major driven forces of rural transformation in China, and based on China's provincial data and cross-country data from major developing countries in Asia, the relationship between the speed of rural transformation, structural transformation and their outcomes (income and poverty) are examined, and the typology of rural transformation is presented. The paper concludes with several major scientific research issues in rapid and inclusive rural transformation for future study, which will have important academic and policy implications.

表 3 1978-2017 年中国分省农村经济转型的分类结果[2]

		农民人均收入年均增长率(%)				
	2.4	高	中	低		
		浙江				
	DT M	福建	m III			
ST 快	RT快	湖北	四川			
		山东				
	RT慢	重庆 江西 河南 安徽 广西	2.3			
			江西	贵州 云南 湖南		
			安徽			
			广西			
	F F 7	江苏	山西	陕西		
ST 慢	RT快	河北	辽宁	甘肃		
		/비 시	12.1	宁夏		
			吉林			
	RT慢		黑龙江	广东		
			青海			

(August 27, 2021) PhD student Zhuanlin Wang, Prof. Jinxia Wang and coauthors published a paper in the journal *China Rural Economy*, entitled "The Changing Trend of Irrigation Investment in Northern China Since the Eighth Five-year Plan Period and the Factors Affecting the New Irrigation Investment in Villages"

This article describes the change trend of irrigation investment in northern China since the "Eighth Five-Year Plan" period and analyzes the policy factors behind it. The results show that the total amount of new irrigation investment in northern regions has been increasing; however, the village-level coverage of new irrigation investment needs to be further expanded; rural tax and fee reforms and national fiscal and taxation system reforms have made the government especially the central government the leading role of new irrigation investment; water-saving irrigation has been rapidly developed. The results show that the new irrigation investment has the "Matthew effect", that is, the better the existing irrigation conditions, the more likely it is to get the new irrigation investment; the better the local economic conditions, the more likely the villages to get the new irrigation from the community. For investment, villages with better cultivated land resource endowments are more likely to receive new irrigation investment from the government; there is a "crowding effect" between the village's new irrigation investment from the government and the new irrigation investment from the community. Finally, this article draws policy enlightenment based on the research conclusions.

表 3 "八五"以来新增灌溉供水投资和新增节水灌溉投资

	新增灌溉供水投资		新增节水灌溉投资	
时期	占新增灌溉投资的 比例 (%)	其中,用于机井及 其配套设施占比 (%)	占新增灌溉投资的 比例(%)	其中,用于渠道衬砌占比(%)
八五 (1991-1995年)	83.4	82.5	16.6	40.8
九五 (1996-2000年)	57.9	86.5	42.1	22.0
十五 (2001-2005年)	66.5	86.2	33.5	33.9
十一五 (2006—2010年)	55.6	94.1	44.4	64.8
十二五 (2011-2015年)	44.7	92.3	55.3	46.5
总体 (1991-2015年)	61.6	88.3	38.4	41.6

(May, 2021) Prof. Jikun Huang finished working paper "Rural Transformation, Household Income and Poverty Reduction by Province in China in the Past Four Decades" in collaboration with PhD student Pengfei Shi

This paper examines the evolutions of and the relationships between regional rural transformation (RRT) and its major outcomes. The results show that although all regions (or provinces) have undergone significant rural transformation, the level and speed of rural transformation differed largely among provinces. Both graphic and regression analyses show that there is strong correlation between the level of RRT and its outcomes. Higher level of RRT is often positively associated with higher level of per capital income and lower level of poverty incidence in rural China. Based on the results of this study, a general category of provincial rural transformation in terms of high-value agriculture and rural labor non-farm employment is discussed. The likely impacts of institutions, policies and investments (IPIs) on RRT are discussed.

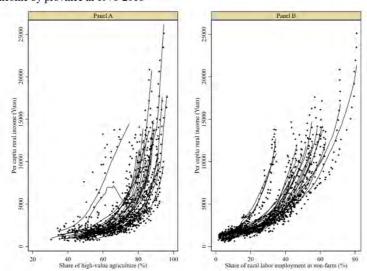


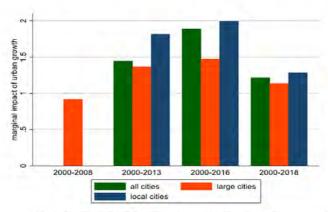
Figure 6. The LOWESS fitting results of rural transformation and per capita rural income by province in $1978-2018^{cd}$

(October, 2021) The paper entitled "Impact of Urban Growth on Rural Development through Off-farm Employment in China" written by Prof. Yu Sheng and coauthors has been accepted by the journal *World Development*

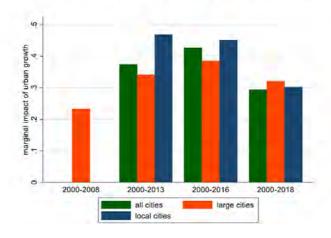
This paper explores the impact of structural transformation on rural development through the lens of analyzing the role of urban growth in creating off-farm employment for rural labor in China. By combining five waves of farm surveys for 1,234 households for the period of 2000-2018 with a newly constructed urban gravity index for 370 cities, this paper shows that rapid urban growth in China has significantly contributed to rural development by increasing off-farm employment for rural labor by 47-71 million since 2000. Moreover, the positive impact started with the emergence of a few large metropolitan cities but ended with the growth of local, relatively small cities, suggesting the interaction between structural transformation and rural development is at a nationwide level.

Fig. 4. Comparing accumulated impact of urban growth on off-farm employment of rural households in China between 2000 and 2018

Panel A: Accumulated impact of urban growth on off-farm employment: Headcount



Panel B: Accumulated impact of urban growth on off-farm employment: Proportion



2. News about project-related activities

(January 11, 2021) *Beijing Review* reported the main research findings of Professor Jinxia Wang on green development and rural economic transformation

At the Peking University Rural Revitalization Forum held on December 30, 2020, one of the roundtable forums was on the topic of "Green Development and Agricultural and Rural Economic Transformation". Beijing Review reporters focused on the theme of green agriculture and sustainable development and reported on the main research findings of Professor Jinxia Wang and others who participated in the discussion at the forum.



According to the report, a study conducted in 2016 by professor Jinxia Wang showed that 75%

of the villages have the problem of falling groundwater level in investigated provinces in north China. For one third of them, the water table dropped by 1.5 meters per year during the period from 2005 to 2015. Although water management technologies and techniques such as drip irrigation have been promoted in China to ease water shortages, these measures are not enough according to Wang, additional measures should be taken to cut total water consumption in these areas.

In recent years, China has begun to adjust crop structure to better fit agricultural production to its seasonal climate. One such measure is to reduce the planting of winter wheat because the water-intensive crop variety, sowed in early winter, needs to be irrigated in the period with lower rainfall, which compels farmers to draft groundwater for irrigation. China introduced a winter wheat fallow policy in 2014. Under this policy, many households in the North China Plain have replaced the winter wheat and summer maize double-cropping system with the spring maize single-cropping system. In 2019, around 133,300 hectares of wheat plots in Hebei Province were fallowed during winter, Wang said. The report finally quoted the concluding speech of Professor Jikun Huang, "The government should take the main responsibility for ecological compensation."

[Link - http://www.bjreview.com/Nation/202101/t20210111_800232252.html]

(April 23, 2021) An interview with Professor Jikun Huang was published in the Rural Revitalization Report



The Peoplefarm.cn belongs to People's Daily invited Professor Jikun Huang to talk about rural revitalization. In the interview, Professor Huang believes that institutional innovation, technological progress, market reforms and agricultural investment have promoted the growth of China's agricultural total factor productivity, thus accelerating the speed of rural economic transformation, and gradually turning China's agriculture into a highly efficient, high-quality, multi-functional, high-value agriculture and sustainable Transformation of development direction. At the same time, China's rural labor force has transformed from part-time work to the division of agricultural and non-agricultural employment.

According to Prof. Huang, China's rural areas are transforming towards the direction of urban-rural integration. In this transformation process, we must attach great importance to the promotion of reforms in rural area, so as to

realize urban-rural integrated development. Breaking the urban-rural dual system and implementing urban-rural integrated development are the prerequisites for advancing the priority development of agriculture and rural areas. Only under the framework of the urban-rural integration system can the dividends of rural reform be fully released.

【Link - https://www.peoplefarm.cn/details/5egIEJY0D.html】

(January 16, 2021) Professor Jikun Huang was interviewed by CCTV's national news program "Xinwen Lianbo"



The CCTV News Channel (CCTV13) broadcasted the video "Under the guidance of Xi Jinping's socialist thoughts with Chinese characteristics in the new era-China's rural areas are moving towards revitalization". Professor Jikun Huang, director of the China Agricultural Policy Research

Center of Peking University and dean of the New Rural Development Research Institute, was interviewed in this video. He said that even in the face of difficulties in 2020, China's continuous investment in agricultural infrastructure is very important. This will lay a good foundation for the country's promotion of rural revitalization strategies and agricultural-rural modernization next year.

https://app.cctv.com/special/m/livevod/index.html?vtype=2&guid=c5ab297596f84b3682126fc1aa304c92&vsetId=C10437

(April 25, 2021) Professor Jikun Huang was invited to participate in "Jiangsu Province Take the Lead in Realizing Agricultural and Rural Modernization Symposium and Rural Revitalization Forum"

On April 25th, "Jiangsu Province Take the Lead in Realizing Agricultural and Rural Modernization Symposium and Rural Revitalization Forum" was held at Nanjing Agricultural University. Prof. Jikun Huang was invited to participate and gave a keynote speech "China's Agricultural Development: Past Trends, Future Prospects and Policy Orientation". He pointed out that under the condition of ensuring food security, China's agriculture was gradually transforming into high-efficiency, high-quality, multi-functional, high-value agriculture and sustainable development. As for the strategic focus and policy orientation of China's future agricultural development, he believed that one was to implement a bottom-line guarantee strategy for absolute ration security and basic grain self-sufficiency; the other was to implement a transformational

development strategy of high-efficiency, green and multi-functional high-value and sustainable agriculture; and the third was to implement innovative development strategy to improve agricultural total factor productivity; the fourth was to implement an international development strategy of opening to the outside world and ensuring food supply capacity. At the meeting, Professor Jikun Huang was also appointed as a distinguished researcher of the Jinshanbao Agricultural Modernization Development Research Institute.



(May 27, 2021) Professor Jikun Huang participated in the 2021 Asia-Pacific Agricultural Policy (APAP) Forum Video Roundtable

The APAP Forum held two video conferences on April 29 and May 27, respectively. The conferences focused on "Promoting Restoration Measures to Achieve Sustainable Agriculture and Rural Development: Achieving Resistance for risk and inclusive growth in the COVID-19 Pandemic". Professor Jikun Huang made a speech entitled "Pandemic Impacts, Responses and Mitigating Measures in Agriculture and Off-farm Employment: the China's Experience". Participants generally believed that China's rapid response policies and measures to quickly control the epidemic, restore agricultural production and non-agricultural employment, and stabilize agricultural and food markets have important reference value for other Asian countries.



$(August\,9,2021)\,The\,WeChat\,public\,account\,of\,National\,Natural\,Science\,Foundation\,of\,China\,reprinted\,the\,paper\,of\,Professor\,Jikun\,Huang\,and\,phd\,student\,Pengfei\,Shi$



On September 21-22, 2020, the 257th Shuangqing Forum of the National Natural Science Foundation of China was successfully held in Beijing. Professor Jikun Huang was invited to participate in the topic of " the Laws of China's Economic Development and Key Scientific Issues in Theoretical Studies" and delivered a speech. The journal "Bulletin of National Natural Science Foundation of China", which is affiliated to the National Natural Science Foundation of China, published Jikun's report at the Shuangqing Forum in the third issue of 2021. On August 9, 2021, the article was reprinted on the WeChat official account of the National Natural Science Foundation of China for further publicity.

[https://mp.weixin.qq.com/s/lbwTgyq-uMQ0XfDjOjvyDA]

(September – October 2021)

(October 28, 2021) Professor Fan Shenggen was invited to give a lecture entitled "Global Food Security and Resources and Environmental Challenges"

On October 28, Shenggen Fan, Professor of China Agricultural University and Dean of the Institute of Global Food Economics and Policy, was invited by CCAP to give a lecture entitled "Global Food Security and Resources and Environmental Challenges". Professor Fan Shenggen made a comprehensive explanation for the audience from the aspects of human health problems, challenges facing the agricultural food system, and the impact of the irrationality of the agricultural food system on the ecology and economy, and put forward that we need to combine policy, technology and system innovation together to achieve the goal of promoting the transformation of the agro-food system.



(November 10, 2021) Professor He Yupeng was invited to give a lecture entitled "China's Agricultural Modernization: An Analysis Framework for Political Economy"

On November 10, Professor He Yupeng, chief economist of CP Group and deputy dean of the China Rural Research Institute of Tsinghua University, was invited to give a report entitled "China's Agricultural Modernization: An Analysis Framework for Political Economy", and the lecture was hosted by Professor Huang Jikun. In this lecture, Professor He used the concept of "agricultural outsourcing" to connect China's past development experiences of agricultural management and discuss the path of China's agricultural modernization in depth, in order to clarify the future policy direction.



(August 17-31, 2021) Team members participated in the 31st International Conference of Agricultural Economists

On August 17-31, 2021, the 31st International Conference of Agricultural Economists (ICAE) was held in New Delhi, India. Due to the impact of the epidemic, the conference was held in the form of an online conference. On August 25th, team member Prof. Wang Jinxia was invited to give a theme report entitled "Forty years of irrigation in China, what next" at the "Making Irrigation Sustainable" special session. In the special session of Digital Technologies for Agriculture, a theme report titled "Facilitating Inclusive ICT Application and e-Commerce Development in Rural China" was given by team member Prof. Huang Jikun, and the reports aroused enthusiastic responses from the participants.



VIRTUAL: 31ST ICAE CONFERENCE

(July 27, 2021) Professor Jikun Huang was invited to participate in the "World Seed and Food Security Development Forum

On July 27, the Chinese Crop Society organized the "World Seed and Food Security Development Forum" around the opening of a new mode of international exchange. The conference focused on major national needs for food security and sustainable agricultural development, discussed in depth policies and measures for innovating germplasm resources and ensuring food security, analyzed major problems in agricultural development, and explored countermeasures and solutions. Team member Prof. Huang Jikun was invited to participate in the conference and gave a speech on "World Agricultural Development and Prospects", and shared concerns about global food security with domestic and foreign experts and scholars.



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(November-December 2021)

(December 6th-8th, 2021) The 10th ASAE International Academic Conference was held in Beijing

From December 6th to 8th, the 10th Asian Society of Agricultural Economists (ASAE) was held in the form of an online conference with about 300 scholars attending the conference. The theme of the conference is "Asian Agricultural Development in the Context of the Fourth Industrial Revolution: Opportunities and Challenges". Professor Jikun Huang shared the report "Digital Technology Boosts China's Agricultural and Rural Development: Opportunities and Challenges". He used rigorous empirical analysis and vivid language to explain the process and challenges of China's agricultural digital transformation.

With the development of information technology and biotechnology revolution in the past four decades, Asian agriculture faces various opportunities and challenges brought about by the improvement of agricultural productivity and the realization of rural transformation in the new era of development. In the theory and practice of agricultural economics, there are still many unsolved problems that need to be explored and studied urgently. By discussing the frontiers and policies of agricultural economics research, this conference shared academic insights and practical results of agricultural economics, exchanged scientific research paradigms, and committed to refining new theoretical issues and research directions.



Invited Speaker of the Plenary Session



Guest and host at the opening ceremony of the conference

(December 12th, 2021) Professor Jikun Huang talks about food security, characteristic agriculture and common prosperity

On December 12th, Professor Huang Jikun was invited to participate in the 2021 "Agreed to Brighten the Countryside"-the first Dingyuan Rural Revitalization and Industrial Development Summit Forum. Professor Jikun Huang gave a keynote speech on issues including food security, characteristic agriculture and common prosperity. When talking about the future vision of China's agricultural development, he said: "In terms of labor productivity, in order to achieve common prosperity for all people, labor productivity in agriculture and that in industrial and service sector must converge. The aquaculture must fully transform to large-scale, specialization and ecologicalization. The planting sector must shift to the "twenty-eighty pattern", that is, 20% of large farmers produce 80% of crop output or contribute 20% of added value, to achieve common prosperity for large and small farmers while ensuring food security."



[Link: https://baijiahao.baidu.com/s?id=1718944298143714910&wfr=spider&for=pc]

(December 8th, 2021) Project team members learn about economic development and carbon emissions

On December 8, Professor Jintao Xu of Peking University was invited to give a report entitled "Economic Issues under the Carbon Neutrality Goal". Professor Xu interpreted China's past economic growth pattern from an environmental perspective with three studies. The first study showed that carbon dioxide emissions rose rapidly after China joined the WTO, while carbon emissions in developed countries such as the United States showed a downward trend. This result supports the "pollution refuge" hypothesis to a certain extent. The second study compares the carbon footprint of various export industries and explains why China's exports are not growing fastest in labor-intensive industries such as textiles and furniture, but capital-intensive industries represented by mechanical and electrical products. Professor Xu believes that the export growth of capitalintensive industries depends on the ultra-high carbon footprint and related pollution emissions, which may be an important reason for its international competitiveness. The third study introduced environmental input variables into the growth accounting model and found that the contribution rate of environmental factors measured by the domestic carbon footprint of export products is second only to the contribution rate of capital and total factor productivity. The above research shows that China's past growth is actually a "miracle growth" that relies on high investment and high carbon emissions. Professor Xu pointed out that China should use economic means to correct the price distortions of environmental factors, promote technological progress and institutional reforms, and thus transform to a conventional growth model driven by efficiency and total factor productivity.



(January-April 2022)

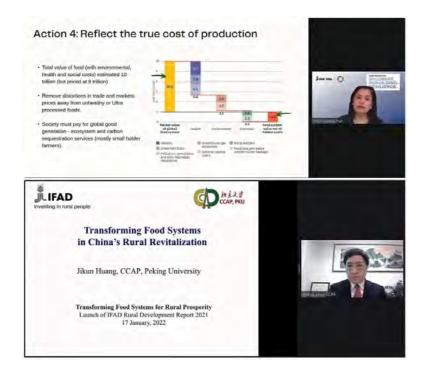
1. Transforming food systems for rural prosperity: the release of Rural Development Report 2021 in China held online on January 17th

On January 17th, China Center for Agricultural Policy (CCAP) of Peking University and the International Fund for Agricultural Development (IFAD) jointly held the China Press Conference of "Promoting Food System Transformation, Promoting Rural Prosperity and Development: Rural Development Report 2021". Affected by the epidemic, the conference was held online, and more than 570 representatives from China and abroad attended the conference. The opening ceremony of the press conference was presided over by Mr. Matteo Marchisio, the representative of IFAD in China. Dr. Wang Jinxia, Boya Distinguished Professor and Director of CCAP at Peking University, pointed out, "The report is an effective action in response to the 2021 United Nations Food System Summit initiative, and it will make an important contribution to the realization of the 17 sustainable development goals of the United Nations." Huang Jikun, Honorary Director of CCAP, Academician of the Academy of Sciences for Developing Countries, Professor of the School of Modern Agriculture of Peking University, and Dean of the New Rural Development Research Institute, proposed that institutions, policies and investments (IPIs) are important drivers for ensuring food security and promoting green agriculture, and innovative public investment needs to support the development of efficient, inclusive and environmentally friendly food systems.









2. On February 23, Professor Huang Jikun interprets the No. 1 Central Document in the Economic Observer newspaper: highlighting the guarantee of food supply and "bottom-up" rural construction

Professor Huang Jikun told the Economic Observation Network that compared with previous years, the central government has raised the issues of agricultural safety and agricultural product supply to an important level this year. Huang Jikun said that soybeans and oilseeds are the most import-dependent products among Chinese crops. Under the current situation, ensuring their safety and increasing supply capacity are issues of great concern to the central government. Compared with previous years, this year's Central No. 1 document places more emphasis on rural construction. The implementation of the rural revitalization strategy has become the focus of rural work after the battle against poverty. At the same time, it puts forward more detailed measures for rural construction, emphasizing that rural revitalization is for the people, and rural construction is also for the people. The rural construction action plan reflects a "bottom-up" reform concept with farmers' participation.



3. Professor Wang Jinxia interpreted the 2022 No. 1 Central Document in an interview from "Beijing Review"

Wang Jinxia, Director of the China Center for Agricultural Policy at Peking University, was interviewed by a reporter from "Beijing Review" on February 28th. In the interview, Professor Wang Jinxia pointed out, "In a certain time, with the rapid advancement of industrialization and urbanization, the urban-rural income gap continued to widen as farmers' incomes had only risen slowly". Therefore, "The purpose of rural vitalization is to realize common prosperity," Wang said. "We should further consolidate and expand the achievements of poverty alleviation, improve poverty monitoring and assistance mechanisms to assure rural residents a better living environment and improved livelihood," Wang told Beijing Review. With over 1.4 billion people and limited arable land, it is not realistic for China to depend on the global market for its food security, hence the country must develop modern agriculture. China's output has exceeded 650 billion kg for seven consecutive years, Wang said, "It cannot go under this number in the future, given it marks the bottom line for grain security." Professor Wang concluded, "We should guarantee grain security by protecting our soil and farmlands and strengthening the integration of agriculture and technology".



4. Professor Zhong Funing was invited to give a lecture at CCAP on March 8th

On March 8, Professor Zhong Funing, Distinguished Professor of "Zhongshan Scholar" of Nanjing Agricultural University, was invited by CCAP to give a speech entitled "Population Change and Rural Governance". The lecture was presided over by Professor Huang Jikun, honorary director of CCAP, and dean of the New Rural Development Research Institute. The lecture took the form of a combination of online and offline, with more than 200 people attending the speech. Professor Zhong pointed out that, the fundamental problem of current rural governance in China lies in the contradiction between organizational membership and population changes, as well as the contradiction between collective ownership of resource assets and changes in organizational membership. To solve these problems, it is necessary to strengthen system construction and innovation, which not only requires the government to improve the laws and regulations on rural grass-roots autonomous organizations and collective economic organizations, but also relies on local governments to formulate governance regulations in line with local actualities, so as to promote the goal of "effective governance" in the process of rural revitalization in China.



5. On March 20th, Professor Huang Jikun was a guest on CCTV's "Sannong Green Hall" column, talking about China's food security

Professor Huang Jikun believes that food security is an important cornerstone of national security and the ballast of social stability. The implementation of the strategy of storing grain in the ground and technology is the key to ensuring China's food security. At the same time, China should also make full use of the international market. Pursuing complete food self-sufficiency is not conducive to sustainable development. Maintaining a food self-sufficiency rate of 85%-95% is more able to achieve sustainable food security in China. At the same time, China is strengthening international cooperation in agriculture. Due to the current low grain yields in Africa and countries along the Belt and Road, it is relatively easy to increase the grain yields of these countries through investment in the agricultural infrastructure and agricultural technology. The improvement of agricultural production capacity in these countries plays an important role in China's use of the international market to ensure domestic food security.



6. On March 25th, Professor Huang Jikun was invited to CCTV's "Sannong Green Hall" column to talk about digital village construction and inclusive development

Professor Huang Jikun believes that to promote the construction of digital villages, we should pay attention to the development gap and how to make farmers become the beneficiaries. The research report "County Digital Village Index (2020)" compiled by Peking University New Rural Development Research Institute and Ali Research Institute shows that China's county-level digital villages have a good foundation for development, but we must attach great importance to regional differences and development gaps, especially the issue of unbalanced regional development of rural economy digitalization. Peking University's research also confirmed that the rural digital infrastructure has been continuously improved. 99.9% of the interviewed villages have achieved full coverage of 4G networks, 23% have established ecommerce service stations, 35% have realized express delivery into the villages, and 37% have built a one-stop service platform and provide online services; but at the farmer level, less than 1% of farmers are selling agricultural products online by the end of 2021. To this end, in vigorously promoting the construction of digital villages, it is necessary to pay special attention to farmers benefiting from the construction of digital villages.



7. Professor Huang Jikun interprets the 2022 No. 1 Central Document in the "Rural Work Newsletter"

Professor Huang Jikun focused on rural construction and thought about the full implementation of the rural revitalization strategy. Based on the survey data of the five provinces of Peking University, Professor Huang Jikun found that there are still shortcomings and weaknesses in China's rural construction. Based on the spirit of the No. 1 Central Document in 2022, he pointedly proposed to improve the implementation mechanism of rural construction, continue to implement the five-year action to improve the rural living environment, solidly carry out rural infrastructure construction in key areas, vigorously promote the construction of digital villages, and strengthen county-level coordination of basic public services. These recommendations provide a reference for China's key rural revitalization work in 2022.



8. Professor Fan Shenggen was invited to give a lecture entitled "How to ensure food security under the dual carbon goals in China" on April 12th

On April 12th, Fan Shenggen, Professor of China Agricultural University and Dean of the Institute of Global Food Economics and Policy, was invited by CCAP to give a lecture entitled "How to ensure food security under the dual carbon goals in China". The lecture was presided over by Professor Huang Jikun, honorary director of CCAP, and dean of the New Rural Development Research Institute. Teachers and students from various departments of Peking University listened to the lecture on the spot, and nearly 1,000 people attended the conference online. Professor Fan Shenggen pointed out that,

food security is the cornerstone of national development and people's well-being. Studies have shown that carbon emissions exacerbate climate change and lead to frequent occurrence of extreme weather, which not only destroys ecosystems, but also affects human health and livelihoods and food security, posing huge challenges to the agricultural food system. However, global agri-food systems also contribute to climate change. Professor Fan Shenggen also emphasized that, the agri-food system has great potential to reduce emissions, which can contribute to the realization of the dual carbon goal in China. Measures such as improving agricultural production techniques, reducing food loss and waste, and adjusting dietary patterns can reduce greenhouse gas emissions from agri-food systems.



(April-June 2022)

1. Professor Huang Jikun gave an academic report at the Qingshan Lake Forum of Zhejiang Agriculture and Forestry University on May 11

On the afternoon of May 11, the first "Qingshan Lake Forum" of Zhejiang Agriculture and Forestry University opened. Professor Huang Jikun, was invited to give an academic report entitled "China's Agricultural Development, Rural Transformation and Common Prosperity: Past Experience and Future Vision". Professor Huang Jikun focused on the theme of agricultural and rural development and transformation, rural revitalization and common prosperity. Based on a large number of data and rigorous analysis, he discussed China's 40 years of agricultural development and reform experience, the main challenges and policy evolution, the experience of rural economic transformation, and the future agricultural development and policy trends. This report has a wide field of vision and a large amount of information. It has both a description of the macro background and an elaboration of the microscopic mechanism, both the interpretation of theoretical research and the analysis of practical cases.



Professor Huang Jikun gave an academic report at the Qingshan Lake Forum

https://www.zafu.edu.cn/info/1002/101019.htm

2. Professor Huang Jikun gave a lecture on food security, agricultural development and common prosperity at Southwest University of China

On May 27, Professor Huang Jikun gave a report entitled "Food Security, Agricultural Development and Common Prosperity" at Southwest University of China.

Professor Huang Jikun shared from four aspects: the development experience of China's agriculture in the past 40 years, the main challenges and countermeasures, the experience of rural economic transformation in China and other countries, and the

future development vision and policy orientation. Taking the development experience of China's agriculture over the past 40 years as the starting point, he pointed out that China has transformed from the era of supply by ticket to a major producer of agricultural products in the world. At present, the per capita output of major agricultural products has exceeded the world average, and behind these changes are institutional innovation and technological progress, market reforms, and increasing agricultural inputs.

He believed that China's agriculture mainly faces three major challenges: food security, widening income gap between urban and rural residents and sustainable development. Focusing on three major challenges, he explained China's policy evolution and countermeasures in this context. Taking the agricultural transformation experience of developed and developing countries as examples, he compared China's agriculture development with other countries. Combining the development experience of China's agriculture over the past 40 years, he believes that relying on institutional innovation, technological innovation, market reform, and agricultural investment can realize common prosperity for urban and rural residents, food security, and common development of global security.



Professor Huang Jikun gave a lecture at Southwest University of China

http://cem.swu.edu.cn/info/1087/2943.htm

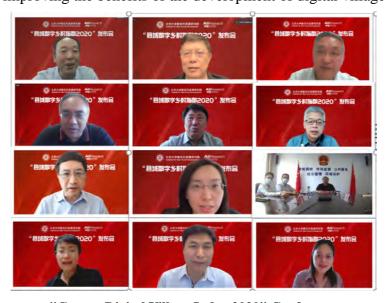
3. The New Rural Development Research Institute of Peking University released the "County Digital Village Index (2020)"

On May 30, the New Rural Development Research Institute of Peking University released the "County Digital Village Index (2020)" online. At the press conference, Professor Huang Jikun introduced the main achievements of the 2020 County Digital Village Index on behalf of the project team. In general, the construction of county-level digital villages in China is in the initial stage of development. Despite the impact of COVID-19, the county-level digital village construction in 2020 still grew steadily. In the four areas covered by the county-level digital village index system, namely digital

infrastructure, economic digitization, governance digitization, and life digitization, digital infrastructure leads the county-level digital village construction. The distribution of the top 100 counties for digital rural development presents a pattern of "one strong and diverse development", and the number of top 100 counties in Zhejiang, Hebei, Fujian, Guangdong and Jiangsu ranks in the top five.

China's county-level digital village construction also faces many challenges. First, the digitalization of county-level rural economies is relatively slow, which has become a major shortcoming restricting the development of county-level digital villages. Secondly, there is a large gap in the development of county-level digital villages between regions. The east is far ahead of the west and northeast, and the distribution of the top 100 counties also shows a significant regional gap (80% in the east, 16% in the middle, 4% in the west and 0% in the northeast). Third, the construction of county-level digital villages presents an overlap between the digital divide and the economic divide. Although the lagging counties are catching up, the close relationship between the digital divide and the economic divide determines that the task of eliminating the digital divide will be very arduous. Fourth, the system, mechanism and capacity building of county-level digital villages need to be improved urgently.

Professor Huang Jikun pointed out that coordinating the promotion of the rapid, inclusive, sustainable and people-benefiting development of county-level digital villages is the way to develop digital villages in the future. To this end, he made the following policy recommendations: First, clarify the development goals, key tasks and development roadmaps at each stage, and orderly promote the rapid development of county-level digital villages in different types of regions. The second is to increase support for underdeveloped areas, and coordinate to promote the construction of a more inclusive digital village. The third is to improve the system and mechanism for the development of county-level digital villages, and explore the sustainable development path of digital villages. The fourth is to build for the people and thrive for the people, and focus on improving the benefits of the development of digital villages.



"County Digital Village Index 2020" Conference

http://www.ccap.pku.edu.cn/zxxw/363395.htm

4. Professor Huang Jikun and several famous scholars published an article in Nature Food calling for a fair livelihood to be the basis for the transformation of the food system

On June 6, 2022, Professor Huang Jikun and several famous scholars published a review article entitled "Equitable livelihoods must underpin food systems transformation" in Nature Food. The article analyzes the challenges to a more equitable transition of food systems from driving factors such as nature and environment, technology and infrastructure, economics and politics, society and population. Achieving equitable livelihoods will require game-changing actions by governments and businesses. Solutions should be rights-based and ensure that all people enjoy the right to food and other rights, which require more innovative institutions, policies and investments (IPIs) in food systems to effectively protect and improve the lives of the disadvantaged.



Review article by Prof. Jikun Huang on the transformation of the food system http://www.ccap.pku.edu.cn/zxxw/363426.htm

5. Professor Zhang Hongyu was invited to give a lecture at CCAP on May 10

On May 10, Professor Zhang Hongyu, President of China Agricultural Risk Management Research Association, Vice President of China Rural Research Institute of Tsinghua University, was invited by CCAP to give an online speech entitled "The choice of the road for the development of rural industries with Chinese characteristics". The lecture was presided over by Professor Huang Jikun. About 2000 people attended the meeting online. Professor Zhang pointed out that it is necessary to fully recognize the importance of rural industries in promoting rural development under the new situation, and put the promotion of rural industry development in a more prominent position in the future work.



Professor Zhang Hongyu gave a lecture at CCAP

https://mp.weixin.qq.com/s/hVEoxeciEHET7MO4RG8KmA

6. Professor Chen Zhigang was invited to give a lecture at CCAP on June 7

On June 7, Professor Chen Zhigang, International Dean of China Academy of Rural Development and Zhejiang University-International Food Policy, was invited by CCAP to give an online speech entitled "Does China Need a Diet Revolution?" The lecture was presided over by Professor Huang Jikun. About 800 people attended the meeting online. Through rigorous analysis, Professor Chen pointed out that the dietary revolution can promote China's coordinated development of residents' health, food security and environmental sustainability, and push China to become a high-income country.



Professor Chen Zhigang gave a lecture at CCAP

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(**June – August 2022**)

1. The first textbook of "Modern Agricultural Economics Management Series" published

In June 2022, "Adaptive Irrigation Management in Changing Environments", the first textbook of the "Modern Agricultural Economics and Management Series" of Peking University's New Rural Development Institute has been published by China Social Sciences Press. The authors of the textbook are Zhang Lijuan, Jiang Yuting, Wang Jinxia and Sun Tianhe.

Adaptive Irrigation Management in Changing Environments focuses on the adaptive response and effectiveness of irrigation management in the context of rural economic transition and climate change. On the basis of theoretical analysis, using the survey data of China's water resources system and management tracked for a long time, and adopting modern econometric methods, this book quantitatively analyzes the effect of rural labor non-agricultural employment on farmers' water-saving technology adoption, irrigation water and technical efficiency, assesses the vulnerability of groundwater irrigation supply in the North China Plain under the background of climate change, identifies the impact of climate change on the reliability of groundwater irrigation supply, and evaluates the effectiveness of groundwater adaptive irrigation management in addressing climate risks, thereby contributing to the national evidence-based and scientific responses to ensure food security, combat climate change, and develop sustainable irrigation management.



2. Professor Wang Jinxia was invited to give a speech at the "Peking University PHBS Financial Frontier Lecture"

On the evening of June 22, at the invitation of Peking University HSBC Financial Research Institute, Professor Wang Jinxia gave an academic report on "Promoting Rural Revitalization—Finance and Other Key Measures". The report was broadcast live online, with a total of 1,225 views and 1,229 likes.

Since the 19th National Congress of the Communist Party of China put forward the rural revitalization strategy, China has been actively introducing relevant legal systems and policies to achieve the long-term goal of "comprehensive rural revitalization, strong agriculture, beautiful rural areas, and rich farmers" in 2050. This lecture sorted out the development history and status quo of China's rural industries, resources and income since the reform and opening up, and described the specific content of the rural revitalization strategy from the perspectives of core principles and key issues, and introduced cultivated land protection, water resources management, technology promotion and policy support, and combined with the actual governance of China's rural areas to discuss how finance can better play a service role and contribute to the realization of rural revitalization.



3. Professor Han Guiqing was invited to give a lecture at CCAP on July 5

On July 5, Professor Han Guiqing, Academician of the International Academy of Agricultural Education, Chairman of the International Black Soil Research Institute of the Food and Agriculture Organization of the United Nations, and Director of the International Agricultural Economics Research Center, was invited by CCAP to give an online speech entitled "Implement the law on black land protection, store grain in the land and technology, and ensure food security". The lecture was presided over by Professor Liu Chunming, Dean of the School of Advanced Agricultural Sciences, Peking University. The Law of the People's Republic of China on the Protection of Black Land marked that China's black land protection has entered the track of legalization and standardization. Academician Han Guiqing introduced the Chinese plan for the protection and governance of black land in detail around this newly promulgated important law.



4. Professor Huang Jikun published an article in Issues in Agricultural Economy entitled Accelerating Rural Transformation, Promoting Farmers' Income Increase and Realizing Common Prosperity

Although rural per capita income has been growing steadily, the income gap between urban and rural and among households in rural remains large. Achieving common prosperity for all is still a long way to go. Based on the analyses of rural economic

transformation and the farmers' income in the past 40 years, and the prospect of agricultural development visions and the main challenges in the next 30 years, this paper shows that achieving common prosperity will require substantial increase in agricultural labor productivity through accelerating rural economic transformation in terms of boosting high-value agricultural development and rural labor non-farm employment, and subject to ensuring food grain security. To do these, urbanization and economic structure transformation should be accelerated to promote the sustainable growth of non-farm employment for rural labor; livestock and aquaculture through enlarging production scale and modernization will take the lead in eliminating the income gap between farming and non-farming works; crop sector should gradually move to the 20-80 Pattern (20% farms with large scale land mainly produce grain and other bulk agricultural commodities, and 80% farms with small scale land develop high-value agriculture) with the corresponding policy support system, in order to achieving the common prosperity for both large and small scale farms.