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## E-commerce Promotes Rural Vitalization in West China

WFP Centre of Excellence for Rural Transformation

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# Introduction

Traditional agriculture and technological business models are integrating in China's vast rural areas as infrastructure continues to improve and internet industry develops rapidly in the e-commerce era. The combination of the two has evolved from sheer experimentation to gradual standardization and is moving toward large-scale development. E-commerce has promoted the digital development of the agricultural industry as well as economic and social transformation in rural areas and has made a special contribution to the milestone achievement of poverty eradication in the country.

China's public and private sectors have collaborated amid its ever-improving e-commerce policy system under the guidance of all levels of government in order to support the development of e-commerce through capital investment and improvement of human resources. Multiple participation models designed for smallholder farmers have played a crucial role in supporting rural e-commerce development. China's improving national infrastructure has also boosted e-commerce over the years. The activity has become an indispensable part of the process of promoting rural vitalization, boosting farmers' incomes, and increasing purchasing power in the country's rural areas.

The natural environment and geographical location in west China hold no advantages over those in the country's eastern and coastal areas in terms of the development of agricultural industry. Many of the counties, townships, and villages in the region are constrained by underdeveloped logistics and transportation facilities to various extents. High-quality agricultural products are often not able to reach the market in a timely manner, which is one of the factors that hinders income growth among smallholder farmers. In recent years, the adoption of information technology has accelerated in western China, however, which has provided a broad space for the development of e-commerce in its rural areas and resulted in the activity becoming a new and effective channel to connect smallholder farmers with the market. E-commerce has greatly promoted agricultural and overall rural development in the western part of the nation and enabled a vast number of smallholder farmers boost their incomes and escape from poverty. Analysis of typical examples of e-commerce development in Gansu and Shaanxi provinces demonstrates the positive effects of e-commerce in promoting rural development in west China and may be useful for other developing countries.



## Section I: Public Sector's Support for the Development of E-commerce Among Smallholder Farmers

# I. Municipal Government-Driven E-commerce Poverty Alleviation: The Longnan Model

Longnan Prefecture-level City, Gansu Province, is the only e-commerce poverty alleviation pilot city in China. The one district and eight counties under its administration were included in national comprehensive county-level demonstration projects designed to illustrate how to introduce e-commerce in rural areas, and a compilation of information about the experiences that have occurred was chosen as one of the “12 typical targeted poverty alleviation case studies” throughout the country. The system that Longnan has implemented is regarded as a representative municipal government-driven e-commerce poverty alleviation model, and the city has won a number of awards for its efforts.

Located in southeast Gansu, Longnan has jurisdiction over Wudu District and Hecheng, Huixian, Kangxian, Lixian, Xihe, Tanchang, Wenxian and Liangdang Counties and is home to 195 towns and townships covering a total of 27,800 sq km of land. The city has a population of approximately 2.4073 million people, 36.18 percent of whom live in its urban areas and 63.82 percent of whom live in its rural areas. More than 43,000 of Longnan’s residents were directly engaged in its e-commerce industry as of 2020. Around 20,000 members of this group were involved in the operation of online stores and micro-stores, over 5,000 were part of platform operations teams, more than 10,000 people were engaged in supply chain work, in excess of 8,000 were working in logistics and other services, and over 2,000 professional and technical personnel were involved in management, brand planning, brand development, user-generated media applications, cross-border e-commerce and services, and other areas.

## (1) Building a Public Policy and Service System in Order to Promote the Development of the E-commerce Industry

Longnan has established an integrated e-commerce service system composed of a municipal e-commerce development bureau, county-level e-commerce service centers, township-level e-commerce service stations, and village-level e-commerce service points. The system provides guidance and concentrated services related to agricultural exhibitions and sales, entrepreneurial incubation, brand operation, logistics, distribution, e-commerce training and the provision of convenient services.

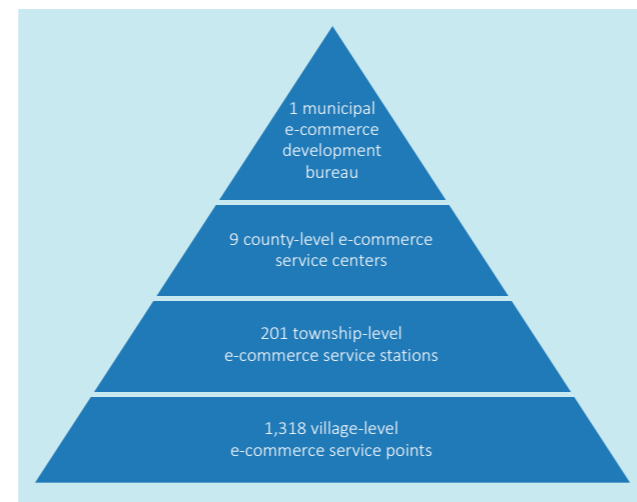


Fig. 1: A diagram depicting Longnan’s integrated e-commerce service system framework

### 1. A Four-Tier E-commerce Service System

#### (1) Municipal Level: The E-commerce Development Bureau

In February 2017, Longnan established the only e-commerce development bureau at the county-

level in China. It is responsible for managing special e-commerce funding and consumption-oriented poverty alleviation funding, arranging a special annual RMB5 million (US\$781,250) fund that supports e-commerce development, and comprehensively monitoring and analyzing the city’s e-commerce data. The Longnan e-commerce Industry Service Center, the Longnan E-commerce Development Institute, and expert workstations were also established under the leadership of the bureau.

Longnan’s e-commerce industry service centers promote the city’s e-commerce development by providing public services related to:

• training	• financing
• cross-border e-commerce	• projects
• the market	• distribution
• online branding	• operations
• MCN (multi-channel network) institutional incubation	

#### (2) County Level: E-commerce Service Centers

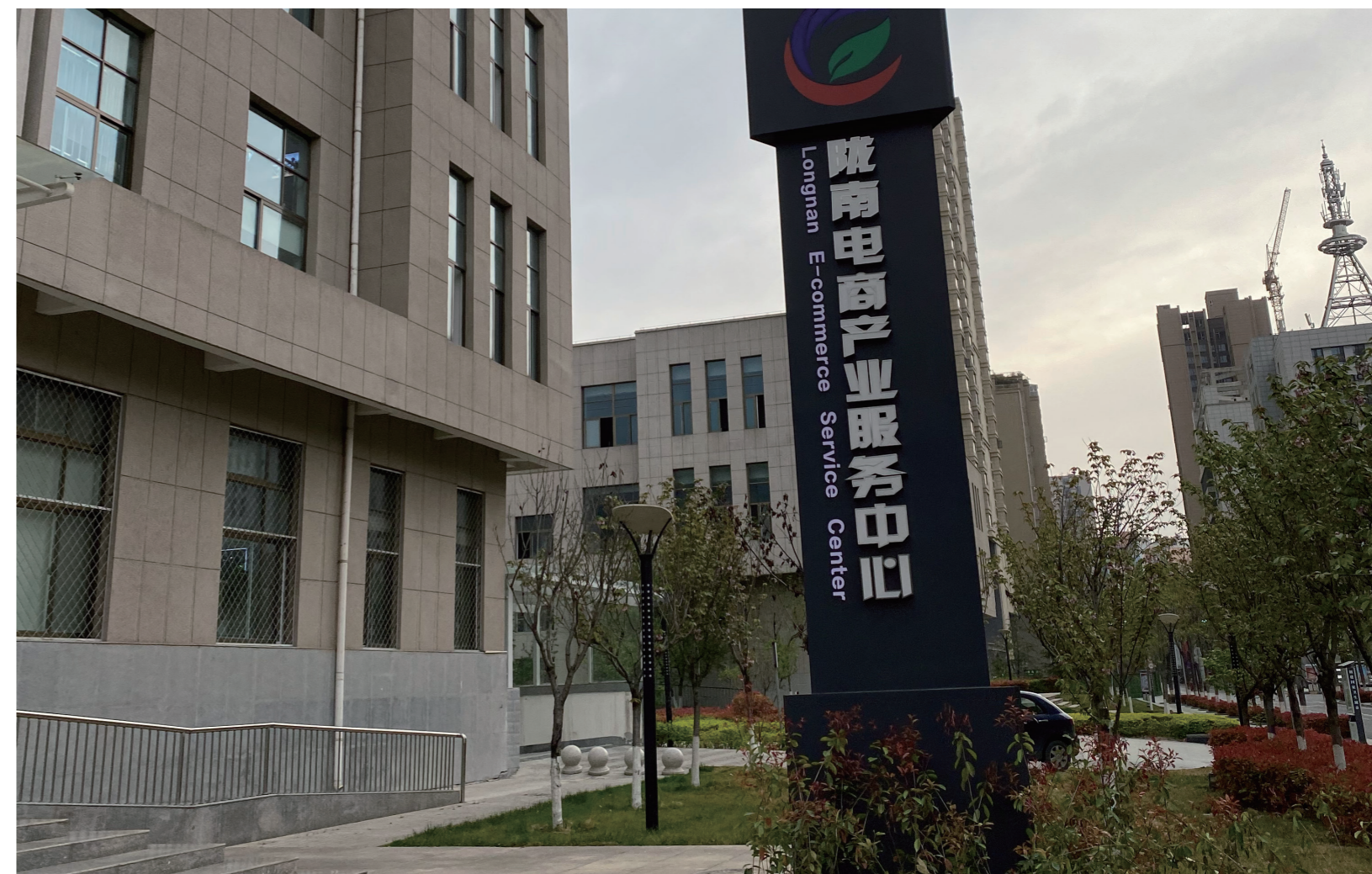
Longnan’s county-level e-commerce service centers are responsible for:

- formulating county-level e-commerce development strategies;
- guiding the development of local e-commerce, logistics, and other supporting industries;
- coordinating and organizing e-commerce training and publicity, among other activities;
- establishing and maintaining e-commerce platforms; and
- building a public service platform that connects “smallholder farmers, cooperatives, e-commerce and supply chains.”

#### (3) Village and Township Levels: E-commerce Service Points and Stations

Village-level e-commerce service points and township-level e-commerce service stations are responsible for:

- collecting, calculating, and providing feedback



related to data and information pertaining to supply and demand associated with upstream and downstream agricultural product sales processes, while solving problems associated with the “last kilometer”;

- directly communicating with farmers’ cooperatives and smallholder farmers, providing guidance, helping smallholder farmers participate in various e-commerce platform activities, and maintaining a cooperative relationship between the platform and farmers’ cooperatives, thus promoting closer integration of e-commerce and smallholder farmers.

## 2. Policy Support

The Longnan e-commerce policy system has introduced a series of top-down e-commerce-related support policies that rely on district- and county-level e-commerce service administrative system units in terms of e-commerce poverty alleviation, preferential rewards, preferential subsidies, other rewards, support, and use of special funds under the guidance of national and provincial e-commerce

development policies, thereby providing a strong policy guarantee for e-commerce development at various levels. It also promotes the rapid development of e-commerce, thus fortifying the city’s e-commerce ecosystem.

From 2013 to 2020, Longnan issued a total of 47 e-commerce-related policy documents related to the e-commerce administrative service organizations that have gradually been established in its district and counties in order to provide comprehensive support for the development of its e-commerce industry.

Longnan has issued 29 policy documents that provide guidance related to the development of e-commerce and corresponding poverty alleviation endeavors in order to support the industry as well. The documents also define incentive and support measures in order to help create a favorable policy environment for the development of e-commerce at various levels in the city.

Table 1 List of Policies that Promote the Development of the E-commerce Industry in Longnan City <sup>1</sup>

Year	Policy Name
2013	Notice of the Office of the Longnan Municipal CPC Committee and the Office of the Longnan Municipal People’s Government on Speeding up E-commerce Development
2013	Implementation Opinions of the Xihe County CPC Committee and the Xihe County People’s Government on Speeding up E-commerce Development
2014	Measures for the Reward and Support of E-commerce in Wenxian County (Trial)
2014	Measures for the Reward and Support of E-commerce in Kangxian County (Trial)
2014	Decision of the Tanchang County E-commerce Leading Group Office on Providing Subsidies and Support for Online Stores Throughout the County
2015	Pilot Plan for E-commerce Poverty Alleviation in Longnan City
2015	Implementation Plan for the Targeted Poverty Alleviation Project Supported by E-commerce
2015	Implementation Opinions of the Office of Longnan Municipal People’s Government on Vigorously Developing E-commerce and Accelerating the Creation of New Economic Power
2015	Notice on Issuing the Pilot Plan for E-commerce Poverty Alleviation in Longnan City
2016	Work Program for the Establishment of a National Comprehensive Demonstration County for E-commerce in Rural Areas of Huixian County
2016	Notice of Xihe County Poverty Alleviation Office and Xihe County E-commerce Center on Releasing Special Funds for E-commerce Poverty Alleviation in 2015
2017	Implementation Plan for the Special Funds Project for Constructing the Three-Level Service System of E-commerce Poverty Alleviation in Huixian County in 2017
2019	Measures for the Management of Funds for the Comprehensive E-commerce Demonstration Project in Rural Areas of Liangdang County
2019	Opinions on Preferential Rewards and Subsidies for Speeding up the Development of the E-commerce Industry in Wudu District of Longnan City
2019	Interim Measures for the Reward and Support of the Integrated Development of Lixian County’s E-commerce Team and Farmers’ Professional Cooperatives in Poverty-Stricken Villages
2019	Measures for the Reward and Support of E-commerce in Chengxian County
2019	Measures for the Reward and Support of the E-commerce Industry and E-commerce Poverty Alleviation in Huixian County (Trial)
2019	Guiding Opinions on Supporting the Development of Rural E-commerce Regarding Finance, Land, Talent and Charges in Liangdang County
2019	Implementation Plan for the Comprehensive Demonstration Project of E-commerce in Rural Areas of Wudu District of Longnan City
2019	Implementation Plan for Special Provincial E-commerce Funds Projects in Wudu District of Longnan City in 2019
2019	Notice on Issuing the Opinions on Preferential Rewards and Subsidies for Speeding up the Development of the E-commerce Industry in Wudu District of Longnan City
2019	Notice on Issuing Interim Measures for the Reward and Support of the Integrated Development of Lixian County’s E-commerce Team and Farmers’ Professional Cooperatives in Poverty-Stricken Villages
2020	Plan for the Follow-up Fund Use of the Comprehensive Demonstration Project of E-commerce in Rural Areas of Huixian County
2020	Implementation Plan for the Chengxian County E-commerce Consumption Poverty Alleviation Project in 2020
2020	Notice of the Lixian County Commerce Bureau on Issuing the Implementation Plan for Lixian County’s Special E-commerce Funds Projects in 2020

<sup>1</sup>Source: Longnan E-commerce Development Bureau



2020	Notice of the Wenxian County E-commerce Center on Issuing the Implementation Plan for Special E-commerce Funds Projects in 2020
2020	Notice of the Tanchang County Finance Bureau, the Tanchang County Poverty Alleviation and Development Office and the Tanchang County Commerce Bureau on Releasing Reward and Subsidy Funds for E-commerce Projects
2020	Implementation Plan for the Rewards and Subsidies for E-commerce Poverty Alleviation Demonstration Enterprises (Cooperatives) in Longnan City
2020	Reply on Approving the Allocation of Reward and Subsidy Funds to 100 Longnan E-commerce Poverty Alleviation Demonstration Enterprises (Cooperatives), Including Shuntian Yumin Planting Farmers' Professional Cooperative of Wudu District, Longnan City

Longnan issued 18 policy documents that create a framework for awarding excellent individuals, farmers' cooperatives, and e-commerce enterprises special honorary titles at varying levels, such as "Hero Fighting Against Poverty Through E-commerce," "Excellent E-commerce Worker," "Excellent Organizer," "Award-Winning Crowdfunded Poverty Alleviation E-commerce Competition Project," and "Top Individual Worker, Advanced Collective, or

Excellent Enterprise Involved with E-commerce" and provides corresponding cash subsidies, bonuses, and other material awards in order to motivate e-commerce professionals. The measures have successfully encouraged smallholder farmers, cooperatives, and enterprises to participate in the development of e-commerce.

Table 2 List of E-commerce-related Commendation Policies in Longnan City <sup>2</sup>

Year	Title of Policies
2015	Decision of the Kangxian County People's Government on Commending Advanced Groups and Individuals in the E-commerce Work of Kangxian County in 2014
2015	Decision on Commending Advanced Groups, Excellent Enterprises and Individuals in the E-commerce Work of the District in 2014
2016	Decision on Commending Advanced Groups, Excellent Enterprises and Individuals in the E-commerce Work of the District in 2015
2017	Decision of the Wenxian County CPC Committee and the Wenxian County People's Government on Commending Advanced Units and Individuals in E-commerce Work in 2016
2017	Decision on Commending Advanced Groups and Individuals in the E-commerce Work of the District in 2016
2017	Notice on Commending the Excellent Organization Award Winners, Advanced Workers and Award-Winning Projects of the Second Crowdfunding E-commerce Poverty Alleviation Competition
2018	Decision on Commending Advanced Groups and Individuals and Excellent Enterprises in the District's E-commerce Work in 2017
2019	Decision of the Huixian County CPC Committee and the Huixian County People's Government on Commending Advanced Units and Individuals in E-commerce Work in Huixian County in 2018
2019	Decision of the Chengxian County CPC Committee and the Chengxian County People's Government on Commending and Rewarding Advanced Groups and Excellent Individuals in the E-commerce Work of Chengxian County
2019	Decision on Commending 2018 E-commerce Poverty Alleviation Heroes, Advanced Townships and Excellent E-commerce Workers
2019	Decision of the Wenxian County CPC Committee and the Wenxian County People's Government on Commending Advanced Units and Individuals in the E-commerce Poverty Alleviation Work of 2018

<sup>2</sup>Source: Longnan E-commerce Development Bureau

2019	Decision on Commending Advanced Collectives and Individuals and Excellent E-commerce Poverty Alleviation Enterprises in the District in 2018
2019	Decision of the Xihe County CPC Committee and the Xihe County People's Government on Commending Excellent E-commerce Enterprises, Excellent Online Merchants, Excellent Village-Level E-commerce Service Points and Advanced E-commerce Workers in 2018
2020	Decision of the Liangdang County E-commerce Work Leading Group on Commending Advanced Collectives and Individuals in E-commerce Work in the County
2020	Decision of the Chengxian County CPC Committee and the Chengxian County People's Government on Commending and Rewarding Advanced Groups and Excellent Individuals in the County's E-commerce Work in 2019
2020	Decision of the Lixian County CPC Committee and the Lixian County People's Government on Commending the Lixian E-commerce Team and Farmers' Cooperatives for Their Integrated Development and the Advanced Business Entities of Intra-city Distribution Services
2020	Decision of the Tanchang County CPC Committee and the Tanchang County People's Government on Commending the Advanced Groups and Individuals in the County's E-commerce Work in 2019
2020	Decision on Commending Advanced Townships, Towns and Individuals in E-commerce Work and Excellent E-commerce Poverty Alleviation Enterprises in the District from 2019 to 2020

## (II) Focusing on Capacity Building in Order to Support Sustainable E-commerce Development

From 2019 to 2020, 49,000 people received e-commerce training in Longnan, 45,000 of whom were impoverished. E-commerce training helps distill regional e-commerce experience and indirectly promotes improvements in the quality and structural optimization of agricultural products. It also accelerated the establishment and development of a rural e-commerce service system and drives the continuous improvement of rural infrastructure development.

### 1. Distinct E-commerce Training System Features

#### Professional Lecturers

Longnan actively organizes and promotes comprehensive e-commerce knowledge and skills trainings and is establishing a city-wide talent pool for e-commerce lecturers, having located willing e-commerce experts from both the public and private sectors. The city has also:

- established the Longnan e-commerce expert workstation and employed 15 nationally known e-commerce experts as e-commerce development consultants or mentors and

- established an online database with information about local e-commerce talent in order to facilitate communication and placement.

#### Combination of Theory and Practice

Longnan has taken the following measures in order to enhance practicality and offline universality:

- The city has invited experts and scholars from various offices and departments, such as the Bureau of Commerce and the Bureau of Agriculture and Rural Affairs, to deliver lectures and conduct theoretical training related to policy management and other areas. Key organizations that have supported Longnan's e-commerce trainings include the China International Electronic Commerce Center and the Qingdao Bureau of Commerce's Comprehensive Cross-Border E-commerce Experimental Area.
- It has also invited e-commerce professionals working in the private sector to provide technical and practical guidance related to business and platform sales, including some from Alibaba and other e-commerce platforms.

#### A Variety of Subject Areas

Longnan has organized and conducted e-commerce

training in various areas and divides them into:

- Training at the city, district, county, and township levels that includes experts delivering lectures that cover theory and policy, cultivation of e-commerce teachers, and dissemination of information about online store operation and brand development.
- Characteristic targeted training for backbone e-commerce live-streaming talent, first secretaries and village support teams that are involved with the endeavor, and backbone cross-border e-commerce talent.

#### Talent Training

Longnan E-commerce Vocational College became the first e-commerce college in Gansu when it was established in 2015. The school has:

- established two e-commerce majors – e-commerce and accounting – and has been involved with a number of national and provincial e-commerce training tasks and projects and
- has focused on practical education, actively guided e-commerce entrepreneurship, and combined it with e-commerce poverty alleviation efforts.

#### 2. Remarkable E-commerce Leadership Training Results

Longnan has trained a total of 847 e-commerce professionals who have gradually become leaders that help drive the transformation and evolution of e-commerce enterprises and regional e-commerce development through three e-commerce talent training projects, namely its:

- e-commerce talent reserve project, which involves local e-commerce enterprises training operations and management talent in collaboration with universities located both inside and outside of Gansu after establishing long-term collaborative supply and demand relationships with them in order to meet the demands of e-commerce in these areas;
- youth e-commerce talent incubation project, which involves local e-commerce enterprises providing a front-line e-commerce practice platform for students

in collaboration with universities located inside and outside the province that they have been working with, introducing talent through recruitment, and instructors training and building a team of high-level, versatile, practical talents and;

- e-commerce product packaging quality improvement and optimization project, which includes simultaneous e-commerce product packaging design and marketing training over both the short- and long-term.

Leaders who have been emerging in Longnan's e-commerce industry have been part of the front lines of entrepreneurship and have played an important role in the city.



#### Case Study

Kang Weiqi, one of China's National Top 10 Farmers

Founder of Gansu Liangyuan E-commerce Co. Ltd., Kang Weiqi is also the leader of both Lixian's Liangyuan Fruit Industry Professional Cooperative and Liangyuan Agriculture Co. Ltd. His online store has developed into a leading Lixian-based e-commerce trade enterprise that has brought in more than US\$15 million of cross-border revenue over the past seven years and currently sells more apples than any other company on Taobao. The company has made it possible for the smallholder farmers who work with it to increase their incomes and decrease their overhead. It also employs women and members of vulnerable groups and has promoted the development of the e-commerce industry and economic growth in the county. The company and associated cooperatives are good examples of smallholder Longnan farmers who are deeply involved in e-commerce development and have promoted the expansion of e-commerce throughout Lixian.

#### 3. Wide Popularization and Publicity Enhance Participation Among Women

Longnan has widely popularized e-commerce and vigorously publicized information about the significance of its development, the process of establishing online stores, their operations, and the commercial value of agricultural products and handicrafts produced in its borders among female university students, young women who return to their hometowns, entrepreneurial women in rural areas, housewives, and other women, which has heightened their awareness of the industry and helped them become more familiar with it.



#### Case Study

Longnan Women's Federation

Women's e-commerce federations have been established in Longnan's district and its counties, and the first leading body of such federations in the city was established in 2019. It is responsible for organizing trainings, research, publicity, and various other e-commerce activities for women's groups in order to help their members increase their skill and know-how. The trainings are designed to cultivate skilled e-commerce talent by focusing on e-commerce applications and management, practical operations, hand weaving, embroidery, and other characteristic activities. In addition, Longnan has been actively promoting the sales of hand-woven textiles and handicrafts created by women and the Longyuan Skillful Hands women's e-commerce brand and helping women start their own e-commerce businesses. The city has trained a total of 1,260 women in the 12 e-commerce programs that it has offered thus far.

#### (III) An Innovative Development Strategy Designed to Promote the Transformation and Development of Rural E-commerce

Innovating new strategies that promote further transformation and development of rural e-commerce is the main way for Longnan to meet new challenges and opportunities now that the industry has been standardized and reached a large scale.

#### 1. Government Support Closely Integrated with Market Entities

First, the government is directly subsidizing e-commerce business activities, purchasing the services of market entities, and promoting increased social capital investment. Second, the government is increasingly choosing which market entities to support based on their performance, which has created a virtuous cycle that contributes to the overall, high-quality development of e-commerce in Longnan. Third, the government is paying increasing attention to the importance of arousing the enthusiasm of leading enterprises and other market entities with the hope that they increase their investment in e-commerce.





## 2. Innovation of an E-commerce Sales Model

Participating entities are encouraged to pursue multiple new business formats, such as social e-commerce and live-streaming, engage with multiple platforms, and diversify in general, and assistance is being provided with these endeavors. Many of the smallholder farmers, small and micro enterprises, farmers' cooperatives, and individual farmers involved with e-commerce in Longnan's district and counties have become well-known online, and some even have millions of fans. Consumers enjoy their livestreams because they are down-to-earth and the format integrates promotion and sales.

## 3. Multi-Industry Synergetic Development

The original purpose of pursuing e-commerce in Longnan was to solve problems related to agricultural product sales. The content and product structure of the city's e-commerce transactions have changed gradually but significantly as in-depth development has occurred, however. E-commerce has promoted supply-side structural reform, including intensive processing of primary agricultural products in the secondary sector and value-added services in the tertiary sector, and other improvements in the agricultural industry.

## II. County Governments Promote the Development of Rural E-commerce: Case Studies About Experiences in Wugong County and Lixian County

The e-commerce development that has occurred in Wugong County, Xianyang Prefecture-level City, Shaanxi Province, and Gansu's Lixian County are two typical examples of the pursuit that have transpired in China's county-level rural areas, which are core elements of the undertaking in the country. E-commerce is an important part of the upward flow of agricultural products and downward flow of consumer goods. Many supporting policies and incentive measures related to comprehensive e-commerce demonstration projects treat county-level administrative areas as important starting points in the introduction and promotion of e-commerce in rural areas, which has helped it diversify. This section examines this method of rural e-commerce promotion and examines the outcomes that have occurred in Wugong and Lixian, which are two counties where the model has been especially successful.

### (I) Government-Led Introduction of E-commerce Enterprises: Wugong County, Xianyang Prefecture-level City, Shaanxi Province

Located in the hinterland of the Central Shaanxi Plain, Wugong enjoys a favorable geographical location and convenient transit, which led to it becoming an important regional transportation hub and distribution center. Endowed with limited resources, the county has traditionally pursued agriculture and had attained a low level of economic development until recently, however. At the end of 2013, Wugong began pursuing e-commerce under the leadership of its government. It quickly achieved success in this area, and the model that it implemented became one of the top 10 rural e-commerce development models in China. Wugong's government played a major role in it becoming a typical example of agricultural product-

based e-commerce development in resource-deficient areas in western China.

### 1. The Leading Role of Government

Wugong mostly adhered to a top-down e-commerce development model that involves its government introducing a number of favorable policies and measures that encourage established e-commerce enterprises come to the area due to the fact that it is an agricultural county that lacked experience in this area (fig. 2).

(1) Wugong built an e-commerce industrial park in order to attract e-commerce enterprises by creating a suitable place for them to engage in operations and development. The county government has continued to upgrade the park in order to better accommodate the companies who have established a presence at the site and to encourage others to do so as well. An e-commerce industry cluster has gradually emerged in Wugong, and the county became one of northwest China's important agricultural product distribution hubs.

(2) The county has actively trained e-commerce talent and made breakthroughs in e-commerce development. Lack of e-commerce professionals is a fundamental problem that China's rural areas commonly face when they want to pursue e-commerce. Wugong developed a sufficient e-commerce labor force by building e-commerce incubation centers and talent training centers with regular offerings and by introducing talent.

(3) The local government has designed special e-commerce industry incentive funds and implemented preferential policies and supporting measures in order to promote the development of the county's e-commerce industry in general and



the innovation and entrepreneurship of small and medium-sized e-commerce enterprises in particular.

(4) Wugong has strengthened the creation of public services in order to help guarantee the development of e-commerce enterprises. Supporting services at the pre-sale, logistics, and after-sale stages provide important prerequisites for the operation and development of e-commerce enterprises. The Wugong government, therefore, began to create a public e-commerce service system that includes quality inspection, cold chain logistics, and access to various other systems related to production and sales, which has boosted the development of e-commerce enterprises and promoted e-commerce industry clustering.

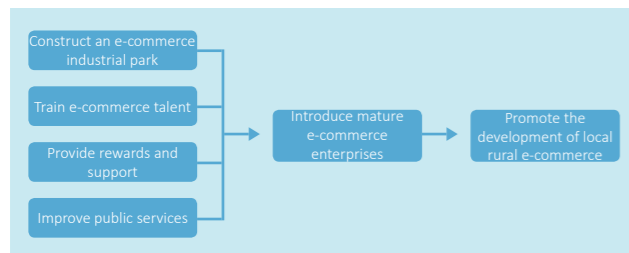


Fig. 2: The top-down e-commerce development model promoted by the Wugong government

## Case Study Xiyu Meinong

The introduction of Xiyu Meinong is of symbolic significance to the development of e-commerce in Wugong. An e-commerce food company founded in 2008 that primarily sells agricultural products from Xinjiang and other places, the organization fits well with Wugong's concept of "purchasing from suppliers located in the northwest and selling to buyers located throughout the country." In 2011, Xiyu Meinong moved its warehousing center, factory, and operations center to Xi'an, Shaanxi Province's capital city, in order to reduce logistics costs. In 2014, Wugong offered to lease

floor space to Xiyu Meinong at a discounted rate in order to help the company continue building a standardized supply chain system by capitalizing on its advantageous geographical location and logistics access and it accepted. In 2017, Xiyu Meinong purchased 6.66 ha of additional land, and more than RMB100 million (US\$15.63 million) was invested in the construction of agricultural and sideline product processing and distribution centers. In recent years, the company has been building diverse supply chains for fresh products as community-oriented group buying has increased and currently is involved with more than 1,000 communities in the Central Shaanxi Plain. Xiyu Meinong thus gradually became a leading e-commerce enterprise in northwest China. In 2020, it achieved RMB860 million (US\$134.38 million) of overall sales, approximately RMB200 million (US\$31.25 million) of which came from community-oriented group buyers.

## 2. A County-Level Operations and Service Center and a Three-Level E-commerce Service System

The introduction of e-commerce enterprises promotes the development of the e-commerce industry, and the creation of a county-level operations and service center has helped Wugong's rural residents have the opportunity to share in the dividends of digital development. In 2013, the Organization Department of the Wugong County Communist Party of China (CPC) Committee and the Wugong County Supply and Marketing Cooperative spearheaded the establishment of a rural e-commerce operations and service center at the county-level and an e-commerce service system that extends into the county, township, and village levels in order to enhance motivation and support service points, service stations, and farmers in the following ways (fig. 3):

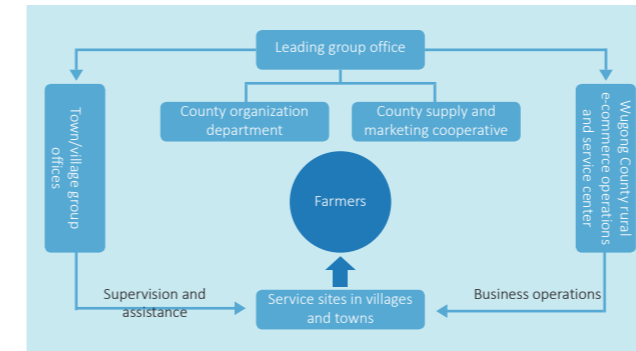


Fig. 3: A diagram depicting the relationship between Wugong's rural e-commerce operations and service center and the entities that it interacts with

Source: Wugong County E-commerce Operations and Service Center

(1) It provides adequate financial support. The Wugong government invests RMB3 million (US\$468,750) in maintaining daily operations at the county-level operations and service center every year and has spent RMB5 million (US\$781,250) on 30 logistics vehicles. The center helps rural areas engage in e-commerce by connecting smallholder farmers with modern markets. It is responsible for community-oriented group buying, the "first kilometer" of transportation with regard to the upstream sale of agricultural products, and the "last kilometer" of delivery with regard to the downstream sale of consumer goods.

(2) It introduces operations and management enterprises. County-level operations and service centers provide farmers with a variety of services related to e-commerce participation. The leading group chose five major privately operated courier companies rather than e-commerce platforms to be responsible for the operation of county-level operations and service centers in order to effectively promote the circulation of products at the "first kilometer" and the "last kilometer" by integrating additional logistics enterprises and resources.

(3) It provides professional training and links to diversified services. Village-level service points and town-level service stations are key parts of enabling e-commerce to penetrate into rural areas, and their profitability is key to achieving long-term, stable operations. The county government provides regular

trainings for people in charge of service outlets in order to help them improve their operations and service capabilities and connects service outlets with agricultural materials merchants, financial services, supply chain support, and other services in order to help ensure that they achieve stable profitability.

Wugong has achieved full village-level service outlet coverage in its borders and has provided initial solutions regarding their profitability, thus realizing the sustainable development of its e-commerce service system at the county, township, and village levels. The introduction of multi-platform and multi-logistics enterprises has also enabled its county-level service and operations center to provide more channels for promoting the upstream sales of agricultural products and for smallholder farmers to participate in e-commerce. The C2S2B (customer to service platform to business) and C2S2C (customer to service platform to customer) rural e-commerce development models that have been implemented thus far reduce logistics costs for farmers who want to engage in e-commerce and the technical threshold that is required as well.



### 3. Achievements and Impact

Wugong has made great achievements in rural e-commerce after more than seven years of development. A total of 336 e-commerce enterprises have established a presence in the county or been launched there as of 2019. The county achieved RMB4.1 billion (US\$640.63 million) of e-commerce sales that year, and its online agricultural product sales ranked higher than those in any other county-level administrative area in western China. The development of the e-commerce industry has promoted the transformation of Wugong's traditional service industry, increasing the proportion of its economy that tertiary industry occupies from 27.88 percent in 2013 to 39.61 percent in 2019. The development of its e-commerce industry has boosted its rural residents' net incomes by RMB862 (US\$135) per capita. The development of e-commerce has also made an important contribution to local poverty alleviation. Impoverished young people have participated in training a total of 4,150 times in Wugong and helped 35,000 people escape from poverty as of 2019.<sup>3</sup>

#### (II) Government-Guided Local E-commerce Entrepreneurship: Lixian County, Longnan City

Situated in northwest Longnan, Lixian is one of China's key apple production counties. The Lixian apple has been designated one of China's geographical indication products. In recent years, the Lixian government has implemented a series of policies designed to facilitate the development of rural e-commerce that focus on the sales of apples produced in its borders and take other local characteristic industries into consideration in order to respond to the policy of vigorously promoting the development of rural e-commerce as put forward by Longnan Municipal People's Government. Lixian has laid a good foundation for e-commerce development

and created a favorable environment for e-commerce entrepreneurship by actively providing government guidance and improving necessary infrastructure. In addition, a number of local, capable individuals have engaged in e-commerce entrepreneurship, which has boosted agricultural development, helped reduce poverty and increased incomes.

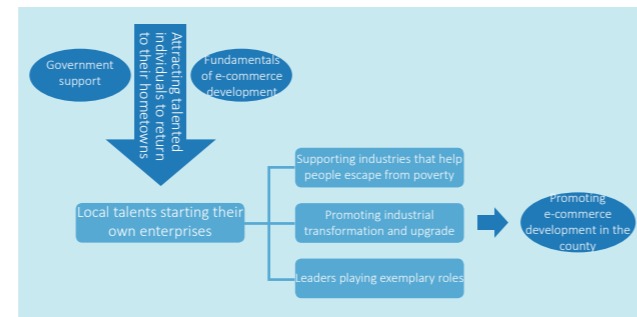


Fig. 4: A diagram depicting how capable individuals engage in e-commerce entrepreneurship with the support of special policies and the leading roles that they play

E-commerce entrepreneurs include veterans, returning entrepreneurs, agricultural production professionals and local experts.

Veterans with experience in the military as well as returning talent with experience working in large and medium-sized cities are familiar with more commercial concepts and have a better understanding of e-commerce operations and market development and can thus participate in e-commerce more readily. Local entrepreneurs have established e-commerce enterprises that play important leadership roles with the strong support and guidance of the government, which promotes the development of poverty alleviation businesses.

#### 1. The “E-commerce Enterprises, Cooperatives, and Impoverished Farmers” Industrial Poverty Alleviation Model

It is difficult for smallholder farmers to engage in e-commerce directly, especially when they are



impoverished. A group of local entrepreneurs have implemented an industrial chain model involving e-commerce enterprises, cooperatives, and impoverished farmers, which has entailed e-commerce-oriented fruit enterprises being established, farmers' cooperatives working with the companies, and small-scale fruit farmers being encouraged to become members, especially if they are impoverished, with the support of the government's e-commerce policies. The efforts have helped establish a win-win system in which commercial interests are organically integrated with social responsibility. The poverty alleviation model effectively utilizes e-commerce to help farmers lift themselves out of poverty and increase their income in the following ways:

(1) It directly increases farmers' cultivation-related income. The model enables buyers located in other areas to purchase farmers' agricultural products, increases sales volume, and raises the purchasing price of the products by utilizing the advantages of e-commerce enterprises, which directly benefits cooperatives and their members, some of whom were impoverished.

(2) It increases employment opportunities. Local e-commerce enterprises have established an agricultural product supply chain, which has created a large number of employment opportunities related to agricultural product procurement, classification, packaging, delivery and express logistics, and other areas. Sorting and packaging work associated with e-commerce has created numerous jobs suitable for women in rural areas and, therefore, plays an important role in promoting gender equality in them.

(3) It promotes various collaboration and increases incomes through multiple channels. E-commerce enterprises and cooperatives work closely with farmers. Some farmers are members of cooperatives and receive dividends, and some are able to receive technical guidance and produce agricultural products cheaply by working with cooperatives that are operated by e-commerce entrepreneurs.

<sup>3</sup>Source: Wugong County's E-commerce Success Stories Spread Frequently, Contributing to Rural Vitalization in a Comprehensive Way



**Case Study** Gansu Liangyuan E-commerce Co. Ltd. and Lixian Richshine Fruits and Vegetables Co. Ltd.

Lixian's Gansu Liangyuan E-commerce Co. Ltd. ("Gansu Liangyuan") and Lixian Richshine Fruits and Vegetables Co. Ltd. ("Richshine Fruits and Vegetables") were founded by residents of the county and have played an important role in the journey out of poverty that the people who work with them have embarked on.

Gansu Liangyuan is located in Xinhe Village, Yanguan Town, Lixian County. It was originally a fruit cooperative led by Kang Yongliang. In early 2014, Kang Yongliang's son, Kang Weiqi, returned home after serving in the military and began participating in e-commerce entrepreneurship in response to local policies. The cooperative developed rapidly with the support and encouragement of Lixian's government and eventually became Gansu Liangyuan E-commerce Company. In 2020, the company's non-cross-border e-commerce transactions exceeded RMB39.1 million (US\$6.11 million).

A leading e-commerce enterprise integrating production, storage, processing, and sales, Richshine Fruits and Vegetables operates the Xianpiaopiao Flagship Store on Tmall and other online stores. Founder Zhao Liang worked at Lixian's Qishan Middle School until he decided to resign in order to start a business in 2009. In 2015, Zhao started helping develop cross-

border e-commerce enterprises in the county and registering them on Alibaba's international site, which was an important step in the evolution of cross-border e-commerce in its borders and played an important role in connecting the Lixian apple with foreign markets. In 2020, the company logged US\$18.55 million of cross-border sales, which made it one of the top 10 exporters of fresh apples in China.

The two enterprises have utilized the "e-commerce enterprises, cooperatives, and impoverished farmers" poverty alleviation model and have achieved good results.

First, growers' incomes have increased. Impoverished farmers who sell their apples to Gansu Liangyuan make an average of RMB3,000 (US\$469) more than those that sell them at average market prices. Richshine Fruits and Vegetables purchases a large number of Lixian apples from farmers located in the county's apple production areas, which has benefited more than 20,000 people in nine villages and towns and boosted their incomes by over RMB4,000 (US\$625) per household.

Second, they provide employment opportunities. Gansu Liangyuan employs an average of more than 80 people – and up to nearly 300 during peak periods – and pays them more than RMB100 (US\$16) per day. It mostly recruits members of impoverished families, which has helped more than 600 households escape from poverty. Richshine Fruits and Vegetables employs more than 175 people and over 250 during peak periods and also prioritizes poverty-stricken farmers and pays them over RMB100 (US\$16) per day. E-commerce teams are also composed of impoverished people. Their members earn more than RMB3,000 (US\$469) a month, which helps ensure that impoverished families are able to emerge from poverty in a stable manner in their local areas.

Third, they engage in various types of cooperation and help people increase their incomes through multiple channels. Gansu Liangyuan signed a

poverty alleviation agreement with 10 farmers' cooperatives in 10 villages in Yanguan Town in accordance with the "e-commerce enterprises, cooperatives, and impoverished farmers" model. Industrial support funds enabled 943 impoverished households to each gain RMB10,000's (US\$1,563) worth of shares and steadily increase their incomes with the dividends that they receive. Richshine Fruits and Vegetables encouraged poverty-stricken farmers to join farmers' cooperatives in line with a cooperation model involving "nursery cultivation and guaranteed sales" so that mutual benefits and win-win results could be achieved. A total of 265 households have become involved with the Lixian County Hongsheng Fruits Professional Cooperative, which has resulted in them achieving more than RMB50,000 (US\$7,813) of annual income per household, thereby benefiting 1,248 people.

**2. Promoting the Improvement of the E-commerce Supply Chain**

Local government policies have promoted the improvement of the e-commerce business environment, which has compelled a large number of people who were working as migrant workers to return to their hometowns in order to start their own e-commerce businesses. They have the opportunity to utilize local resources and regional brands that serve as bridges and intermediaries between e-commerce enterprises, agricultural product producers and consumers. This group of people can also receive help establishing and improving a procurement system for agricultural products, carefully selecting high-quality products, and classifying and standardizing their products. They also promote the improvement of the production and quality of agricultural products. E-commerce enterprises serve as information and credit intermediaries between producers

and consumers, which promotes quality and the development of processed products. (1) They are responsible for quality control. Quality is key to competitiveness; thus, quality should be improved in order to help with the creation of regional brands. (2) They are responsible for engaging in product innovation from primary agricultural products to processed products in order to diversify and obtain additional profits. (3) They are also responsible for utilizing packaging that meets consumers' diverse needs and enhances brand value.



**Case Study** Li Fang, e-commerce professional

Li Fang and her husband, Zhao Ying, worked in Beijing for many years. In 2016, the couple returned to their hometown and established a company that mostly engages in online apple sales known as Lidangjia E-commerce Co. Ltd. A young entrepreneur, Li had some ideas about how to grow the business and drew on her working experience in other areas. Her company has always adhered to the tenet of "quality is life, and the customer is king."

Li enhanced the value of the Lixian apple in a variety of ways in order to achieve high-quality e-commerce development. (1) Her procurement process is strictly controlled. During the apple

harvesting period, she and her husband personally examine apples during the purchasing stage in order to ensure the quality of their products. (2) They procured intelligent apple sorting lines. During their early stage of operations, they secured RMB1.6 million (US\$250,000) of investment in order to purchase the REEMOON “Hefu” intelligent apple sorting line, which is the most advanced sorting line of its kind in the world. The equipment weighs the fruit electronically and utilizes image recognition, infrared spectrum analysis, and other technology to analyze the color, shape, size, quality, and other external aspects of the fruit as well as maturity, sugar content, acidity, degree of browning, presence or lack of a rotten core, and other internal qualities in a scientific and accurate manner. The increasingly scientific and intelligent methods that are being used are making it possible to achieve a high level of product standardization. (3) The couple values packaging design. In 2017, the company designed and produced various gift packaging boxes in different styles in order to enhance product value and meet the needs of different types of consumers. (4) They created processed products with higher value added. The company developed agricultural products that use apples as raw materials, including chips and juice. In 2020, Lidangjia E-commerce Co. Ltd. purchased more than 20 million kg of apples and achieved RMB12.87 million (US\$2.01 million) of total sales. Li invested in a sorting line, developed processed products, and put an emphasis on packaging in line with her goal of creating a local brand. This innovative, entrepreneurial spirit has been instrumental in the e-commerce and brand development that has occurred in the area.

### 3. Transformation and Development of E-commerce Live-Streaming

Small-scale farmers have also been involved with e-commerce entrepreneurship. Their scale, low e-commerce literacy, and lack of experience often hindered direct participation in the past, but the support policies and inclusive e-commerce model that the government has implemented have made it much easier now. The training that has been provided has helped farmers improve their e-commerce know-how and entrepreneurial skills, and the development of live-streaming has made it easier for older and less-educated ones to participate in e-commerce by lowering the threshold of entry. Live-streaming enables farmers to convey their simple, hardworking image to consumers and showcase the quality of the products that they produce, which boosts sales and increases added value.



#### Case Study Zhang Jiacheng, Lixian farmer

Fifty-eight-year-old Longhuai Village, Yongxing Town, Lixian County, native Zhang Jiacheng – known as “Uncle Zhang” to the people in his area – has gained some fame as a result of the e-commerce live-streaming that he engages in in Lixian. He mostly worked in other areas in order to support his family in the past until he returned

to his village in 2004 with the intention of starting his own apple business in order to increase his level of prosperity. Uncle Zhang studied hard and learned to cultivate apples at this time. He also participated in e-commerce trainings organized by the government and established his own Taobao store in 2014 in response to the government’s call to vigorously develop e-commerce, thereby taking part in a new wave of e-commerce entrepreneurship.

Uncle Zhang’s e-commerce journey was quite difficult at first due to his old age and lack of education. In June 2019, Alibaba poverty alleviation technical task force member Yin Yipan traveled to Lixian in order to conduct e-commerce live-streaming training and encouraged him to participate. The budding businessman agreed and soon mastered various live-streaming skills. He created necessary accounts, began live-streaming

for more than 10 hours a day, and received up to 14,000 views at a time. On November 10, 2019, Uncle Zhang – an original recommender of the Lixian apple – participated in a special poverty alleviation-oriented public welfare program connected with Tmall’s Double 11 (November 11 shopping holiday) Party in order to promote Lixian apples to netizens across China and help them get distributed beyond his local area. In 2020, he was able to sell all 25,000 kg of the apples that he grew for good prices online using live-streaming technology. He also helped other Longhuai residents sell 15,000 kg of apples for a total of more than RMB300,000 (US\$46,875). Uncle Zhang’s entrepreneurial journey serves as an example for other farmers who want to participate in e-commerce, which promotes e-commerce empowerment and has played an important role in Lixian’s publicity.



A red tractor is shown in a field, likely harvesting or tilling. The tractor is the central focus, with its large rear wheel and smaller front wheel visible. The background shows a field of crops under a clear sky.

## Section II: E-commerce Players' Strategy for the Development of Rural E-commerce

Farmers, e-commerce enterprises, sales platforms, and other private sector entities all play an important role in the development of rural e-commerce and determine whether it can develop sustainably. Farmers' ability to effectively participate in the development of the e-commerce industry, share the dividends it produces, and organically connect with modern markets are key measures of the success of the undertaking. The ability of e-commerce enterprises to develop directly affects whether large-scale e-commerce industry clusters or even entire industry chains can be created within a county, township or village. Sales platforms support the development of rural e-commerce by providing huge virtual marketplaces that break spatiotemporal constraints, which enable characteristic rural products to be sold more easily. The concessions and convenience offered by sales platforms also help farmers and related e-commerce enterprises enhance their competitiveness in the vast e-commerce market to a certain extent. Various market entities play different roles and functions. This section will, therefore, discuss how the private sector can effectively support e-commerce development among smallholder farmers and the roles that online villages, e-commerce enterprises, and sales platforms play in the undertaking.

### I. "E-commerce for Small- and Medium-Sized Farmer Enterprises": An Independent Development Model for Rural E-commerce

Founded by Alibaba in May 2003, Taobao is a popular online shopping and retail platform in China. Taobao Villages are known for having been transformed by the internet because they primarily conduct transactions on the Taobao platform and are thus microcosms of the development of rural e-commerce in China. The most concentrated or developed rural e-commerce zone, a Taobao Village is defined as an administrative village where more than 10 percent of its families are actively engaged in e-commerce or where there are at least 100 active online stores and total online sales exceed RMB10 million (US\$1.56 million) per year. Having mushroomed from three in 2009 to 5,425 in 2020, the rapid expansion of Taobao Villages demonstrates that e-commerce can flourish in developing countries' rural areas under the appropriate conditions.

Linghu Village, Caijiapo Town, Qishan County, Baoji City, Shaanxi Province, is a well-developed Taobao Village in western China. Its residents have vigorously pursued e-commerce in order to sell their traditional local snacks, processed noodles, and other agricultural and sideline products to buyers located all over the world. Well-known e-commerce enterprises, including Qinsheng and Qizhengxiang, and online brands, such as Prince Noodles, have emerged in the village. Linghu has utilized its strong economic foundation to create an independent bottom-up e-commerce development model unlike most areas that are engaged in e-commerce in western China.

Linghu has a strong logistical foundation. The village enjoys a high level of economic development as well as a very advantageous geographical location. Highways run through Caijiapo, and there are standard and high-speed train stations in its borders, which makes it easy to access the village.

Linghu also enjoys labor advantages. Caijiapo's industrial economy is relatively developed, and automobile enterprises represented by Shaanxi Automobile have established factories in its borders, which has promoted economic development and enabled the village's young people to find jobs in the area, thereby creating a labor force for local e-commerce development.

Linghu has a long history of doing business and has seized the important opportunity that technological innovation provides as well. In the 1980s, its residents sold processed noodles out of trolleys on its streets. They were typically of the ready-to-eat variety and not easy to store, however. Around 2007, tea factory workers tried to facilitate storage and shipment by vacuum packaging the noodles in a manner similar to tea, which was an important milestone in the development of e-commerce in the area.

Local young people helped the village's processed noodle e-commerce industry chain develop rapidly. Linghu transitioned from traditional, manual noodle production to a mixture of manual and mechanical production and finally to large-scale production, which makes it convenient for farmers and e-commerce enterprises to sell processed noodles online. The village created different e-commerce development models for different scales – "noodle procurement, seasoning production, and e-commerce sales" and "household production, seasoning production, and e-commerce sales" for small-scale producers and "noodle production, seasoning production, and e-commerce sales" for large-scale enterprises. The restaurants in the village have also begun to sell processed noodles while live-streaming their production as social e-commerce and live-streaming e-commerce have taken root.

## II. “E-commerce Enterprises and Farmers”: An Effective Way for Smallholder Farmers to Participate in the E-commerce Value Chain

The “e-commerce enterprises and farmers” model is an effective way to help supply chain participants achieve stable incomes over the long term as agricultural product e-commerce develops. Small Chinese farmers commonly have a weak ability to mitigate risks and low information literacy, which renders most of them incapable of participating in e-commerce entrepreneurship directly. In recent years, the rise of live-streamed e-commerce has led to a continuous increase in data costs, which has made it more difficult for smallholder farmers to start e-commerce businesses. Most e-commerce enterprises selling agricultural products are unable to produce and sell goods on their own as a result of high costs, long business cycles, and high risks throughout the production process, and agricultural products purchased by village agents or at wholesale markets are often stereotyped and uncompetitive. The “e-commerce enterprises and farmers” development model can help smallholder farmers participate in e-commerce development while standardizing production and guaranteeing profits, however. It also helps e-commerce enterprises enjoy a more stable supply of higher-quality products at lower costs, which promotes their development.

### (I) Order-based Agriculture Achieving Win-Wins for Three Parties: Ganfuyuan

Ganfuyuan is a large e-commerce enterprise specializing in various kinds of fruits and vegetables headquartered in Shaanxi Province’s Yangling Agricultural High-Tech Industry Demonstration Zone. It has built warehouses all over China and achieves a total of more than RMB1 billion (US\$156.25 million) of revenue on Tmall and other platforms every year. The company establishes fixed, collaborative relationships with cooperatives, large-scale growers, and regular farmers and signs orders with them

in order to ensure a stable supply of high-quality products and provide a stable sales channel for farmers.

Xinjiang’s Aksu apple is a good example. Every year, Ganfuyuan signs contracts with apple growers that require them to apply chemical fertilizers and pesticides in strict accordance with production standards and purchases the fruit at local market prices, which guarantees a stable supply for income

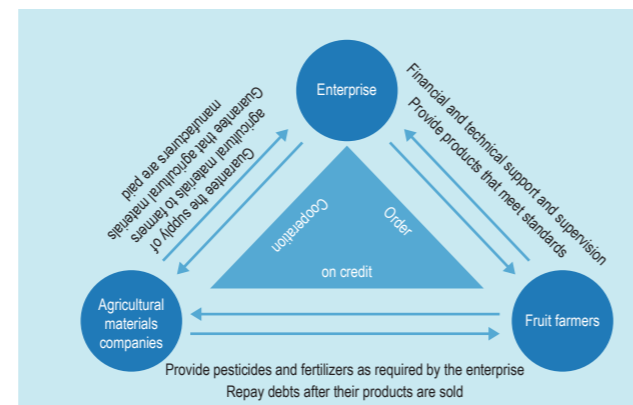


Fig. 5: A diagram depicting the relationships between Ganfuyuan, agricultural materials manufacturers, and fruit farmers

for growers. The company also works closely with agricultural materials manufacturers in order to ensure quality. They provide pesticides, chemical fertilizers, and other products to fruit farmers on credit in accordance with its requirements from March to April every year, and Ganfuyuan’s orders with fruit farmers guarantee that the agricultural materials manufacturers will be able to obtain their payments on schedule every year, which enables the three parties to obtain win-win-win results (fig. 5).

A large e-commerce enterprise providing fresh produce and other food, Ganfuyuan also strives to use its “discourse power” to guide the healthy development of the market. For example, the

company has noted that Xinjiang Aksu apples that are not bagged have a poorer appearance but are of a better quality and are sweeter and crisper than those that are. It, therefore, influences consumers’ perceptions and consumption habits by spreading information about the issue online and instructs growers not to use bags.

### (II) Jointly Building Bridges That Facilitate Cooperation Between Farmers and Enterprises: Qifeng Fruit Industry

Qifeng Fruit Industry Co. Ltd. is a kiwifruit sales enterprise based in Meixian County, Baoji City, Shaanxi Province. Company President Qi Feng began engaging in kiwifruit sales in 1997 and established a kiwifruit cooperative in 2008. Qi formally established the company in 2010 and established an e-commerce company in 2013. The company’s online sales exceeded RMB100 million (US\$1.56 million) in 2017, and the valuation of the Qifeng kiwifruit brand

reached RMB356 million (US\$55.63 million) in 2020.

Qifeng’s high quality is the key to the continuous development and growth of its fruit business. In 2008, the company established the Meixian Qifeng Selenium-Rich Kiwifruit Cooperative in order to be able to produce high-quality kiwifruit and form a long-term cooperative relationship with growers. The cooperative helps strengthen cooperation with fruit farmers, ensures that fruit farmers benefit over the long term, and reduces costs associated with production and sales by providing technical training, agricultural machinery, agricultural technology services, high-quality agricultural materials, fertilizers, and rebates to its members. The close ties that have developed between the organization and growers have enabled the enterprise to lay a solid foundation for the long-term development of its fruit business by standardizing agricultural materials, norms, technology, sales and branding.



### III. A Platform Promoting E-commerce Development in Western China

China's implementation of its Western Development Strategy and construction of e-commerce infrastructure have made it possible for high-quality agricultural products produced in remote, mountainous parts of the region to be sold to buyers located around the country. Alibaba and other e-commerce platforms have been placing strategic focus on villages and have done much work in areas such as digital production, digital marketing, and digital logistics and support e-commerce development and poverty alleviation in the western part of the country.

Alibaba has played a leadership role in rural e-commerce. It launched its “thousands of counties and villages” project in 2014 and has continued to invest large amounts of funds in solving problems associated with the “first kilometer” of agricultural product sales. In December 2017, Alibaba established a poverty alleviation fund in order to explore sustainable, participatory, and learnable rural development paths in five major areas – education, health, women, the environment and e-commerce. A total of RMB303.7 billion (US\$47.45 billion) of agricultural product sales have been logged on Alibaba platforms as of the end of 2020. There are currently more than 120 flagship stores representing landmark brands with high-quality and affordable prices on Tmall. The Cainiao Rural Intelligent Logistics Co-distribution Project has established over 1,000 county-level distribution centers and more than 30,000 village- and township-level distribution centers in 29 of China's provincial-level administrative areas, which has improved the sales volume of rural goods and enables special rural products to be sold under good brands and at good prices, thereby boosting the development of rural industries. On May 17, 2021, Alibaba launched “Alibaba Rural Vitalization Program” and transformed its poverty alleviation fund into a

rural vitalization fund. The company is helping to facilitate rural vitalization in three areas – science and technology vitalization, industry vitalization, and talent vitalization – in order to help consolidate the poverty alleviation achievements that have been made in rural areas and continue to invest in the endeavor.

For example, Alibaba dispatched two poverty alleviation technical task force teams and a rural vitalization technical task force team to various counties in western China in order to help them engage in e-commerce. The teams brought digital know-how and internet technology to underdeveloped areas; created digital development plans based on local circumstances, characteristics, and industrial development levels; and used e-commerce to promote development. Alibaba created a model in which warehouses located where products are produced complete the construction of a regional agricultural product distribution hub, made large investments based primarily on the characteristics of e-commerce associated with agricultural products dominant in western China, and created a complete cold chain logistics system in order to drive upward sales of agricultural products, thus empowering farmers.

#### (I) Promoting E-commerce in Poverty-Stricken Areas: Technical Task Force in Rural Areas

In 2019, Alibaba launched its “Poverty Alleviation Technical Task Force” project in line with its poverty alleviation mission and the vision of the platform. A total of 11 senior employees in two groups were chosen to work in Gansu Province's Lixian and Weiguan counties, Guizhou Province's Pu'an County, Hunan Province's Chengbu Miao Autonomous County, Shanxi Province's Pingshun County, Hebei Province's Zhangbei and Julu counties, Henan Province's Minquan County; Jilin

Province's Wangqing County, Jiangxi Province's Xunwu County, and Shaanxi Province's Yijun County in order to engage in designated poverty alleviation work. Technical rural vitalization task forces were also dispatched in 2021. The groups have used internet methodologies and know-how to mobilize relevant Alibaba and Ant Group resources in line with development needs in specific areas and in consideration of their specific characteristics and implemented customized poverty alleviation programs with the strong support of local governments. The technical task force system has been an effective means of mobilizing the platform's resources and connecting local governments, merchants, and internet companies with each other. Technical task force groups have been able to make



Case Study Yin Yipan, technical task force team member working in Lixian County

The technical task force team member Yin Yipan was dispatched to Lixian County. He determined that the apple industry could be used as an engine to promote local development after studying and investigating various industries in its borders and helped fruit farmers open online stores and engage in live-streaming by utilizing Alibaba's resources and offering training programs. Yin also taught farmers to use internet tools that expand online sales channels for apples. He worked with the local government to get the Lixian apple registered as a “National Geographical Certification Trademark” and helped develop a variety of processed apple foods in order to enhance the value of the products. In 2019, the task force member assisted with the sale of more than 10 million kg of apples and trained more than 800 e-commerce practitioners.

substantial contributions to the development of e-commerce industry in the areas that they have been deployed to.

#### (II) Developing the Digital Agriculture Supply Chain: The Xi'an Fresh Point-of-Origin Warehouse

In October 2019, Alibaba established its Digital Agriculture Division, which focuses on improving cold chain logistics systems. The division creates plans for large-scale regional warehouses and processing centers and centralized transportation in core agricultural production areas across China. A large number of small-scale, direct management warehouses are being established in advantageous counties, townships, and villages that produce characteristic agricultural products, and sales warehouses are being built in cities.

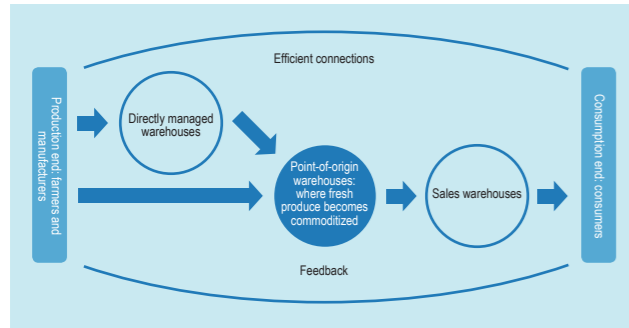


Fig. 6: A diagram depicting the relationships between Alibaba's warehouses in producing areas

In November 2020, Alibaba built centralized regional, large-scale digital point-of-origin warehouses, processing centers, and transportation infrastructure in Kunming City, Yunnan Province; Nanning City, Guangxi Province; Pujiang County, Chengdu City, Sichuan Province; Yiyuan County, Zibo Prefecture-level City, Shandong Province; and Xi'an City, Shaanxi Province, and put them into use.

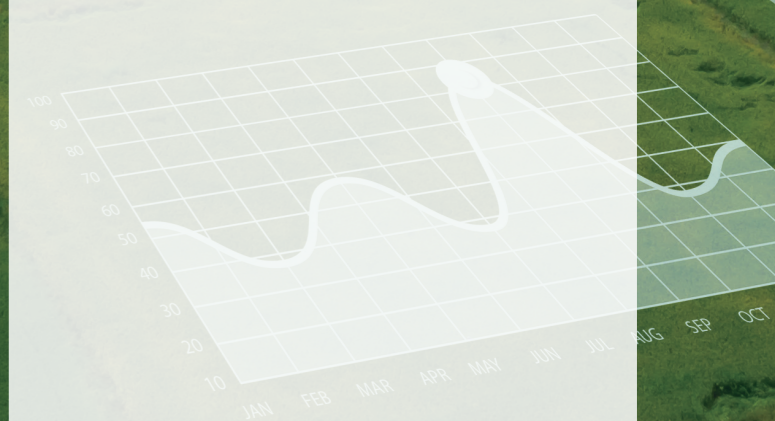
Point-of-origin warehouses are key to transforming agricultural products into standard agricultural commodities. Agricultural products undergo quality testing, cleaning, sorting, and classification as well as pre-cooling, cold storage, and automated packaging at the facilities and are then delivered to buyers located throughout China.

The warehouses benefit both farmers at the production end and consumers at the consumption end. They help farmers solve problems associated with the "first-kilometer" of sales, allow them to bypass middlemen, and create more space for profit. The standardized processes that they employ play a vital role in the development of regional brands and improve brand awareness. They also enable consumers to obtain commodities in cheaper and faster ways. The facilities, therefore, contribute to the upward sale of agricultural products.



## Section III: Implications Related to the Development of Rural E-commerce in Western China for Other Developing Countries

The rapid development of e-commerce in China has created new consumer demand, triggered a new investment boom, opened new channels for increasing employment and incomes, and provided new space for mass entrepreneurship and innovation. E-commerce is accelerating its integration with the manufacturing industry, promoting transformation of the service industry, and giving birth to new paradigms and has thus become a new force for the provision of public services and economic development.



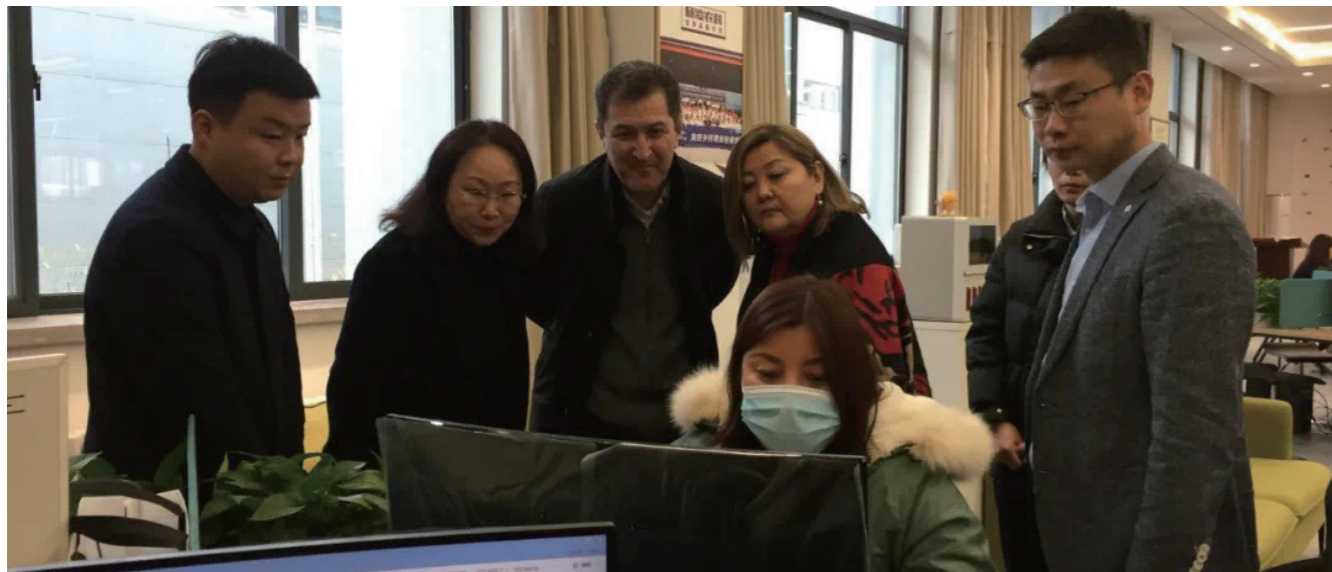


## I. Public Support Promotes the Development of Rural E-commerce

Public investment has played the most prominent role in the development of rural e-commerce in western China, including funds slated for improving infrastructure and transportation and logistics, lowering thresholds of entry, and increasing financial service support. The public sector has primarily increased financial and policy support in order to promote the development of rural e-commerce by:

- strengthening the integrated development of the internet with agriculture and rural areas and introducing management concepts such as the industrial chain, the value chain and the supply chain;
- formulating a supervision system that helps maintain quality standards and developing cold chain logistics infrastructure for agricultural products;
- establishing comprehensive e-commerce demonstration zones in rural areas and making use of the “thousands of townships and villages” project in order to improve the rural e-commerce service environment;
- developing a technical standards system and a product quality assurance system for geographical products; and
- encouraging e-commerce platforms to serve “one product from one village” and promoting the outward development of branded agricultural products.

## II. E-commerce Effectively Promotes the Development of the Rural Value Chain



China’s rural e-commerce has rapidly driven the diverse development and extension of the agricultural industry chain while linking digital villages with intelligent agriculture as it has developed in recent years.

The development of e-commerce in rural areas:

- effectively reduces the economic and social cost of rural consumption;
- drives rural consumption and effectively boosts value added by the participants in the supply chain;
- promotes rural industrial development and value chain development;
- promotes common development and employment, enhances related industries, and drives the growth of the rural economy.

## III. E-commerce Enhances the Role of Cooperatives

The “farmers, cooperatives, and e-commerce” development model has unleashed the potential of rural e-commerce to help villagers become more prosperous. Traditional cooperatives often rely on a single sales channel, possess a limited range of customer groups, and suffer from restricted growth of their development spaces. Participating in e-commerce yields many benefits, such as the following:

- Cooperatives no longer have to rely on their original sales channels and local markets. E-commerce enables their markets to expand and provides space for prices to appreciate. Customers also tend to make repeat purchases at higher rates. Some cooperatives have laid a sound foundation for the creation of an agricultural product supply chain by launching new e-commerce stores.
- Farmers’ cooperatives can increase the value-added space of the upward sale of agricultural products by virtue of economies of scale and other advantages that occur when they unite with each other and integrate their agricultural product resources by taking advantage of specialized e-commerce service platforms run by farmers’ societies, the government, and other organizations and should continue to do so.
- E-commerce platforms, and especially vertical e-commerce platforms, obtain high-quality production-area resources by signing stable sales contracts or by creating high-quality production bases via joint investment with farmers’ cooperatives, which enhances consumer retention and achieves mutually beneficial results.

## IV. Triggering Effects of the Private Sector/Platform Economy

E-commerce enterprises are creators and coordinators of dynamic business ecosystems and are key to the development of e-commerce in rural areas. Sales platforms provide information, transaction support, and catalogues of commodities; accept and process orders; and coordinate relationships between producers and logistics enterprises. Third-party payment platforms also help reduce risks, which helps ensure that transactions are successfully completed.

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WFP Centre of Excellence for Rural Transformation and AliResearch will continue to learn China's valuable experience in rural e-commerce development together and share with more developing countries.