

# 中国发展数字农业农村的做法与经验

## Practice and Experience in Developing E-agriculture and E-village of China

中华人民共和国农业农村部信息中心主任 王小兵

Wang Xiaobing

Director General of Information Centre, Ministry of Agriculture and Rural Affairs

P.R. China

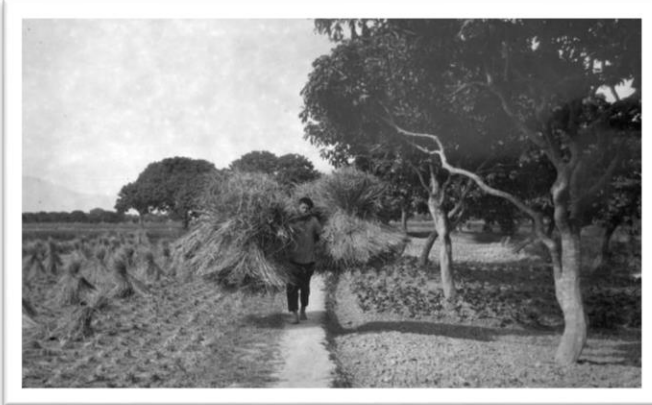
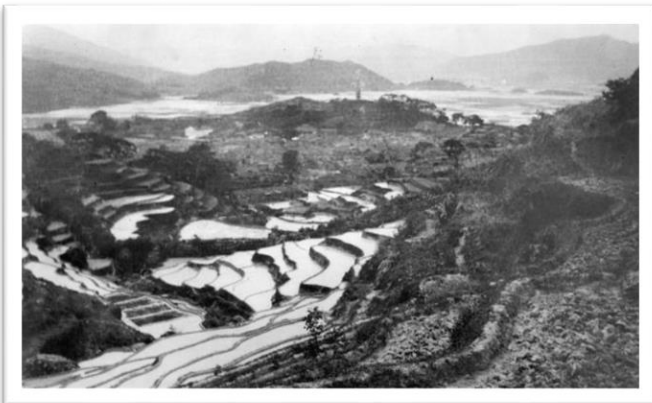
意大利·罗马, 2019年10月  
Rome October, 2019

## 1915年至1932年间的河北秦皇岛 Qinhuangdao, Hebei Province, 1915 -1932

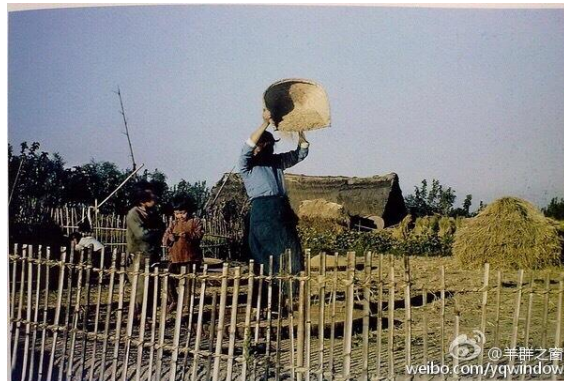
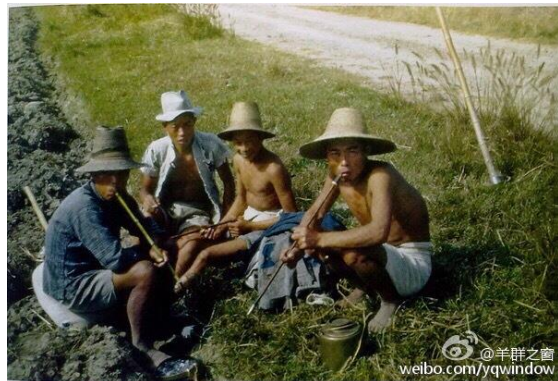
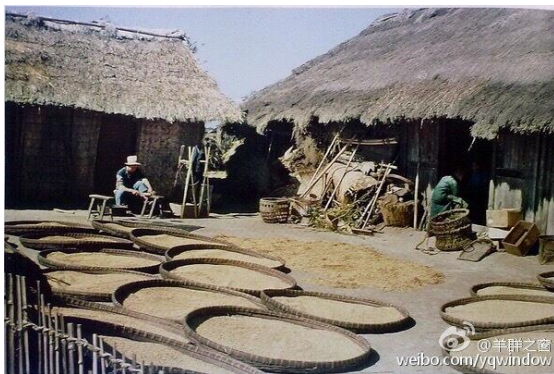
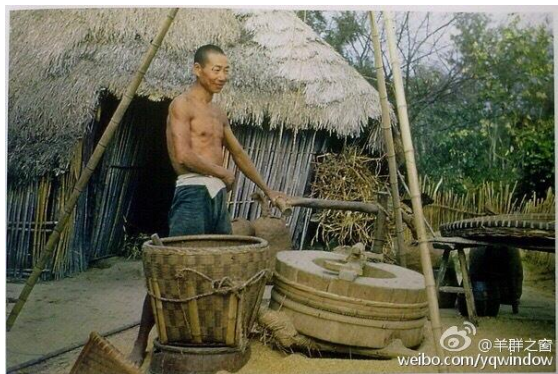


来源：美国人西德尼·D·甘博 (Sidney David Gamble, 1890-1968) 摄

## 1923年的福建福州农村 Fuzhou, Fujian Province, 1923



## 1945年的浙江杭州农村 Hangzhou, Zhejiang Province, 1945



来源：美国飞虎队成员艾伦·拉森、威廉·迪柏摄 Photo by : American Flying Tigers member Alan Larsen, William Debord

# 今天中国的农业、农村、农民 Today



福建成为数字中国战略的发源地，浙江杭州诞生了阿里巴巴等互联网公司



资源变资产、农民变股民、资金变股金

Turn resources to assets, farmers to shareholders, funding to shares



Agri-tourism, Guilin, Guangxi

1

中国农业农村发展取得历史性成就、发生历史性变革  
Development and changes in China's agriculture and rural areas

---

2

中国推动数字农业农村的主要做法与成就  
China's main approach to promoting e-agriculture and e-village

---

3

中国在发展数字农业农村方面的经验  
Experience in e-agriculture and e-village of China

---



# 一、中国农业农村发展取得历史性成就、发生历史性变革

## I. Historic development and unprecedented changes in China's agriculture and rural areas





**“三农”定位：解决好“三农”问题，全党工作重中之重**  
**“Three Rural Issues”：A top priority on the work agenda of the Party**

**新发展理念：创新、协调、绿色、开放、共享**  
**New Development Philosophy：Innovative, coordinated, green, open and shared development**

**推动“三农”工作：理论创新、实践创新、机制创新**  
**Cornerstone in work on “Three Rural Issues”：Innovation in theory, practice and institution**

**农业农村发展：取得历史性成就、发生历史性变革**  
**Agricultural and rural development：Historic achievements and unprecedented changes**



**大国小农** A large country with a large population of smallholders **农耕文明: 5000多年** **History of farming:** Over 5000 years

**中国小农: 传统农耕文明的重要载体、农业农村经济的基本单元**

**Chinese smallholders:** Vital role in conserving traditional farming culture, and basic units of agriculture and rural economy

**全国耕地总面积: 1.35亿公顷**

**Total cultivated land:**

**135 million ha.**

**人均耕地面积: 0.097公顷**

**Per capita availability:**

**0.097 ha.**

**< 2ha.**  
**2.58亿农户**  
**258 million**  
**households**

**> 2ha.**  
**1076.6万农户**  
**10.766 million**  
**households**

**> 13.3ha.**  
**36.6万农户**  
**366,000**  
**households**



## 总体成效 Overall achievement

9%

中国用占世界9%的耕地  
9% of world's cultivated land

6.4%

6.4%的淡水资源  
6.4% of world's freshwater  
resources

20%

解决了占世界近20%人口的吃饭问题  
The ability to feed 20% of world's  
population



# 农业供给侧结构性改革取得新进展

## Advance in agricultural supply-side structural reform

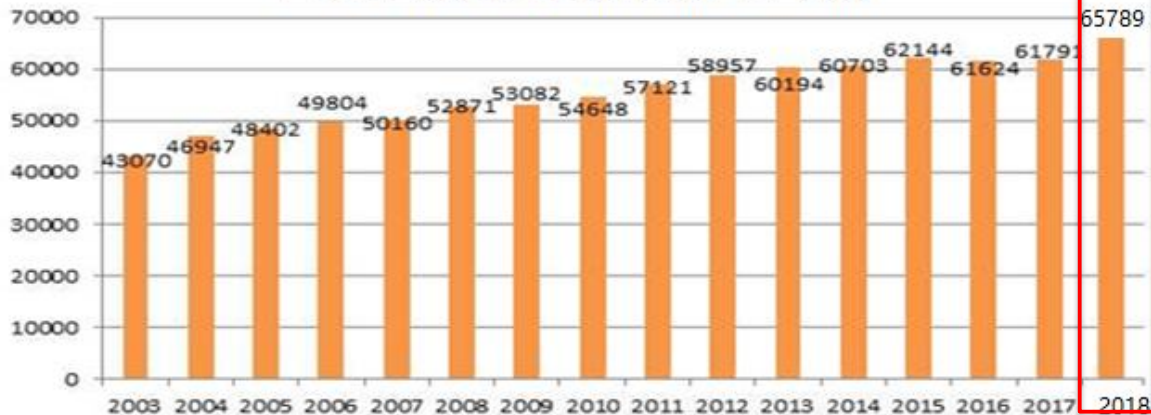
- ◆ 全国粮食总产能**连续6年稳定在6亿吨以上**，主要农产品供给充足，优质绿色农产品比重持续提升。

Annual grain production above 600 million tons (6 consecutive years), abundant supply of agricultural products, increasing share of high-quality green products.

- ◆ 农民合作社、家庭农场等新型农业经营主体不断发展壮大，**已超过300万家**。

New types of agribusinesses including farmers cooperatives and family farms keep growing, reaching over 3 million.

### 2003-2018年中国粮食总产量 (吨)



China's Grain Production 2003-2018 (ton)

67%

主要农作物耕种收  
综合机械化水平

Mechanized tilling, sowing and  
harvesting of main crops

58.2%

农业科技进步贡献率

Contribution of science  
and technology  
to agricultural growth

# 农村改革取得新突破

## Breakthroughs in rural reform

- 坚持市场化改革取向，取消临时收储政策，农产品市场形成价格机制基本建立。Abolishing state stockpiling and adopting market-based pricing system.
- 坚持农村基本经营制度，推进承包地“三权分置”改革，承包地确权面积超过80%。Adhering to the basic rural operation system, and promoting the reform to separate ownership rights, contract rights and management rights for contracted land. More than 80% of contracted land has been registered and certified.
- 推动农村创业创新，大力发展休闲农业、农村电商、乡村旅游等新产业新业态新模式。Encouraging innovation and entrepreneurship in rural areas, and promoting the development of new industries and business models in recreational agriculture, rural e-commerce and rural tourism.

保护所有权  
Protect  
ownership  
rights

稳定承包权  
Stabilize  
contracting  
rights

放活经营权  
Liberalize the  
transfer of  
management  
rights



# 城乡发展一体化迈出新步伐

## Integrated urban-rural development

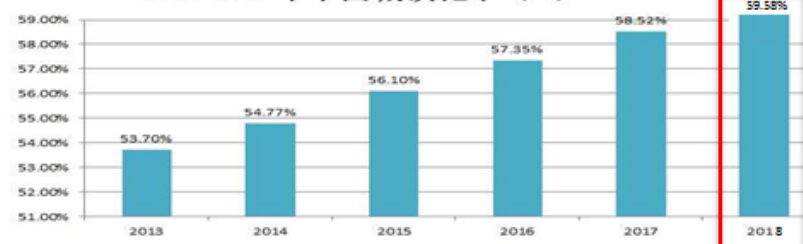
农民收入增速连年快于城镇居民，农民的衣食住行用全面改善，城乡差距逐渐缩小。农村居民恩格尔系数从**2012年的39.3%**下降至**2018年的30%**。2018年农村居民人均可支配收入达到**14,617元**（约2100美元），城乡收入差距比**2.69:1**。Rural residents have seen faster income growth than urban residents for years in a row and steady improvement in their living standards. The divide between urban and rural areas is gradually shrinking. The Engel's Coefficient in rural areas has dropped from **39.3% in 2012 to 30% in 2018**. The per capita disposable income of rural residents reached **14,617 RMB** (about US\$2,100). Urban-rural income gap is **2.69:1**.

2013-2018年中国农村人均可支配收入（元/年）



Per capita disposable income of rural residents 2013-17 (RMB/year)

2013-2018年中国城镇化率（%）



China's urbanization rate 2013-2018 (%)

浙江·余村  
Yu Village, Zhejiang



四川·阴平村  
Yinping Village, Sichuan

# 农村公共服务和社会事业达到新水平

## Improvement in rural public service and social undertakings

农村水、电、路、气、房和**信息化**建设全面提速，农村人居环境整治全面展开。全国农村公路总里程达到**405万公里**，乡镇（**99.6%**）和建制村（**99.5%**）基本全部实现通硬化路，全国农村自来水普及率达81%，厕所革命让村庄更加宜居。城乡居民基本养老保险机制开始并轨，农村大病医疗保险从无到有并基本实现全覆盖。

Over the past years, comprehensive improvement has been made in rural infrastructure, **ICT application**, and living environment. The rural road length in China reached **4.05 million kilometers**, and **99.6%** of townships and **99.5%** of administrative villages have tarmac and cement roads. The national rural tap water penetration rate reached 81%. **The toilet revolution** (pit-lavatory dry to flush) made villages more livable. China has started to integrate pension schemes for rural and non-working urban residents. The serious disease insurance system which was not in place in rural areas years ago has **now covered all rural populations**.





# 脱贫攻坚开创新局面

## Progress in poverty alleviation

稳步推进产业扶贫、教育扶贫、健康扶贫、生态扶贫等举措，精准扶贫精准脱贫方略落地生效。自2012年以来，累计**8,239万**贫困人口稳定脱贫，贫困发生率从2012年的**10.2%**下降到2018年**1.7%**。截至2018年底，全国还有农村贫困人口**1660万人**。

Poverty is alleviated through the development of local industries, education and healthcare, and through the development and conservation of local ecological resources. The targeted poverty alleviation strategy has been implemented and started to pay off. Since 2012, **82.39 m** people have been lifted out of poverty, and the poverty headcount ratio has dropped from **10.2% in 2012 to 1.7% in 2018**. By the end of 2018, there were **16.6 million** rural poor in the country.



发展生产  
脱贫一批

Development of local  
industries



易地搬迁  
脱贫一批

Relocation



生态补偿  
脱贫一批

Ecological  
compensation



发展教育  
脱贫一批

Development of  
education



社会保障  
兜底一批

Social security

“五个一批” 脱贫措施 poverty alleviation through five measures

# 农产品国际贸易实现新提升

## A new high in agricultural trade

目前，中国已经成为世界**第二大农产品贸易国**。

China is the **second largest** trader of agricultural products.

2018年进出口总额  
2168.1亿美元  $\uparrow$  7.7%

2018 agricultural trade value US\$ 216.81 b

$\uparrow$  5.5%

出口 export  
797.1亿美元  
US\$79.71b

进口 import  
1371亿美元  
US\$137.1b

$\uparrow$  14%  
贸易逆差  
573.8亿美元  
trade deficit US\$57.38b

世界的机遇  
Opportunity  
to the world!



## 二、中国推动数字农业农村发展的主要做法与成就

## II. China's main approach to promoting e-agriculture and e-village



MINISTRY OF AGRICULTURE AND RURAL AFFAIRS  
OF THE PEOPLE'S REPUBLIC OF CHINA



Home

About MOA

Overview

Government Affairs

Services

International Cooperation

Hot Topics

On-line Exhibition

• 2019-03-30 China, Pacific Island Count... • 2019-02-26 First Meeting of the [More>>](#)

SEARCH

News

[More>>](#)

- China, Pacific Island Countries agree to enhance agr... (03-30)
- The First Meeting of the China-Malaysia Agricultural... (02-26)
- Vice Minister Yu Kangzhen Meets OIE Director General... (02-21)
- Vice Minister Qu Dongyu Meets Lithuanian Counterpart (02-14)
- China is Capable of Controlling ASF (02-13)
- Minister Han Changfu Meets WFP Executive Director an... (01-30)
- Vice Minister Zhang Taolin Meets Italian Minister of... (01-28)
- Vice Minister Qu Dongyu Visits Germany and Netherlands (01-28)

About MOA

- [Message from the Minister](#)
- [Leaders of MOA](#)
- [Mandates](#)
- [Departments](#)
- [Subordinate institutions](#)
- [Social Organizations](#)



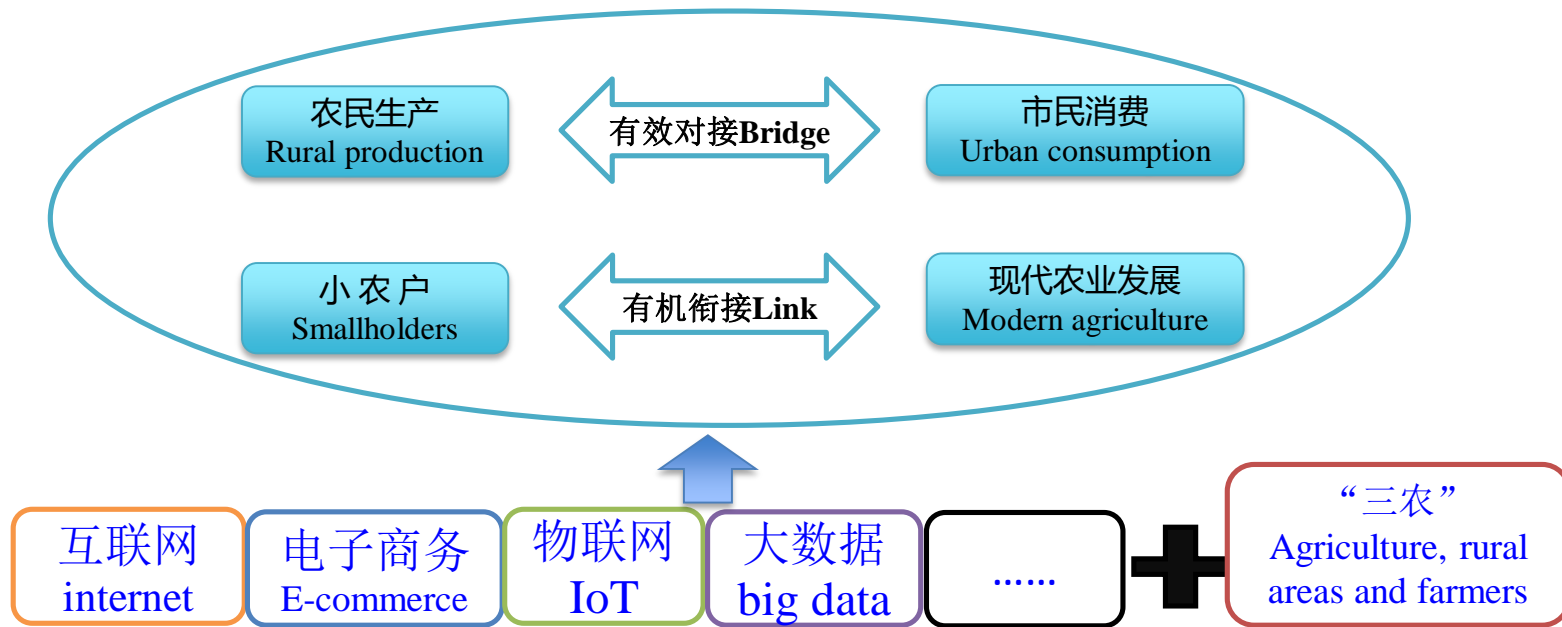
First Meeting of the China-Malaysia Agricultura...

[more>>](#)

# 大力发展数字农业 建设数字乡村

## Vigorously develop e-agriculture, build e-villages

- **信息化发展客观规律:** 信息通信技术连接人、连接商业、连接产业  
**Nature of ICT development:** connecting people, businesses and industries
- **数据链:** 带动和提升农业的产业链、供应链和价值链  
**Data chain:** enhancing agricultural supply chain, industry chain and value chain



# 实施“宽带乡村”工程

## Implement the "Broadband Village" project



四川大凉山“悬崖村”建基站:4万斤建材、25公里山路全靠肩挑背负。  
The base station of the “Lake Village” in Daliang Mountain, Sichuan province: 40,000 kilograms of building materials are shoulder-carried along the 25 kilometers of mountain roads on foot.



## 网络提速降费

Improve the speed of the internet and reduce costs

我国移动流量平均单价从**97.1元/G**（2015年5月）降至每**G不到10元**（2018年5月），月户均上网流量从**294M**上升至**4.4G**。2018年7月1日全面取消国内流量漫游费后，流量使用进一步提升。

The average unit price of mobile traffic in China dropped from **US\$14 /G** (May 2015) to less than **US\$1 per G** (May 2018), and the average monthly DOU(dataflow of usage) per household increased from **294M** to **4.4G**. After the domestic traffic roaming fee was completely cancelled on July 1,2018, the traffic usage was further improved.

The people are faithful;  
the country is powerful;  
the nation is hopeful.



# 农村网络基础支撑能力明显增强

## Strengthened internet infrastructure in rural areas

农村通宽带率

Rural broadband coverage

98%

贫困村宽带覆盖率

Poor village broadband coverage

95%

有电商配送站的行政村

Villages with e-commerce distribution sites

64%

2.25亿

农村网民数

Rural internet users 225m

64.5%

县域城乡互联网普及率

Rural internet penetration



贵州·千户苗寨

Xijiang Qianhu Miao Village, Guizhou

# 大力发展农村电子商务

## Thriving e-commerce in rural areas

➤ **原则：**政府引导、市场主体、农民受益

**Principle:** market-based, government-guided, and benefiting farmers

➤ **模式：**平台+自营、平台+商家店铺、平台+品牌营销、全产业链运营……

**Models:** “platform+self-run selling”, “platform+businesses”, “platform+brand marketing”, and whole value chain business operation

➤ 2018年全国农产品网络零售额达**3490.7亿元**，同比增长43.3%。

In 2018, the national agricultural product network retail sales reached 349.07 billion RMB (\$49.2 Billion) , increase of 43.3%.



## 农村电商工程

建设电商支撑服务体系

Rural e-commerce Project

—  
building

an e-commerce backed service system





# 社交电商、视频电商蓬勃兴起

Thriving social e-commerce and video e-commerce in rural areas



拼购村



## 巧妇9妹

- 打造了全网千万粉丝的电商大品牌。

It has created an e-commerce brand with millions of fans across the network.

- 2018年销售农产品产值突破**2300万元**。

In 2018, the output value of agricultural products sold exceeded **US\$3.22million**.

- 创造了视频直播2小时下单10万斤水果的奇迹。

It has created a miracle of selling **50,000 kg fruit in 2 hours** video live.

- 提供**200个**就业岗位帮助了**200**贫困户。

It has provided **200 jobs** to help **200 poor households**.





## 传播民族文化

Use short video to spread the unique culture of the ethnic



利用短视频讲授种植知识、为农户解决问题, 并推广有用的种植技术

Use short videos to teach planting knowledge, solve problems for farmers, and promote useful planting techniques.

# 电商减贫

## Poverty reduction through e-commerce

➤ 农村电商为残疾人赋能——陕西省洛川县屈万平。

Rural e-commerce empowers disabled people - Qu Wanping, Luochuan

County, Shaanxi Province.

➤ 甘肃省陇南市，架“天线”走“网路”，建立“电商+贫困户”帮扶机制。

Longnan, Gansu Province, improves local internet infrastructure and established the “e-commerce + farmer” assistance model.

➤ 贵州省，实施“黔货出山”电商行动。

Guizhou Province sells products out of remote mountainous areas through e-commerce.



Guizhou

贵州



新华网  
WWW.NEWS.CN

# 全面提升农村综合信息服务

## Upgraded rural information service

### 实施信息进村入户工程

Information entering rural households

### 开展农民手机应用技能培训

Training farmers to use smartphone

把村子推向世界，把世界带进村子

Connecting villages to the world

中国从2014年开始实施信息进村入户工程，着力在每一个行政村建设村级信息服务站点，为农民提供政策信息、农产品销售、市场信息、技术指导和水电气缴费、买票、教育、医疗、金融等服务、以及信息技术和网络应用的培训，**让农民借助信息化互联网进一个门办样样事。**

Since 2014, China has implemented the information entering rural households project, focusing on building information service stations in each administrative village to provide farmers with policy information, agricultural product sales, market information, technical guidance, water and electricity payment, ticket purchase, education, the training of medical and financial services, as well as information technology and network applications. **The stations can help people to enter a door to do everything by network.**

# 益农信息社

## Information stations in rural for farmer



- **“六有”标准：**有场所、有人员、有设备、有宽带、有网页、有持续运营能力

**Construction standards:** suitable avenues, professionals, equipment, broadband, web pages, and continuous operation capabilities.



- **“四项”服务：**公益服务、便民服务、电子商务和培训体验

**Service type:** Public service, convenience service, e-commerce and training



## 建设服务成效 (截止2018年底)

Effectiveness (end of 2018)

- 全国已建成运营超过**27.2万**个益农信息社 (覆盖中国近一半的行政村)

**272,000** information stations,  
Covering nearly half of China's  
administrative villages

- 提供公益服务近**1亿**人次

public service **100 million** person-times

- 开展便民服务**3.14亿**人次

convenience service **314 million** times

- 实现电子商务交易额**244亿元**

e-commerce transaction amount  
**\$3.42 Billion**

- 累计培训农民超过**3000万**人次, 辐射**4亿**多农民;

Training more than **30 million**  
farmers, influencing more than **400**  
**million** farmers;

- “农民学手机” APP年度装机量超过**35万**。

The application of “farmers learn  
smartphone” has been installed more  
than **350,000** in one year.



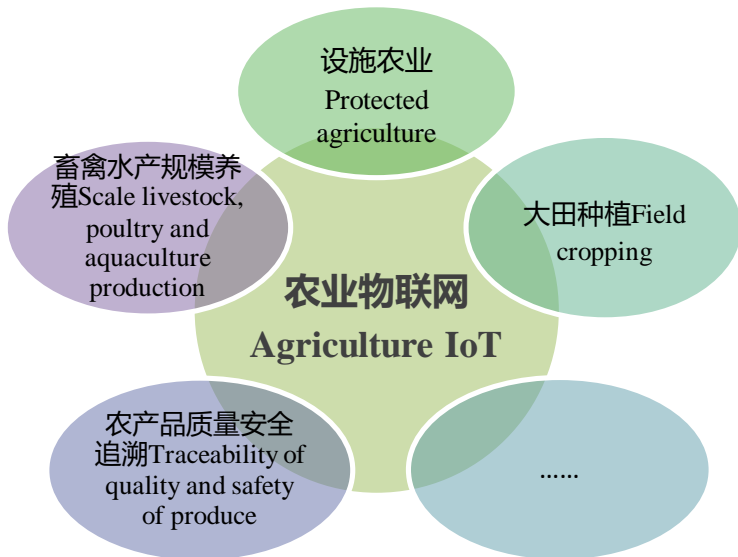


## 推动物联网技术在农业生产中应用

### Pilot Digital Agriculture and IoT

通过工程项目的示范带动，物联网、卫星遥感、大数据等现代信息技术在种植业、养殖业等行业得到推广应用

Driven by the demonstration projects, Internet of Things, satellite remote sensing, and big data have been applied in industries such as crop production, animal production and aquaculture.



➤ 2014-2015年先后征集、发布了**426项**节本增效农业物联网产品、技术和应用模式。

Has collected and published **426** cost-effective agricultural IOT products, technologies and models.

➤ 2019年开展数字农业农村新技术、新产品、新模式征集活动，经初审后有**316项**入围进入专家评审。

In 2019, we have collected e-agricultural new technology, new products and new model. After the initial review, **316** finalists entered the expert review.

## 推动物联网技术在农业生产中应用

### Pilot Digital Agriculture and IoT

- 2017年启动实施数字农业建设试点，重点开展**大田种植、设施园艺、畜禽养殖、水产养殖**4类数字农业建设试点项目。

In 2017, the pilot project for e-agriculture was launched, focusing on field planting, protected horticulture, livestock and poultry breeding, and aquaculture.

- 2018年成功发射了首颗**农业高分卫星**，为农业监测安上了“**天眼**”，**北斗卫星**在渔船安全生产、农机作业中加快应用。

In 2018, the first agricultural high-definition earth observation satellite was successfully launched, which has installed "eyes in the sky" for agricultural monitoring. The Beidou satellites were applied in the safe production of fishing vessels and agricultural machinery operations in a faster pace.



## 取得了明显的经济、社会和生态效益

### Notable economic, social and ecological benefits



新疆棉花种植项目区肥料利用率提高**20%**以上，  
土地利用率提高**8%**，综合效益每公顷增加**3,150**  
元。

In cotton-growing area of Xinjiang Uyghur Autonomous  
Region, IoT has improved fertilizer efficiency by 20%,  
land use rate by 8%, and overall benefits/ha. by \$442.

江苏无锡水产养殖单位面积平均增产**10%**，  
节省电费**1,200**元/公顷，每公顷增收**15,000-**  
**19,500**元。

In Wuxi, Jiangsu Province, IoT has lifted  
aquaculture output per unit area up by 10%,  
reduced power bill by 168 dollar/ha., and secured  
income growth by 2,106-2,667 dollar/ha.



# 快速推进农业农村大数据发展

## Rapid deployment of big-data technology

### 组织开展农业农村大数据试点：建立条数据

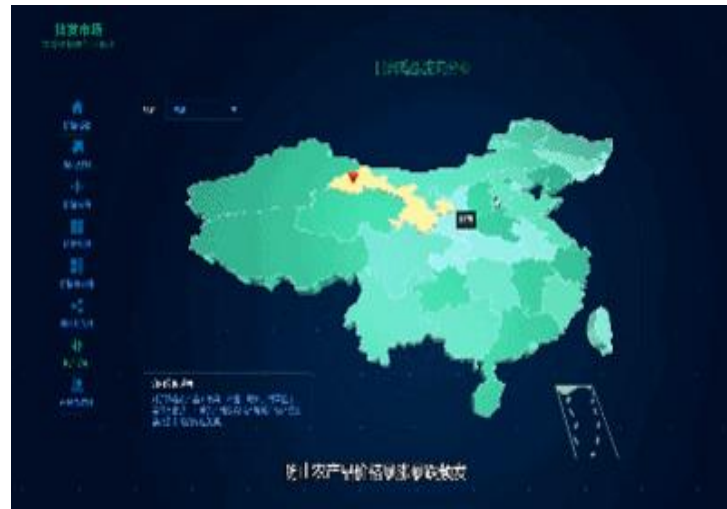
Pilot scheme big data for agriculture: strip data

单品种全产业链推进——苹果、生猪、茶叶……

大数据发展应用——熨平市场价格波动，减轻灾害损失，引导金融服务业健康发展，促进农业高质量发展。

Whole-chain application for selected species-apple, swine, tea, etc.

Big data-address market price volatility, reduce losses by disasters, advance healthy development of financial service, and promote high-quality development of agriculture.



### 政务信息资源整合——建立块数据

Integration of administrative information: block data

农业农村政务信息资源目录

数据共享平台

业务系统数据资源汇聚

国家农业农村地理信息平台

Catalogue of information resources on agriculture and rural areas

Data-sharing platform

Data collected from all agricultural agencies

National Agricultural and Rural Geographic Information Platform

## 苹果全产业链大数据——一条数据建设

### Big data of apple's entire industry chain——Strip Data



围绕中国苹果产业发展的突出问题和薄弱环节，加快苹果产业**数字化改造**，建设苹果全产业链大数据，发挥大数据**优化资源配置**和**预测预警**的核心作用。

Focusing on the outstanding problems and weak links in the development of China's apple industry, we will accelerate the digital transformation of the apple industry, form the big data of apple's entire industry. The aim is use big data to optimize resource , predict situation and pre-warn disaster.



**生产**  
Produce



**仓储流通**  
Warehouse  
and circulate



**加工**  
process



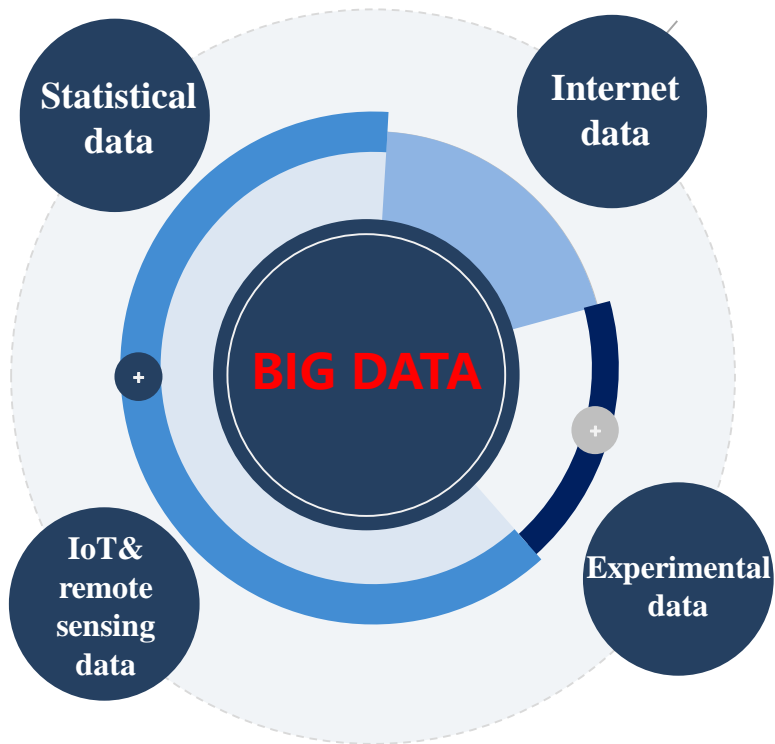
**消费**  
consume



**贸易**  
trade

# 数据来源

## Data Sources



构建天空地一体化的数字资源体系，建立和打通传统监测统计、互联网数据和文本挖掘、物联网在线动态感知、实验室和检验检测机构等4条数据采集渠道。

Build a data resource system integrating the Satellite remote sensing, Drone & UAV and IoT. Establish four data collection channels such as traditional statistics, Internet data and text mining, Internet of Things online dynamic perception, laboratory and inspection & testing institutions.



# 国家苹果大数据公共平台

## National Apple Big Data Public Platform



初步实现了数据在线分析、智能监测预警、可视化展示服务，形成了苹果大数据一张图。目前，已在苹果产量早期评估，病虫害和气象灾害监测预警，市场供需和价格走势预测等方面取得明显的经济、社会、生态效益。

China has basically realized data online analysis, intelligent monitoring and early warning, visual display services, formed a map of Apple big data. At present, it has achieved obvious economic, social and ecological benefits in the early evaluation of apple production, monitoring and early warning pests and diseases, forecasting meteorological disasters, predicting market supply & demand and price trend.



猪联网——生猪大数据平台  
Swine IoT – big data platform for swine

马铃薯大数据平台  
Big data platform for potatoes



# 国家农业农村地理信息平台——块数据

National Agricultural and Rural Geographic Information Platform ——Block Data

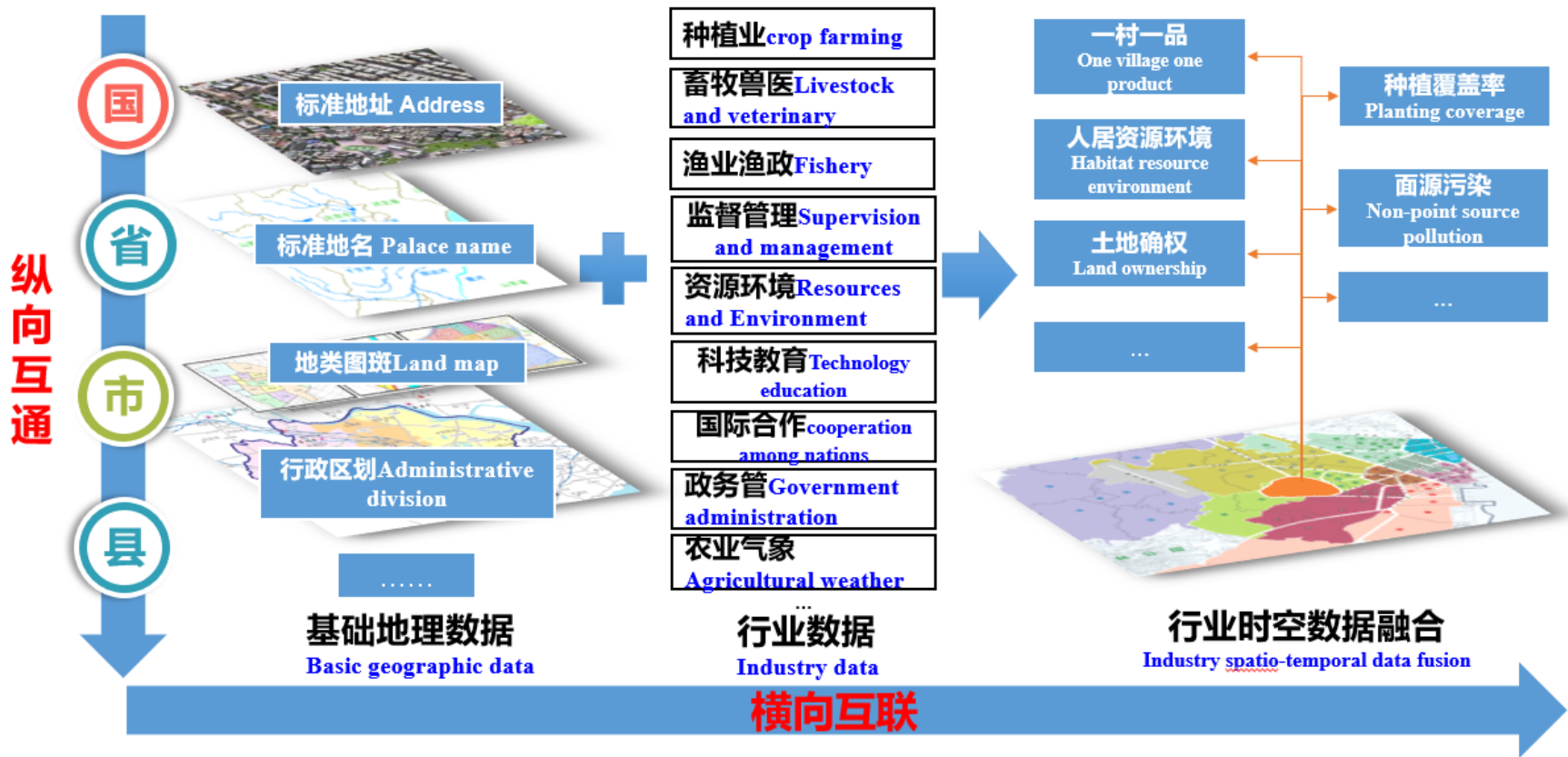
构建农业农村的数字地图，形成时空信息服务“超市”，按需提供服务。

Building a digital map in the agriculture and rural areas, forming a “supermarket” of spatio-temporal information services, providing services on demand.



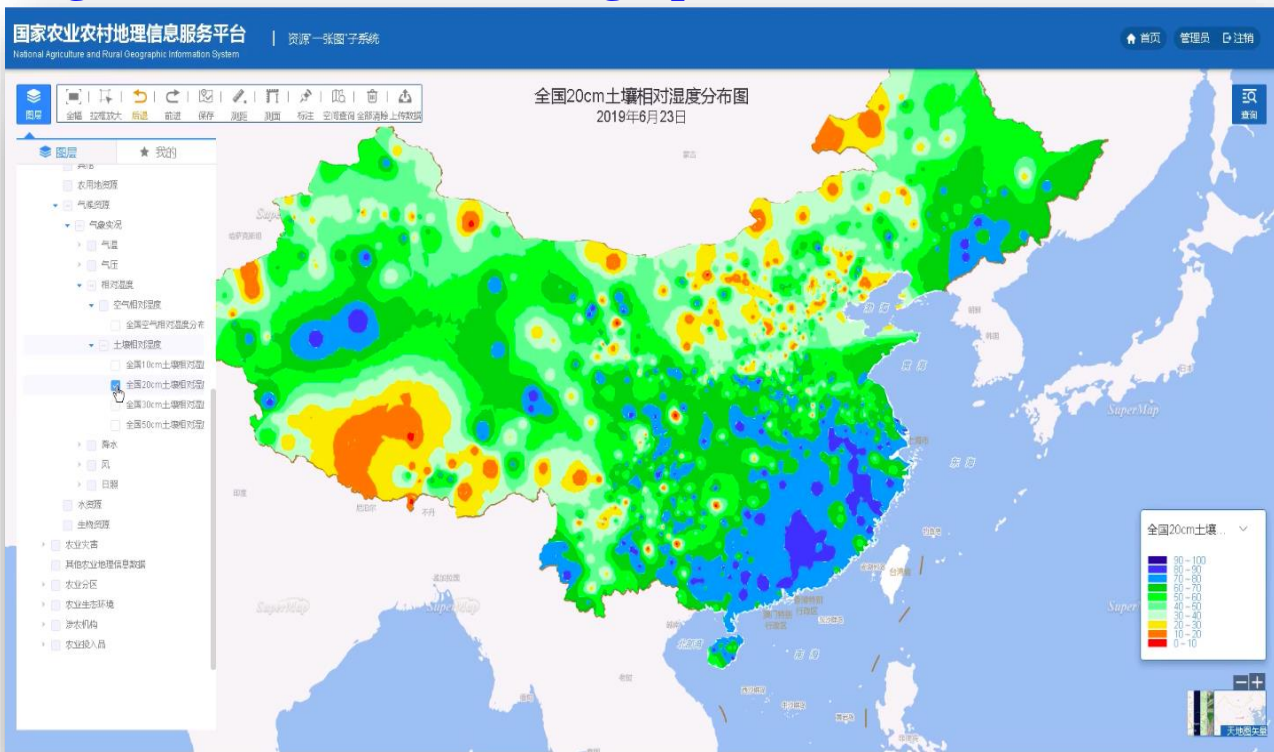
# 全国农业农村一张图、一个平台

A map and a platform for the nation's agricultural and rural areas



# 国家农业农村地理信息平台

## National Agricultural and Rural Geographic Information Platform



完成7类气象实况数据解析，初步实现数据上图，包括：空气相对湿度、土壤相对湿度、降水、日照时数、小时气温、气压、10分钟平均风速图

**Integrated 7 types of meteorological data**

### 三、中国在数字农业农村发展方面积累了宝贵经验

#### III. Experience in e-agriculture and e-village of China



## 时代背景 Background

- 信息化为人类社会带来了千载难逢的机遇，已经成为引领驱动农业农村创新发展的先导力量
- ICT presents unprecedented opportunities for the whole world to promote innovation-driven development of agriculture and rural areas

## 指导思想 Guidance

- 习近平新时代中国特色社会主义思想及网络强国战略思想和“三农”重要思想
- Xi Jinping Thought on Socialism with Chinese Characteristics In a New Era, strategic thought of building China's strength in cyberspace, and thought on agriculture, rural areas and farmers

## 基本方略 Strategy

- 坚持新型工业化、信息化、城镇化、农业现代化同步发展
- Balanced development of new industrialization, ICT application, urbanization, and agricultural modernization

## 做法经验 Practices

- 坚持把信息化作为农业农村现代化的制高点，加强顶层设计，采取综合措施，推动信息通信技术与“三农”深度融合，加快农业数字化、网络化、智能化
- Prioritizing ICT application in agricultural and rural modernization, improving roof design and taking holistic measures to integrate ICT with the development of rural areas, agriculture and farmers for a digital, internet-based and smart farming sector

# 创新完善政策体系

## Improving policy systems through innovation



- **要加快信息化服务普及，为老百姓提供用得上用得起用得好的信息服务。**  
Provide accessible, affordable and high-quality information services for the people.
- **要瞄准农业现代化主攻方向，提高农业生产智能化、经营网络化水平。**  
Advance agricultural modernization by developing smart production and internet-based operation.
- **要发挥互联网在助推脱贫攻坚中的作用，推进精准扶贫、精准脱贫，让更多困难群众用上互联网，让农产品通过互联网走出乡村，让山沟里的孩子也能接受优质教育。**  
Leverage the role of the internet in targeted poverty alleviation so that more poor people can have access to the internet. Agricultural products can be sold out of villages through e-commerce, and children in remote mountainous regions can receive high-quality education.
- **要面向农村这片广阔沃土，推进信息资源整合共享与利用，完善民生保障信息化服务，让农民有更多获得感、幸福感、安全感。**  
Promote the integration, sharing and utilization of information resources in rural areas, improve the information service of people's livelihood, and let farmers have more sense of acquisition, happiness and security.

# 创新完善政策体系

## Improving policy systems through innovation



**“十三五”农业农村信息化发展规划、“互联网+”现代农业三年行动实施方案、电子商务行动计划、农业农村大数据实施意见、数字乡村战略纲要……**

**The ICT Application Plan for Agriculture and Rural Areas during the Thirteenth Five-Year Period, the Three-Year Action Plan on “Internet Plus” Modern Agriculture, the Action Plan on E-commerce, and the Opinions on Implementing Big Data Application in Agriculture and Rural Areas, E-village Strategy Outline ……**

## 加强网络基础设施建设

### Strengthening ICT infrastructure construction

- 充分发挥政府统筹规划、整体协调的作用，积极调动社会各方参与。

Government plays a role in planning and coordinating, and mobilizing parties in the society to participate.

- 实施农村宽带网络工程，推进提速降费和电信普遍服务，扩大4G网、光纤网在农村的有效覆盖，进一步把网络服务延伸到户，大幅提升农村互联网普及率。

Implement rural broadband network projects, promote speed-up and fee reduction, supply universal telecommunication services, expand the effective coverage of 4G networks and fiber-optic networks in rural areas, further extend network services to households, and significantly increase rural Internet penetration rates.

- 实施信息进村入户工程和农村电商工程，提升农村公共服务供给能力和服务水平。

Implement information entering rural households project and Rural e-commerce project to improve the rural public service supply capacity and service level.





# 充分发挥市场主体作用

Giving full play to the primary role of market

投资、税收、用地、用电优惠

Supportive policies on

investment, tax revenue, land

and electricity

信息通信技术 ICT

工商资本、返乡下乡创业人员  
Business capital, return start-ups

农业农村创新创业  
Innovation and entrepreneurship

新产业新业态新模式  
New industry, new business forms, new models

使市场在资源配置中起决定性

作用&更好发挥政府作用

Enabling the market to play a decisive role in resources allocation and the government to improve its role

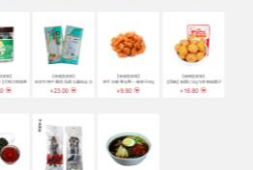
- 农业互联网企业不断涌现  
Rural internet enterprises keep springing up
- 大型互联网平台企业纷纷进军农村市场  
Large internet companies have started to explore the rural market
- 传统农业企业也纷纷向数字化转型  
Traditional agricultural enterprises have embraced digital operation

# 充分发挥市场主体作用

## Giving full play to the primary role of market



习近平总书记指出：“可以发挥互联网在助推脱贫攻坚中的作用，推进精准扶贫、精准脱贫，让更多困难群众用上互联网，让农产品通过互联网走出乡村，让山沟里的孩子也能接受优质教育。”



阿里巴巴集团、京东集团、苏宁云商集团、中国邮政集团等企业纷纷布局农村电子商务市场。

Alibaba, JD.com, Suning Commerce and China Post have started to explore the e-commerce in rural areas.

## 做好试点示范和培训引导

Carrying out pilot demonstration projects and trainings

### 先试点后推开

Pilot program before full-scale implementation

做给农民看、带着农民干、领着农民赚

Implement demonstration projects, take the lead to mobilize farmers and increase their income



# 全国县域数字农业农村发展水平评价情况

Evaluation on e-agriculture and e-village at county level



海南·农业互联网小镇  
Internet agricultural town, Hainan

# 指标体系

## Indicator system

### KPI关键绩效指标 (KPI Key Performance Indicators)



一级指标 (Primary indicator)



二级指标 (Secondary indicators)

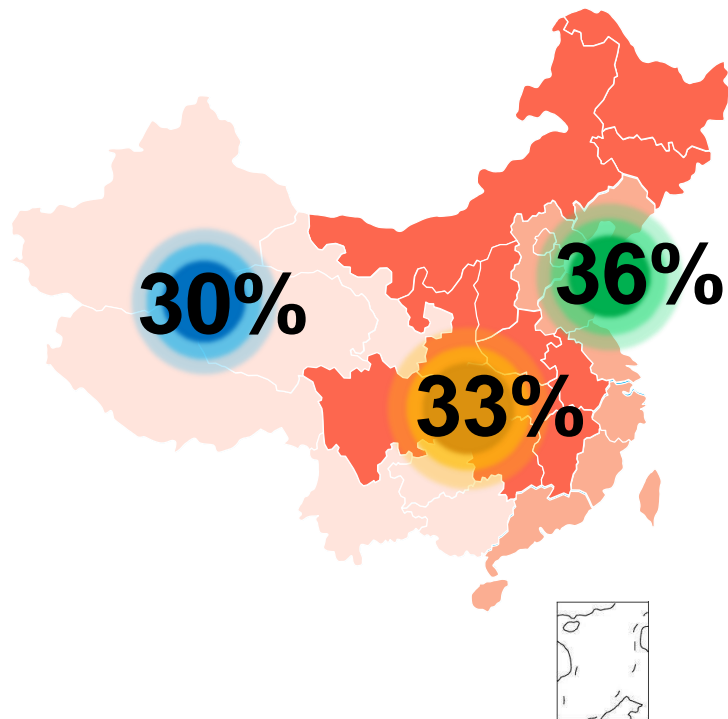


三级指标 (Three-level indicator)

指标名称	权重	指标名称	权重	指标名称
发展环境	20%	农业农村信息化财政投入情况	50%	乡村人均农业农村信息化财政投入 (万元/人)
		农业农村信息化管理服务机构情况	50%	县级农业农村信息化管理服务机构设置情况 (是, 否)
基础支撑	10%	互联网普及程度	50%	互联网普及率 (%)
		电商服务站建设情况	50%	电商服务站覆盖率 (%)
信息消费	10%	人均信息消费情况	100%	城乡居民通信消费系数 (%)
生产信息化	20%	农作物种植信息化应用情况	30%	信息技术在农作物种植中的应用率 (%)
		设施栽培信息化应用情况	15%	信息技术在设施栽培中的应用率 (%)
		畜禽养殖信息化应用情况	30%	信息技术在畜禽养殖中的应用率 (%)
		水产养殖信息化应用情况	25%	信息技术在水产养殖中的应用率 (%)
经营信息化	20%	农产品网络销售情况	70%	农产品网络销售率 (%)
		农产品质量安全追溯信息化应用情况	30%	农产品质量安全追溯信息化应用率 (%)
乡村治理信息化	10%	农村党务、村务、财务公开信息化应用情况	100%	信息技术在农村党务、村务、财务公开中的应用率 (%)
服务信息化	10%	信息进村入户建设情况	100%	信息进村入户村级信息服务站覆盖率 (%)

# 全国县域数字农业农村发展总体水平为33%

overall level of e-agriculture and e-village at county level is 33%

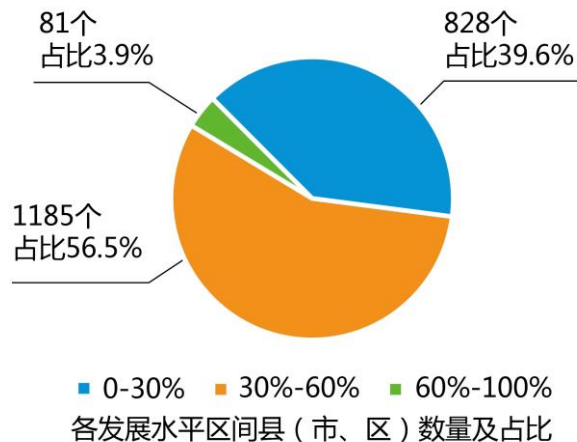


前100名的县（市、区）平均发展水平为62%

The average of the top 100 is 62%

前500名的县（市、区）平均发展水平为45%

The average of the top 500 is 45%

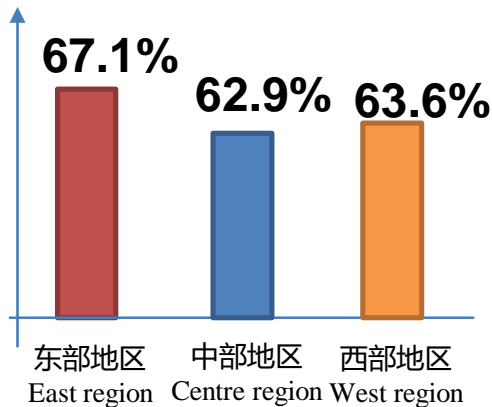


# 全国县域城乡居民人均电信消费为507.53元

The per capita telecommunications consumption of urban and rural residents in the county is \$71.3.

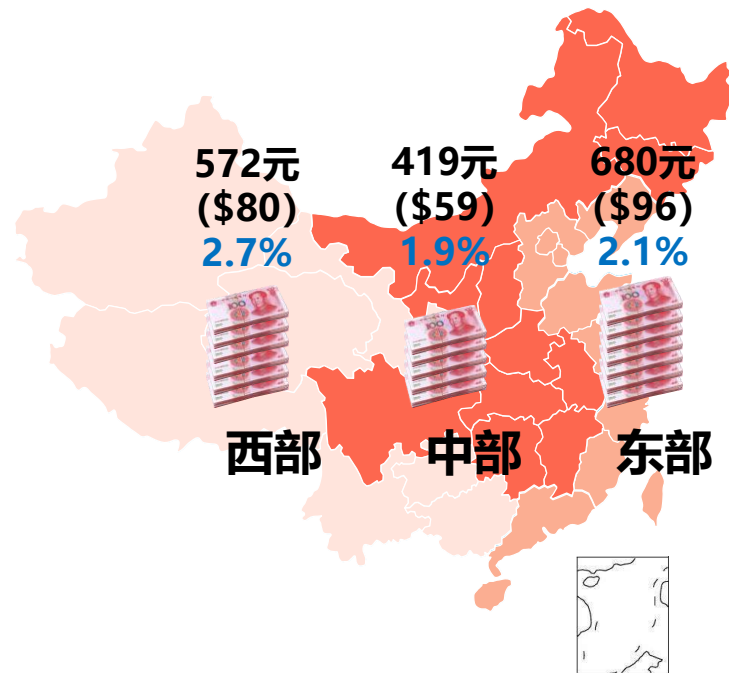
占县域城乡居民人均可支配收入的**2.2%**

Accounting for **2.2%** of the per capita disposable income of urban and rural residents in the county



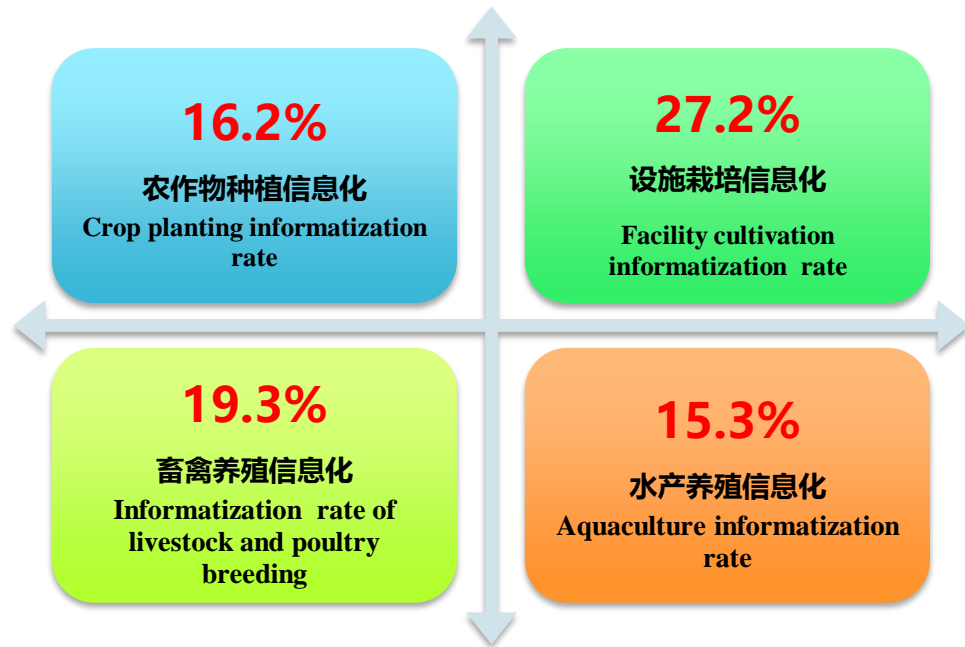
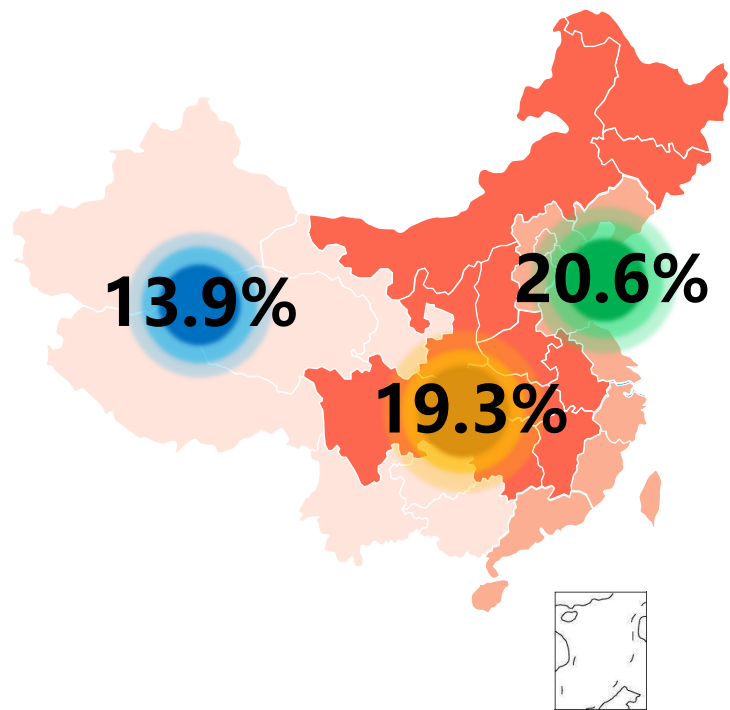
不同地区县域互联网普及程度

County Internet penetration in different regions



# 农业生产数字化水平为18.6%

The informatization level of agricultural production is 18.6%



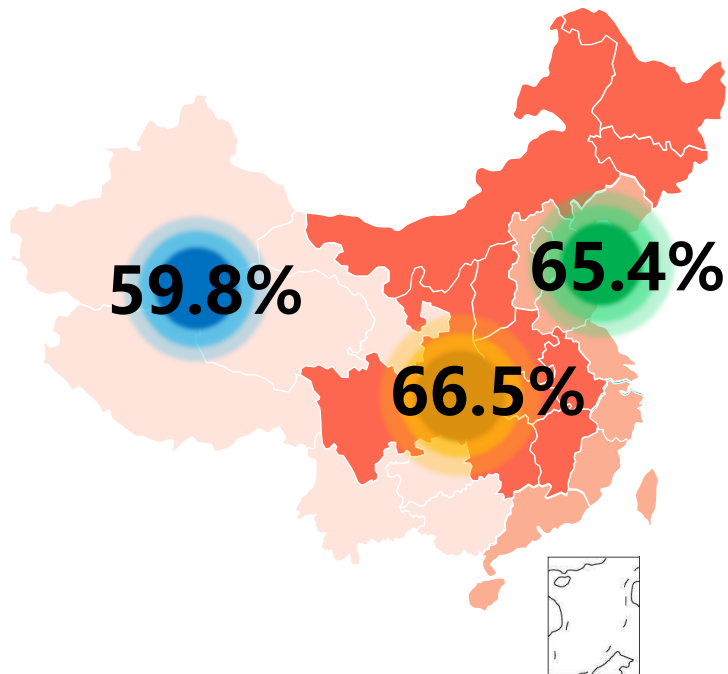


## 行政村电子商务站点覆盖率为64%

Administrative village e-commerce site coverage rate is 64%

已建有电子商务服务站点的行政村为**28.34万个**，共有电子商务服务站点**39.1万个**

The number of administrative villages that have established e-commerce service sites is **283,400**, and there are **391,000** e-commerce service sites.



893

覆盖率  
超过80%  
Coverage  
more than  
80%

746

覆盖率  
超过90%  
Coverage  
more than  
90%

606

28.9%  
全覆盖  
Full  
coverage

## 县域农产品网络零售额接近农产品交易额的9.8%

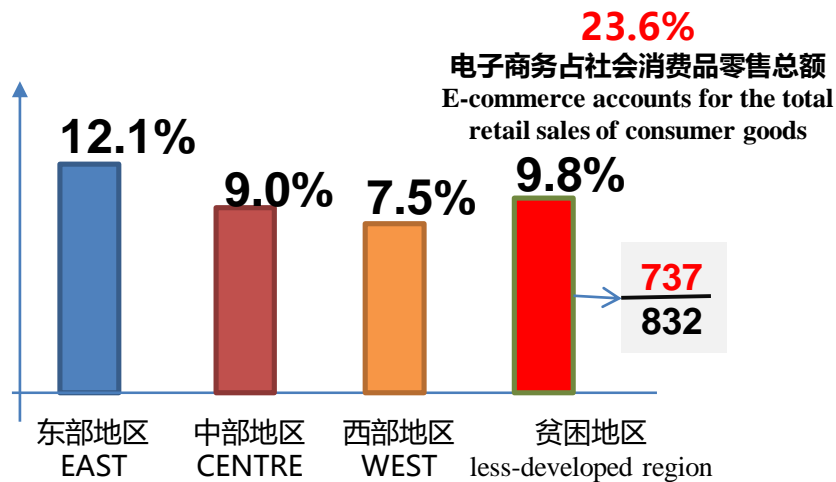
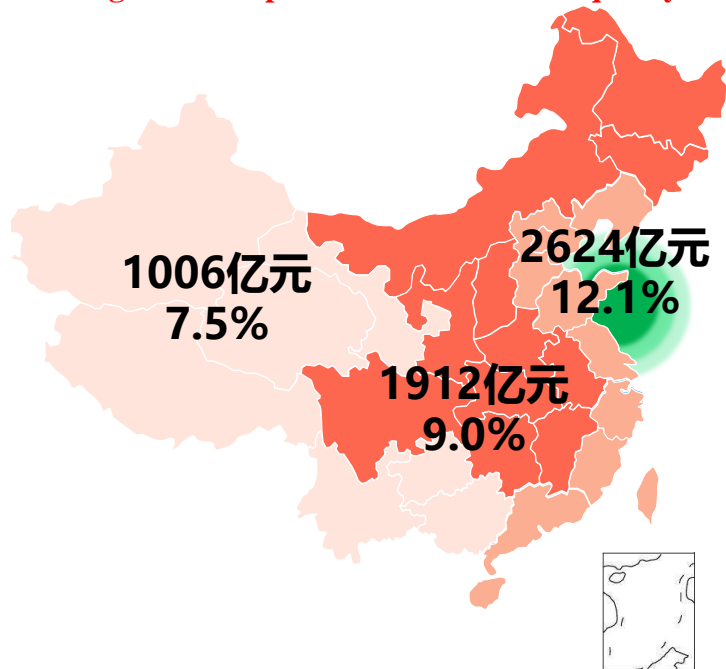
The retail sales of county agricultural products network is close to 9.8% of the agricultural product transaction volume.

## 县域农产品网络零售额为5542亿元

County agricultural product network retail sales amounted to \$77.9 billion

实现了质量安全追溯的农产品占交易总额的10.7%

Agricultural products that achieved quality and safety traceability accounted for 10.7% of total transactions

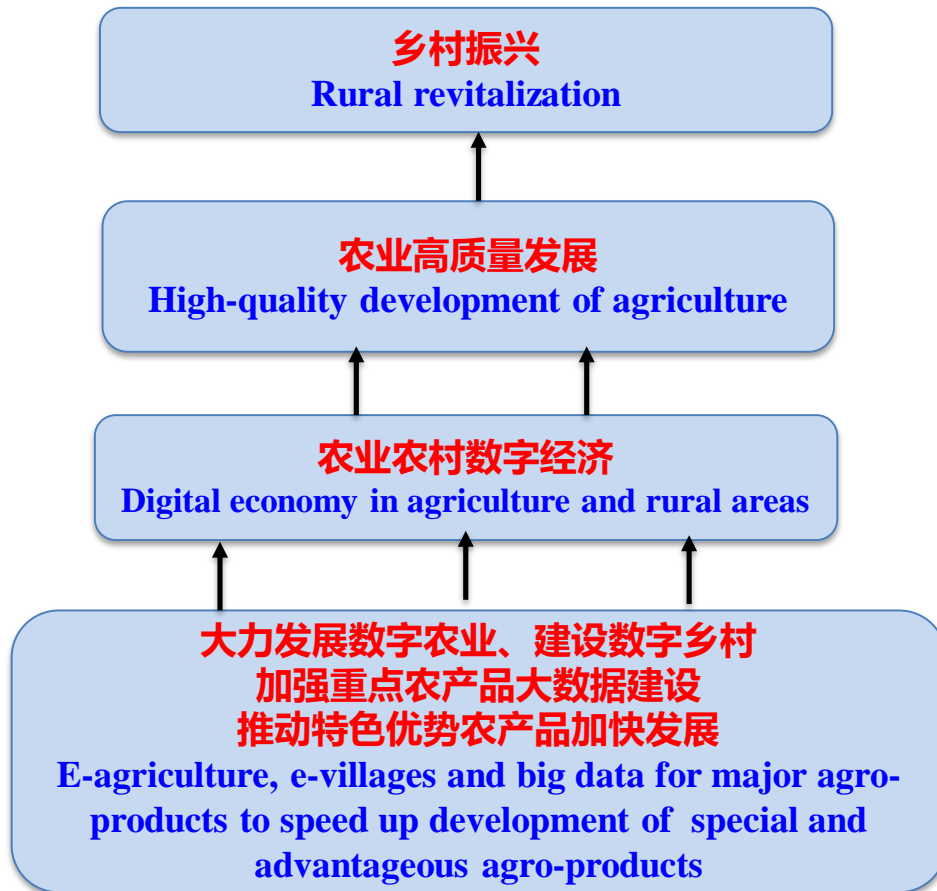


不同地区农产品网络零售额在农产品交易额中占比

The proportion of retail sales of agricultural products in different regions in the turnover of agricultural products

# 为乡村振兴战略顺利实施提供强有力的信息化支撑

ICT application: Backbone for the rural revitalization strategy



### 10个方面任务 Ten aspects of tasks

**(一) 加快乡村信息基础设施建设**

Building rural information infrastructure

**(二) 发展农村数字经济**

Developing rural digital economy

**(三) 强化农业农村科技创新供给**

Strengthening scientific and technological innovation

**(四) 建设智慧绿色乡村**

Establishing green smart village

**(五) 繁荣发展乡村网络文化**

Rural network culture

**(六) 推进乡村治理能力现代化**

Modernizing rural governance

**(七) 深化信息惠民服务**

Deepening information service

**(八) 激发乡村振兴内生动力**

Inspiring rural revitalization

**(九) 推动网络扶贫向纵深发展**

Intensifying network poverty alleviation

**(十) 统筹推动城乡信息化融合发展**

Integrating urban and rural informatization

## 中国发展为世界带来机遇

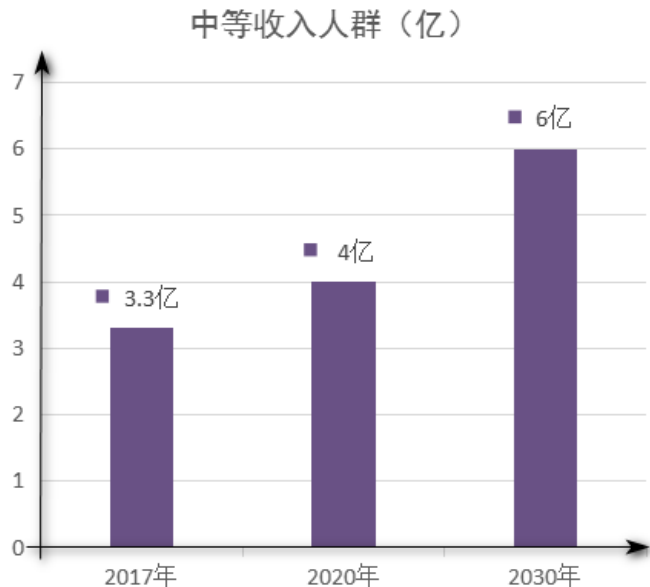
### China's development brings opportunities to all

我们愿意推动世界各国共同搭乘互联网和数字经济发展的**快车**，也乐于将我们的经验成果与世界各国特别是发展中国家**共同分享**。

China also welcomes other countries to get on-board the **fast train** of internet and digital economy, and is ready to **share** our experience with countries in the world, especially developing countries.

**中国的消费能力将快速提升，中等收入群体将快速扩大，对中国发展优质生态特色农产品提供了强大动力，也为世界农产品带来了巨大的市场机遇。**

**China's consuming power will elevate rapidly, accompanied by a growing middle-income group. This provides a strong impetus for China to develop premium agricultural products and creates a **large market** for agricultural products from all over world.**





谢谢大家！  
Thank you for your attention!

云南·八宝镇