

中共中央党校
(国家行政学院)

科学技术支撑农区现代化的治理创新

Science and Technology are the Main Pillars for the
Governance Innovation of Rural District's
Modernization

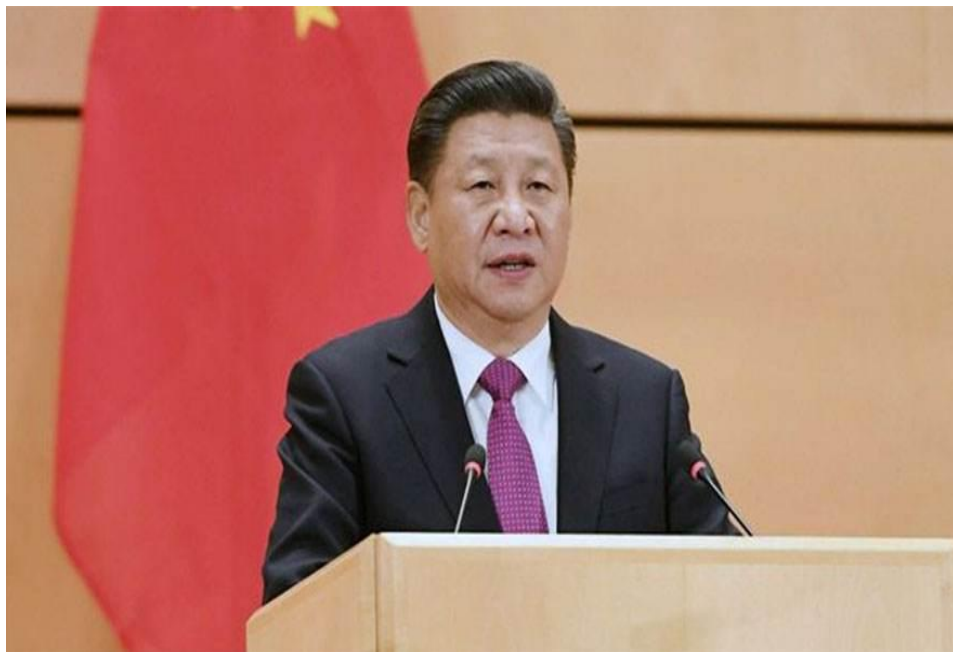
许正中

中共中央党校（国家行政学院）国际战略研究院
副院长 教授 博导

Professor Xu Zhengzhong, Deputy Dean
The Institute for International Strategic Studies
Central Party School (China National Academy of Governance)

December 12th, 2019
Guilin, GuangXi China

- 经济学博士，管理学博士后，中共中央党校（国家行政学院）经济学部副主任、教授，博导，学科带头人。国家百千万人才，享受国务院特殊津贴。在《Energy Policy》、《财政研究》、《人民日报》等国内外一流刊物发表学术论文200余篇，担任联合国、世界银行等国际机构战略咨询专家
- Ph.D, major in economy, and the Post-Ph.d major in management. National Secondary Professor. He is selected for new century talents project national candidates, enjoy the special allowance of the State Council, the chief expert of major national science and technology projects management. Published more than two hundreds journal articles on international and China's first class publications and newspapers, for instance 《Energy Policy》, 《Research of Public Finance》, 《People's Forum》, 《People's Daily》. He is the strategy consulting expert of United Nationa, the World Bank and other international organizations.



“只有回看走过的路、
比较别人的路、远眺前
行的路，弄清楚我们从
哪儿来、往哪儿去，很
多问题才能看得深、把
得准。”

---习近平2018.1.5讲话

“Only when we look back at the road we have passed, compare the road of others, and look far ahead, and find out where we are from and where we are going, we can see many problems deeply and accurately.”

---President XI Jinping on January 5th, 2018

中共中央党校 (国家行政学院)

基于“三元互动”理念形成的“中鹤模式”
"Zhonghe model" based on the concept of "three element interaction"

□在国家行政学院许正中教授团队的指导下，中鹤集团导入了三元互动理念，率先迈出了三元互动协调的第一步，形成了一整套粮食主产区三元互动的新格局，打造了政府、企业与农民共同受益的城乡一体化多元开放式平台。

□Under the guidance of Professor Xu Zhengzhong's team, Zhonghe Group took the first step of three element interaction and coordination, formed a set of new pattern of three element interaction in the main grain production areas, and created a multipul open platform for urban-rural integration benefiting the government, enterprises and farmers.

专家团调研中鹤集团： 农业现代化融合发展新样板



中共中央党校 (国家行政学院)



“中鹤探索”成为中国
政府省部级领导干部
研讨班教学案例。

“Zhonghe exploration” has listing in the study and research case in the seminar for provincial and ministerial leaders of the Chinese government.



“中鹤模式”探索缘起 The origin of "Zhonghe model"



河南省鹤壁市浚县，古称黎阳，自古就有“黎阳收，顾九州”之美誉。王庄镇位于该县东北部，总面积100平方公里，其中耕地面积9万亩，人口7.1万人。王庄镇是一个典型的传统农区和粮食主产区。

Junxian County, Hebi City, Henan Province, was known as Liyang in ancient times. It has been known as "Liyang collection and Jiuzhou". Wangzhuang Town is located in the northeast of the county, with a total area of 100 square kilometers, including a cultivated area of 60000000 square meters and a population of 71000. Wangzhuang Town is a typical traditional agricultural area and main grain producing area.

中共中央党校 (国家行政学院)

◆中鹤集团的前身：1995年成立的以生产玉米淀粉为主的河南淇雪淀粉有限公司

◆The predecessor of Zhonghe Group: Henan Qixue Starch Co., Ltd. has established in 1995, which mainly produces corn starch

◆2007年河南中鹤现代农业开发集团有限公司（简称中鹤集团）正式成立，与此同时中鹤产业布局不断加强，同年中鹤纯净粉业有限公司、中鹤粮油贸易有限公司开工建设，并配套建设了能源公司、环保公司，产业集聚效应初步展现。

◆In 2007, Henan Zhonghe Modern Agricultural Development Group Co., Ltd. (hereinafter referred to as Zhonghe group) was officially established. At the same time, the industrial layout of Zhonghe group was continuously strengthened. In the same year, Zhonghe pure powder industry Co., Ltd. and Zhonghe grain and Oil Trade Co., Ltd. started construction, and supporting the construction of energy companies and environmental protection companies. The industrial agglomeration effect was initially demonstrated.

三元互动的内涵包含三个层面：

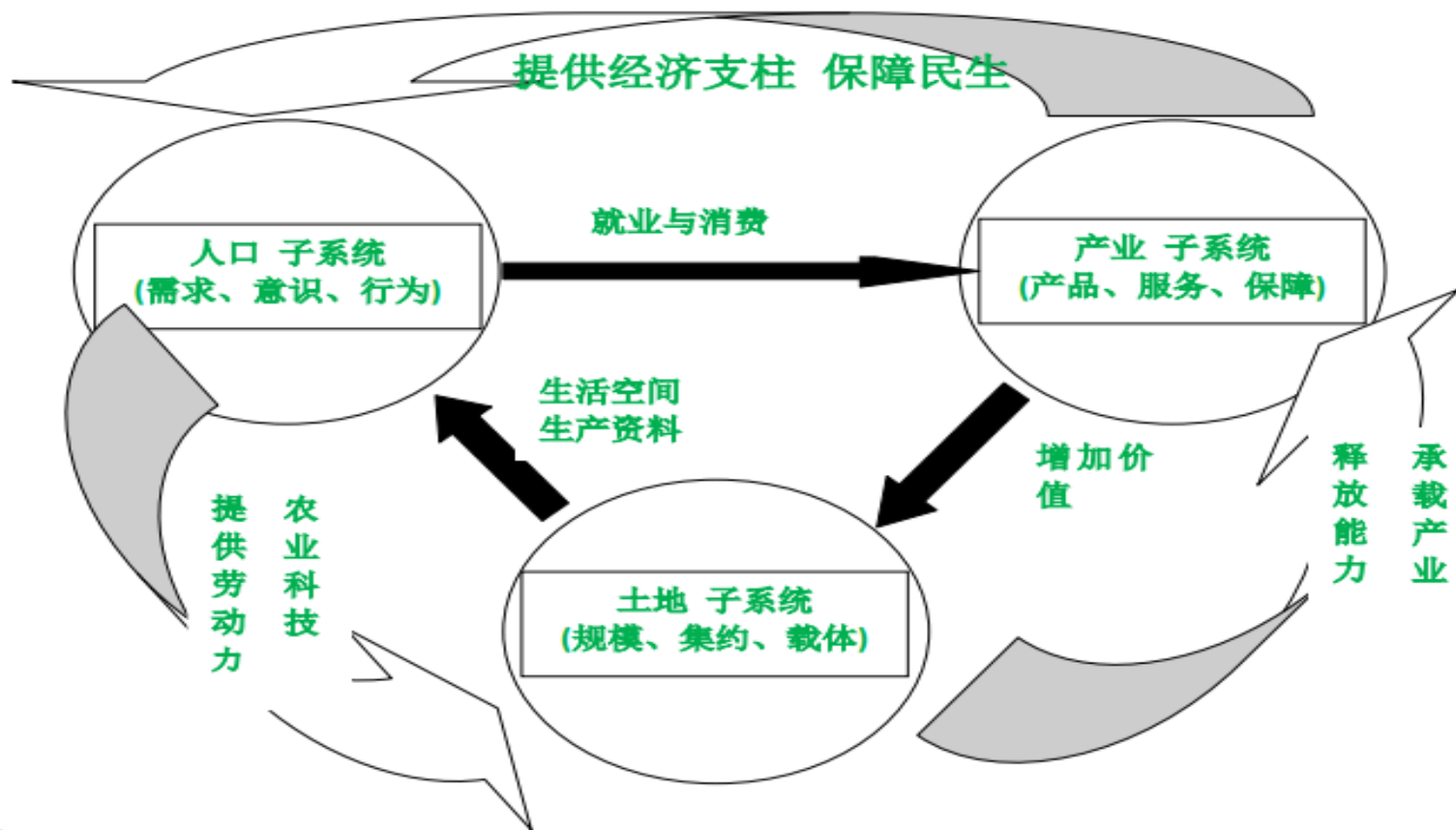
- ◆ 一是从生产力载体层面看，主要是产业、人口、土地三类要素的互动；
- ◆ 二是从产业形态来看，具体表现为创业园、培训园、安居园的互动。从内在本质来看，它反映了新型城镇化、新型工业化和农业现代化之间的三元互动；
- ◆ 三是从社会经济运行的宏观格局来看，表现为政府、市场、社会之间的互动。

There are three levels of three elements interaction:

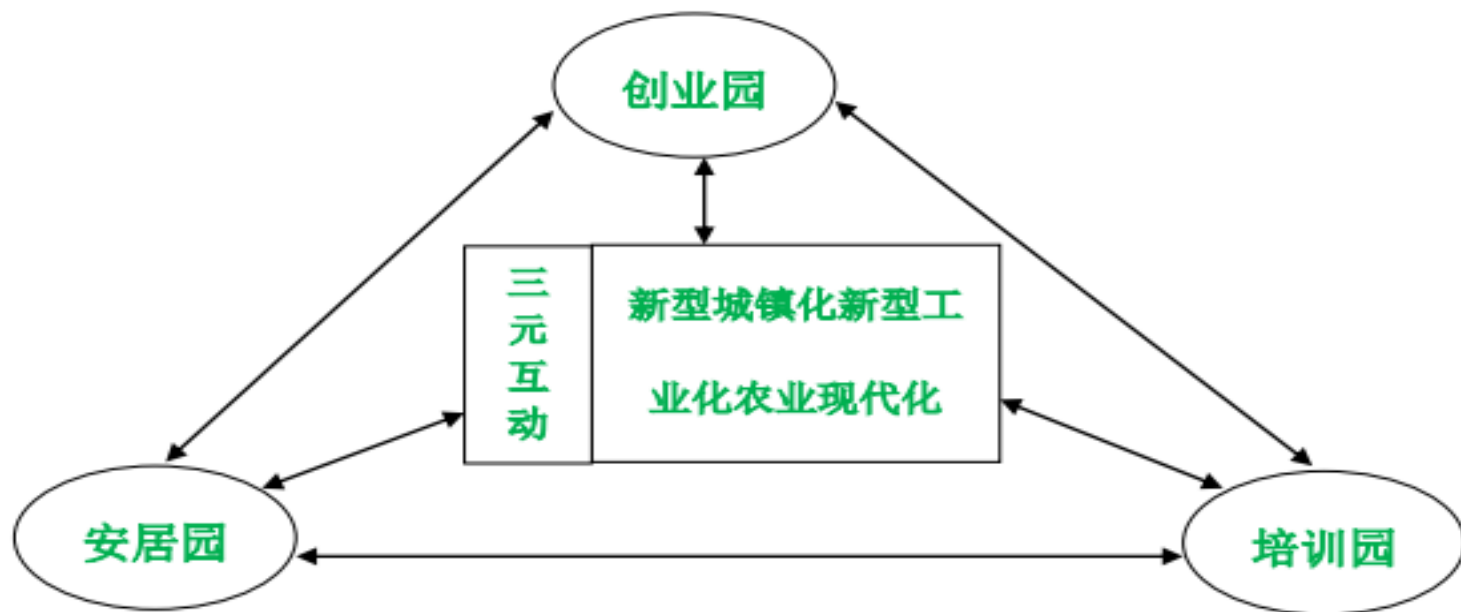
- ◆ First, from the perspective of productivity carrier, it is mainly the interaction of industry, population and land;
- ◆ Second, from the perspective of industrial form, the specific performance is the interaction of entrepreneurship Park, training park and housing park. In terms of internal essence, it reflects the three-dimensional interaction among new urbanization, new industrialization and agricultural modernization;
- ◆ Third, from the perspective of the macro pattern of social and economic operation, it shows the interaction among the government, market and society.

产业、人口、土地的三元互动

Three elements interaction: industry, population and land

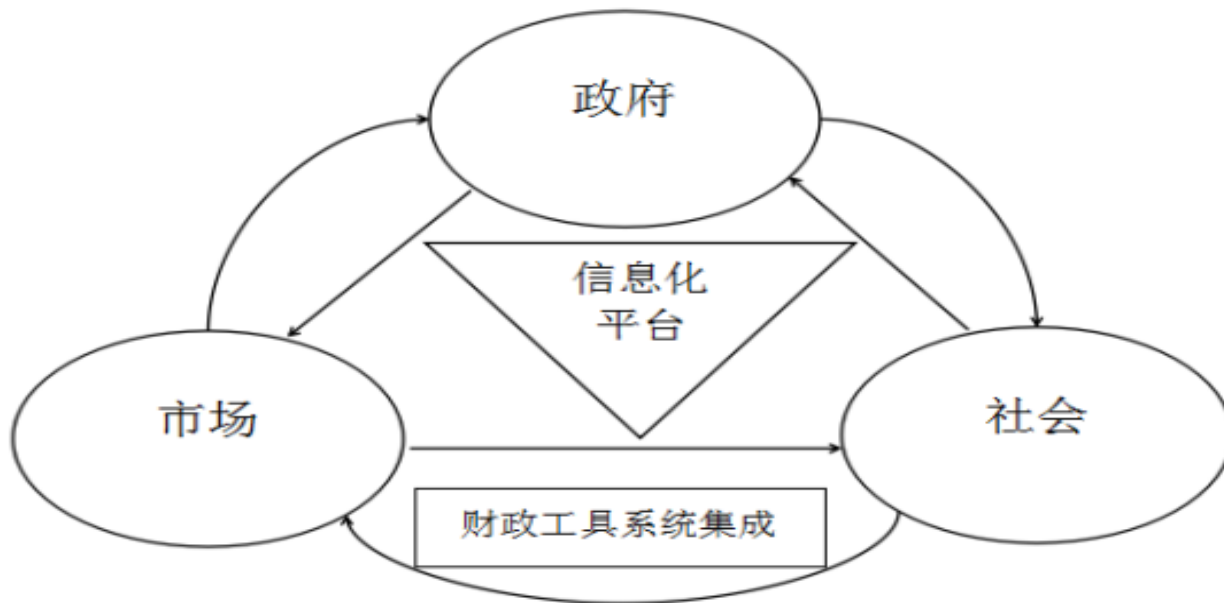


创业园、培训园、安居园的三元互动
Three elements interaction for
entrepreneurship Park, training park and
housing Park



政府、市场、社会的三元互动

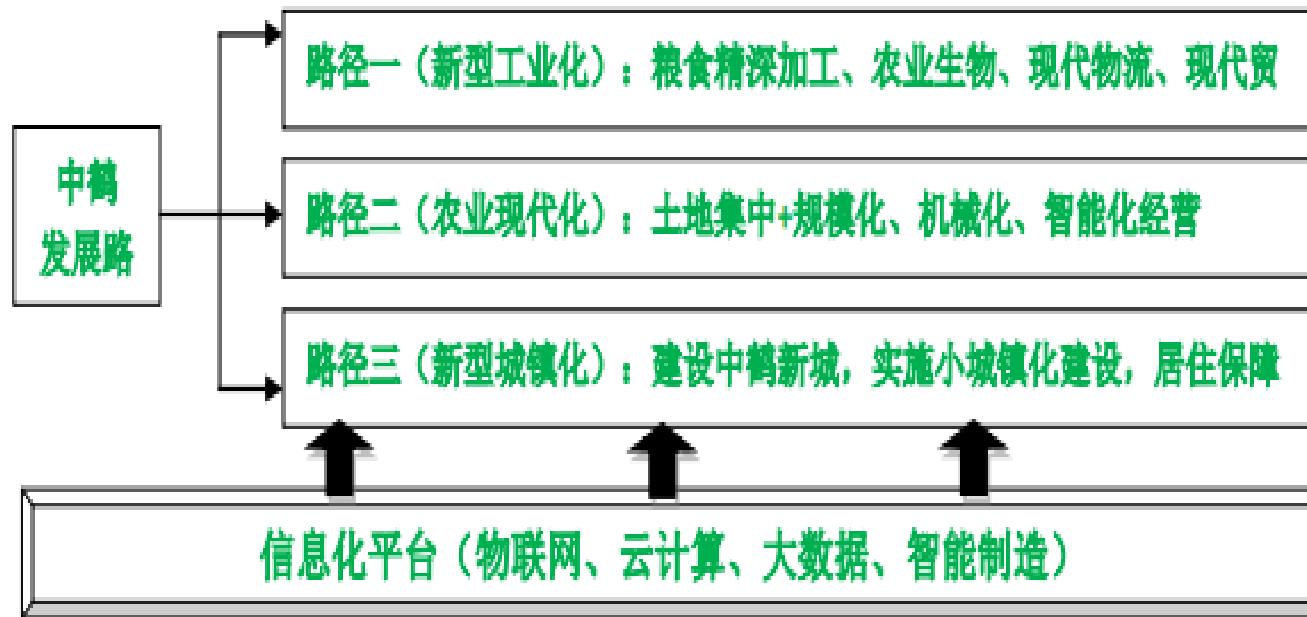
Three elements interaction for government, market and society



中鹤集团经过多年的积极探索、大胆实践、不断创新，践行出一条通过三元互动，推动以信息化为平台、以新型工业化龙头、以新型农业现代化为基础、以新型城镇化为提升的一二三产业融合发展的新路径，被称为“中鹤模式”。

With exploration, bold practice and continuous innovation, Zhonghe group has put in practice of a new path for integrated development of primary, secondary and tertiary industries, which is based on information technology, led by new industrialization, based on new agricultural modernization and promoted by new urbanization, and is called "Zhonghe Model".

中鹤发展路径 the Path of Zhonghe Model



information platform (IoT, Cloud, Big Data, AI)

创新农村土地制度，构建三元互动机制

➤ 土地流转、整理、置换，转出一片新天地

土地成片连方

土地流转：遵循依法、有偿、自愿的原则，中鹤集团与农民联合创建了“浚县鹤飞农机服务专业合作社”，农民首先将承包的耕地流转给王庄镇的“土地流转服务中心”，再由“土地流转服务中心”转租给鹤飞农机合作社，这样不仅规范了土地流转行为，而且保障了农民的权益。

置换：宅基地、迁坟（农村最难的两件事）

整理：“四旁”（村旁、树旁、路旁和沟旁）和“四荒”（荒山、荒坡、荒丘和荒滩）

产业向园区集中

三集中

规划原则

土地
向合作社集中

人口
向新城区集中



已完成王庄镇
15万亩镇域面积、46个行政村、7万人口
和9万亩耕地的
整体规划，
涵盖三个板块、
七大功能区

目前已实现耕地面积由9万亩增加到12万亩，净增耕地**3万亩**

中共中央党校 (国家行政学院)



中共中央党校 (国家行政学院)



规划占地11平方公里、建成后可容纳8万人居住的中原农都——中鹤新城，目前已搬迁入住2.5万人，同时还有3万群众正在搬迁中。

Zhonghe new town, the planned agricultural capital of the Central Plains, covers an area of 11 square kilometers and can accommodate 80000 people after completion. At present, 25000 people have been relocated and 30000 people are still in the process of relocation.

中共中央党校
(国家行政学院)

“羊” 贵妃：海选自澳大利亚3大洲的54个牧场

"Sheep" Princess: selected from 54 pastures on three continents in Australia



中共中央党校 (国家行政学院)



标准化肉羊养殖基地

Standardized mutton sheep breeding base



羊舍顶部光伏发电板

Photovoltaic power panel on the top of
sheep house

中共中央党校 (国家行政学院)

CCTV 10
科教

走近科学

新农业新循环



To plant grain, straw, straw for sheep, pull manure from sheep, and return manure to the field
Establish a new model of environment-friendly, resource-saving and green ecological agricultural development

“地种粮、粮秸秆、秆喂羊、羊拉粪、粪还田”
建立环境友好型、资源节约型、绿色生态型农业发展新模式

中共中央党校 (国家行政学院)

打造“全方位立体化”的“互联网+”平台，催生现代化智能农业
让农业插上科技的翅膀

Build a "all dimensional and three-dimensional" Internet + platform, and promote the development of modern intelligent agriculture.
Add the wing of science and technology to agriculture



中鹤集团智慧农业气象站
Intelligent agricultural meteorological station of Zhonghe company



中鹤设施农业智慧大喷灌系统
Intelligent sprinkler irrigation system for Zhonghe facility agriculture



中鹤设施农业大田数据智能监测站
Zhonghe facility agricultural field data intelligent monitoring station

中共中央党校 (国家行政学院)





从美国引进的臂展468米节水灌溉机，运用这种喷灌设备为**1000**亩麦田洒水，只需要三个农民、几十分钟的时间就可以完成，并且用手机终端就可操作，而这在一家一户的传统农业中可能需要几百户农户灌溉几天的时间。

The 468 meter water-saving irrigation machine introduced from the United States can spray water on 666667 square meter wheat fields in just three farmers and dozens of minutes, and it can be operated by mobile terminals, which may take hundreds of farmers to irrigate for several days in a traditional agriculture.

设施农业：年产优质特色果蔬3万吨健康食品原料基地

Facility Agriculture: 30000 tons of health food raw materials base with annual output of high quality and special fruits and vegetables



中鹤特色果蔬设施农业基地规划占地6000亩，年产优质特色果蔬3万吨，配备人工智能卷帘、保温、遮阳、通风等高科技日光大棚600栋，目前已投入使用300余栋，为中鹤速冻素食系列、蔬菜面系列提供了绿色、生态原料。

Zhonghe special fruit and vegetable facility agricultural base is planned to cover an area of 4000000 square meters, with an annual output of 30000 tons of high-quality special fruit and vegetable. It is equipped with 600 high-tech sunlight greenhouses such as artificial intelligence rolling curtains, heat preservation, sunshade and ventilation. At present, more than 300 greenhouses have been put into use, providing green and ecological raw materials for Zhonghe quick frozen vegetarian series and vegetable noodle series

中共中央党校 (国家行政学院)

夯实“从田间到餐桌全产业链”，促使食品工业产业化、集群化追求的使命。农业的现代化发展，也促使产业链后端食品产业是良心产业，对中鹤集团来说，发展绿色生态科技农业源于食品工业发展需求，最终目的是为消费者提供营养健康的终端食品，这是中鹤集团作为食品企业一直食品工业产业化、集群化发展。

Strengthen the "whole industrial chain from field to dining table" and promote the industrialization and clustering of food industry

The food industry is a conscience industry. For Zhonghe company, the development of green ecological technology agriculture originates from the development demand of food industry, and the ultimate goal is to provide consumers with nutritious and healthy terminal food, which is the mission Zhonghe group has been pursuing as a food enterprise. The modernization of agriculture also promotes the industrialization and cluster development of food industry at the back end of industrial chain.



“中鹤模式”的主要成效

The main effect of "Zhonghe model"

农业生产方式的转变
Transformation of agricultural
production mode

从分散向现代化规模化转变
From decentralization to
modernization

农民生活方式的转变
The transformation of farmers'
life style

从庭院居住向社区集中居住转变
From courtyard living to
community concentrated living

农村生态环境的转变
Transformation of rural ecological
environment

从凋敝衰败向欣欣向荣转变
From decline to prosperity



- 做大第三产业：推动农区产城互动融合发展
- To enlarge the tertiary industry: to promote the interactive and integrated development of industry and city in agricultural areas



2017年9月，中鹤新城项目荣获联合国全球人居环境奖

In September 2017, Zhonghe new city project won the United Nations global living environment award

“中鹤模式”的经验启示

Experience and Enlightenment of "Zhonghe model"

- (一) 因地制宜：“中鹤模式”恰当利用了当地的农业比较优势，构建了突出的区域竞争力优势。
- (二) 产业布局：“中鹤模式”用工业方式管理农业，将各类生产要素全部纳入现代产业体系，探索农业产业化全产业链经营。
- (三) 人力资本：“中鹤模式”把农民转变为新型职业农民，构建起人力资本体系，支撑乡村振兴。
- (四) 社会治理：“中鹤模式”创新了社会治理方式，破解了长期以来城乡发展不平衡的根本症结，建立起政府、企业、农民利益联结机制。

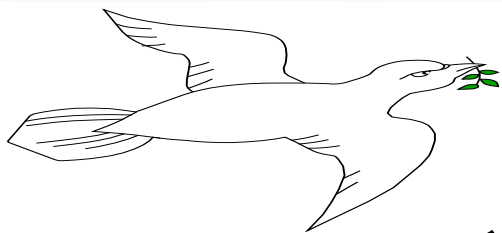
(一) adjusting measures to local conditions: the "Zhonghe model" has made proper use of the local agricultural comparative advantages and constructed outstanding regional competitiveness advantages.

(二) industrial layout: "Zhonghe model" manages agriculture in an industrial way, integrates all kinds of production factors into the modern industrial system, and explores the whole industrial chain management of agricultural industrialization.

(三) Human Capital: the "Zhonghe model" transforms farmers into new-type professional farmers, builds up a human capital system and supports Rural Revitalization.

(四) Social Governance: the "Zhonghe model" has innovated the way of social governance, solved the fundamental problem of unbalanced urban and rural development for a long time, and established a mechanism to link the interests of the government, enterprises and farmers

中共中央党校
(国家行政学院)



谢谢大家!
Thanks

许正中

+8613910422876

xu_zhengzhong@163.com

