



# Investigation of the Current Situation and Trends in Agricultural Product E-commerce in China

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**Abstract.** Agricultural e-commerce will become an important force propelling the "digital business of agriculture" as a crucial hand in China's rural revitalization. This paper focuses on the current situation and mode of development of China's agricultural e-commerce, and it is intended to make recommendations for future development based on research and analysis of China's agricultural e-commerce market, rural e-commerce regional development situation, and China's agricultural e-commerce development mode.

**Keywords:** agricultural products, agricultural e-commerce, mode, development status quo

## 1 Introduction

With the rapid development of China's economy and the acceleration of urbanization, consumers' expectations for the quality, safety, environmental protection, and health of agricultural products are increasing, as is their reliance on brands when purchasing agricultural products online, but the capacity of traditional farmers' markets is limited and unable to meet the growing demand of urban residents<sup>1-3</sup>. Furthermore, the rapid popularization of Internet technology and the ease of mobile payment provide infrastructure and technical support for the development of agricultural e-commerce<sup>4-6</sup>, and agricultural producers can provide access to more technological information than traditional sales channels, making online transactions more convenient and secure<sup>7-8</sup>.

The current research on China's agricultural e-commerce focuses on the individual parts of the development status quo and mode; however, this paper takes the development status quo and mode of China's agricultural e-commerce as the research perspective, analyzes it thoroughly, and makes reasonable recommendations using the policy analysis method, the literature analysis method, and the case study method.

## 2 An examination of the current situation

### 2.1 "Digital Commerce for Agriculture" is bearing fruit

With the comprehensive implementation of the "Digital Commerce for Agricultural Development" project. It has played a significant role in improving agricultural product upward mobility and better ensuring agricultural product supply.

According to corporate big data monitoring, national rural internet retail sales will reach 21.7 trillion yuan in 2022, rising 3.6% year on year. As shown in Figure 1, rural internet retail sales of physical commodities were 1.99 trillion yuan, a 4.9% increase year on year.

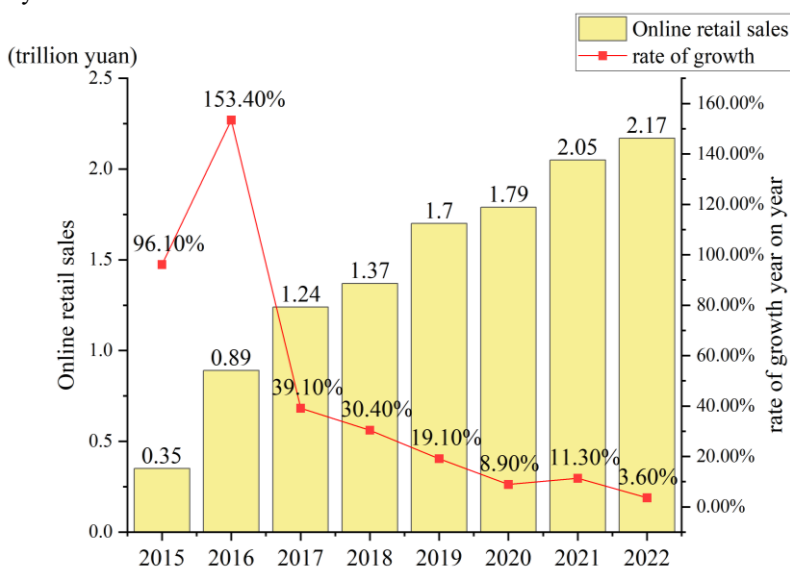


Fig. 1. Rural Online Retail Sales in China, 2015-2022

### 2.2 The agricultural products e-commerce market is growing

Green and organic agricultural products will be in higher demand in 2022 as customer demand for health and the environment grows. More farmers will sell their agricultural products through e-commerce as e-commerce platforms become more popular and developed.

According to the monitoring of business big data, the national e-tailing sales of agricultural products amounted to 531.38 billion yuan, with a year-on-year growth of 9.2%, and the growth rate was 6.4 percentage points higher than that of 2021. As shown in Figure 2, five categories of nourishing food, milk, grain and oil, meat, poultry and eggs and seasonings grew by more than 10.00% year-on-year.

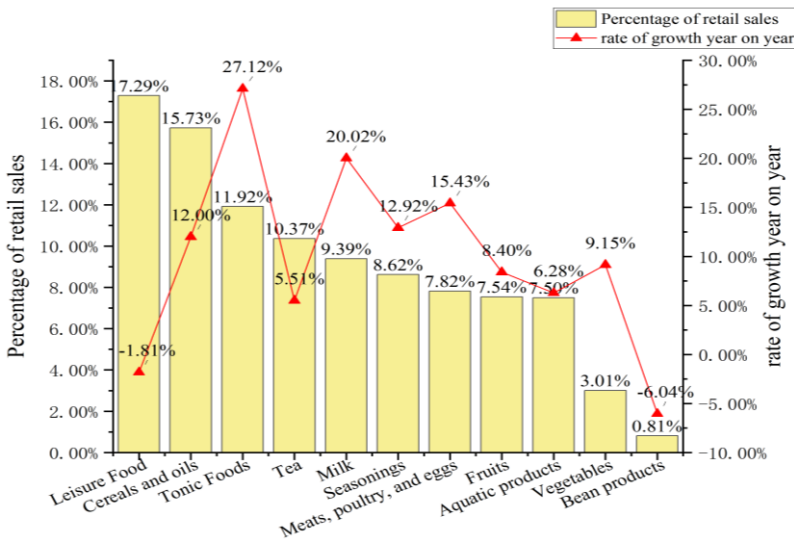


Fig. 2. Agricultural Products E-commerce Market in China by Retail Value Share and Year-on-Year Growth Rate, 2022

### 2.3 Rural e-commerce development is unbalanced and inadequate

Although the extent of rural e-commerce in China continues to rise, it is still plagued by imbalanced and insufficient development. China's rural e-commerce regional development is imbalanced at the sub-regional level. As shown in Figure 3.

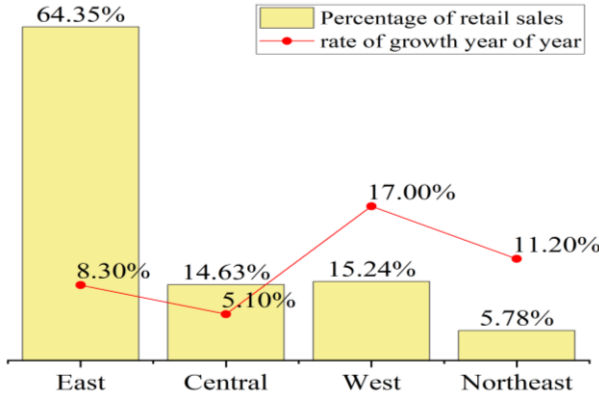


Fig. 3. China's Agricultural Product E-commerce Sales by Region and Year-on-Year Growth Rate, 2022

As shown in Figure 4. Zhejiang, Jiangsu, Fujian, Hebei, and Shandong were among the top five provinces in terms of rural e-tailing sales, accounting for 72.45% of total national rural e-tailing sales. In terms of year-on-year growth, Tibet, Gansu, Hainan, Qinghai, and Jilin were in the top five.

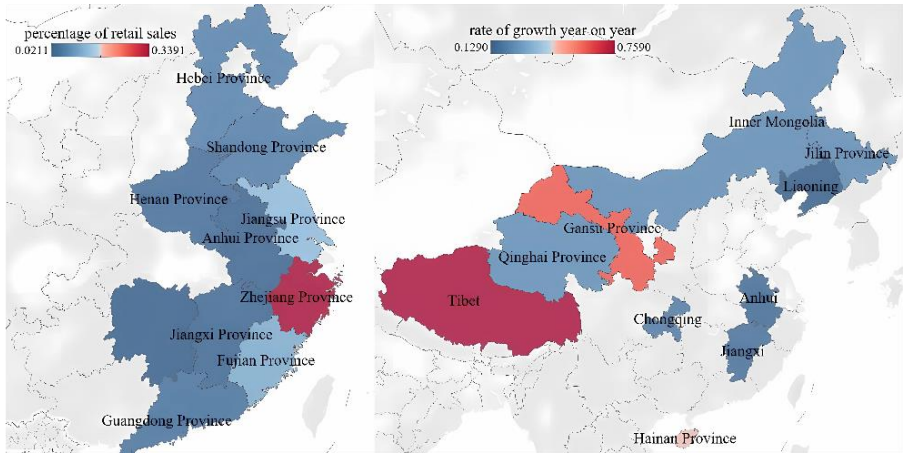


Fig. 4. China's Online Retail Sales Share and Year-on-Year Growth Rate in 2022, by Province

### 3 Modeling research

#### 3.1 Synergy model for "Integrated Urban-Rural Logistics + Supply Chain"

As shown in Figure 5. E-commerce, logistics, and supply chain platforms have evolved into significant forces behind the industrialization and intellectualization of agriculture against the backdrop of "Internet+" development<sup>9</sup>. The model primarily relies on cutting-edge e-commerce and modern logistics technology, building resource sharing, integrating the logistics and distribution system between urban and rural areas.

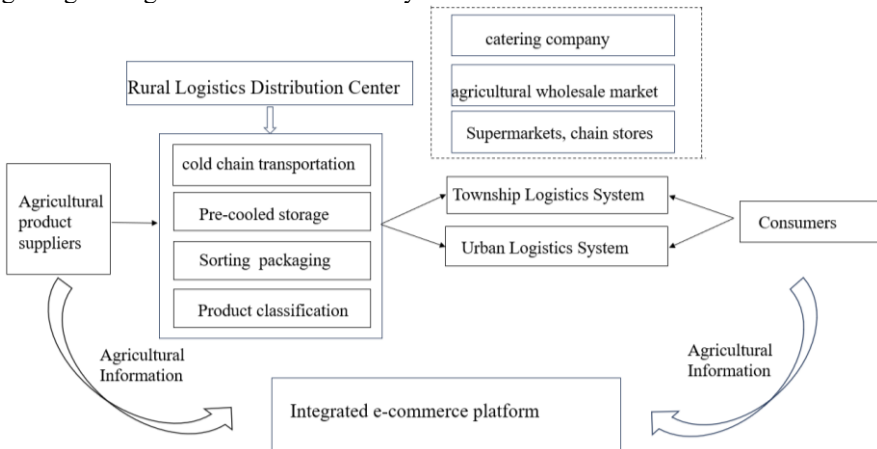


Fig. 5. Collaboration Model for "Integrated Urban-Rural Logistics + Supply Chain" Structure

### 3.2 Specialty agricultural product sales model using "Live E-commerce"

As shown in Figure 6. The primary method of selling agricultural products in "live e-commerce" is through the use of network platforms, social software, etc. Live broadcasting to become a new infrastructure in rural areas, agriculture, new agricultural activities, a strong active rural consumption, and promote villagers to start a business to increase income<sup>10</sup>.

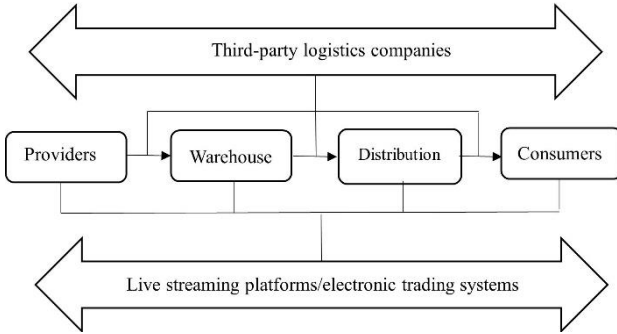


Fig. 6. Collaboration Model for "Integrated Urban-Rural Logistics + Supply Chain" Structure

### 3.3 The emergence of "Physical E-Commerce + Brand"

As shown in Figure 7. The China Agricultural Brand Development Report (2021) goes into detail about the importance of agricultural product branding at the new stage of development and how it will expand and consolidate the outcomes of poverty alleviation and the effective linkage with rural revitalization.

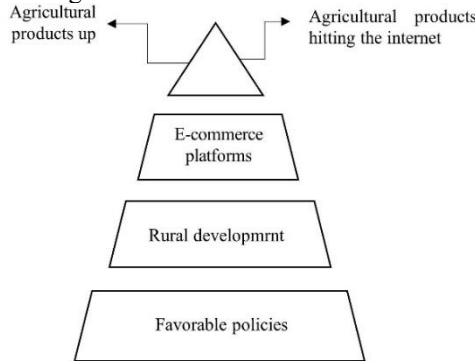


Fig. 7. Development model of "brick-and-mortar e-commerce + brand" structure

## 4 Conclusions

To offer customers with trustworthy information on product quality, strengthen the supervision of agricultural product quality, support the creation of an agricultural product

certification system, and integrate relevant certification information with the e-commerce platform.

Encourage cooperation and integration of all links in the agricultural industry chain, increase agricultural product supply chain efficiency, and strengthen logistics, distribution, and warehousing capacities.

The government can promote agricultural product e-commerce businesses to develop into the worldwide market, conduct agricultural product export operations, and establish the international brand of Chinese agricultural products.

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