Exploring the E-commerce Mode for Agricultural Products under the Reform of Agricultural Supply Side

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Abstract: Based on the current new situation and major contradictions of agricultural production in China, the reform of agricultural supply side is an effective way to promote the circulation of agricultural products, increase farmers' income, narrow the gap between urban and rural areas, and achieve common prosperity. By analyzing the existing problems in China's urban and rural agricultural products trading under the supply-side reform background, this paper proposes several measures to improve the development level of agricultural products e-commerce, in order to deepen the reform of agricultural supply side.

Keywords: Reform of Agricultural Supply Side; Agricultural Products; E-Commerce Mode; Measures

With the transformation of China's economic shape, the relationship between supply and demand of agricultural products has become more and more obvious from a tight to a loose one. The agricultural product price index has shown a downward trend, and the problem of unsalable agricultural products has become an urgent problem for agricultural development. In 2016, the No. 1 Document of the Central Committee first proposed the concept of agricultural supply side reform, vigorously developed green agriculture, guaranteed food quality and safety, and promoted farmers' continued income increase to improve the matching of agricultural production and market demand. Moreover, it is necessary to promote the development of agricultural innovation, transformation and upgrading, and improve quality and efficiency. At this stage, the domestic agricultural production model is still lagging behind, continuing the traditional small-scale farming model, without industrialization and brand awareness. The output of agricultural products has always lacked a systematic and standardized process, but the national demand for diversified demand for agricultural products and quality and safety are becoming higher and higher, which has become a problem that needs to be solved in the reform of agricultural supply side.

I. Current Status and Expectations of Agricultural Products Trading under the E-commerce System
1.1 E-Commerce System for Agricultural Products

At this stage, China's agricultural products e-commerce is developing rapidly. It has formed a pyramid structure system based on online agricultural product futures trading, online agricultural product derivatives trading, bulk agricultural product electronic trading, agricultural product online retail trading, entity enterprise O2O trading, and agricultural product online trading.

1.2 Current Status and Expectations of Agricultural Products Trading

In 2017, China's agricultural products traded 953 million in the futures market, and the transaction volume reached 40.88 trillion yuan. In 2017, the number of China's agricultural product electronic trading market had reached 585. According to the monitoring data of the E-Commerce Research Center, the retail sales of rural agricultural products reached 250 billion yuan in 2017. The relevant departments expect that the retail sales of agricultural products in China will reach 800 billion yuan in 2020.

In the past five years, the sales of fresh agricultural products in China have increased substantially, with an annual increase of more than 50%. In 2017, China's fresh agricultural products reached 139.13 billion yuan, and the relevant departments expected that the total transaction volume of China's fresh e-commerce market will exceed 300 billion yuan in 2020.

In 2017, the number of Taobao villages and towns in the country was 2,118 and 242 respectively. In 2016, there were as many as 11,000 online stores in Taobao Village with annual sales of 1 million yuan. In 2017, there were more than 100 Taobao villages in Zhejiang, Guangdong, Jiangsu, Shandong, Fujian and Hebei provinces.

It can be seen that with the advancement of agricultural supply side reform, the development mode of China's agriculture has also changed, and the e-commerce system has been continuously improved. However, it is limited to some developed provinces, and rural e-commerce in most provinces of China has not yet developed.

![Forecast of Online Retails of Agricultural Products in China in 2013-2020](image)

Figure 1: Forecast of Online Retails of Agricultural Products in China in 2013-2020 (Unit: 100 million yuan)
II. A Series of Problems in Agricultural Product Trading under the Supply-side Reform

2.1 The quality of agricultural products is not high and commodity trading is limited.

The development of social economy has made the national consumption level and consumption quality increase year by year, and the consumption structure has been continuously and rationally optimized, constantly changing from low level to high level. At this stage, the agricultural products of high quality, leisure and health series are welcomed by more consumers. One of the main problems in the sales of agricultural products in China is that the quality of agricultural products is low, which cannot meet the increasing consumer demand, which ultimately leads to poor circulation and limited transactions. As a result, on the one hand, a large number of agricultural products are excessively slow-moving, and on the other hand, some emerging market demands are not met. Based on this, it is impossible to achieve efficient and optimal allocation of agricultural resources, resulting in waste of resources, the market is obviously not developed, and the consumption demand cannot be stimulated to stimulate agricultural growth.

2.2 Lack of Branded Agricultural Products

Judging from the overall situation of agricultural product operation in the past, China's agricultural product operation needs to meet lower requirements, and most of the agricultural products circulating in the market are not brand-oriented. As the disposable income of residents increases year by year and the consumption level of residents increases, the influence of current brand effects on people’s purchase of goods is increasing. However, at present, the marketing of most agricultural
products in China is not highly positioned, and the number of leading enterprises producing agricultural products is relatively small. In the long run, it is unfavorable for the further development of agricultural products. Under the situation of agricultural supply side reform, agricultural product producers should establish brand awareness; Relevant departments shall formulate standard standards for quality requirements, grade specifications, safety testing, storage and preservation, and transportation management according to different types of agricultural products.

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<td>Residents’ Disposable Income (Unit: yuan)</td>
<td>18310.76</td>
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<td>23820.98</td>
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2.3 Infrastructure in Rural Areas is Backward

With the advancement of supply-side reform, the development model of agricultural products e-commerce has become a hot word, but the e-commerce model in most rural areas in China has developed slowly. As of June 2017, rural netizens accounted for 26.7% of the netizens in China, with a scale of 201 million; urban netizens accounted for 73.3% and the scale was 550 million; Through the investigation, we found that the prevalence rate of computers in rural areas is relatively low at present, and the number of farmers who can access independent Internet in China is also small, and the relevant knowledge about agricultural e-commerce is scarce. These directly affect the improvement of the development level of China's agricultural products e-commerce; In addition, the logistics industry supporting the e-commerce model is better than the rural areas in the development of the city, and traffic inconvenience is one of the main influencing factors. Roads are not smooth, agricultural products can be hardly transported, and damage rates are increased. Under the condition of lagging logistics, agricultural products can only be sold locally, and the market is obviously not developed. This will lead to overstocking of stocks, deterioration of commodities, and losses to producers.

2.4 It is Difficult to Acquire Information

In the process of agricultural reform, balancing the supply side and the demand side is the top priority, and ultimately improving the level of social productivity. Under the new situation, the main contradiction in agricultural is the coexistence of periodical oversupply and insufficient supply. One of the reasons for the large inventory is information asymmetry, that is, manufacturers cannot obtain real and effective data information in time, leading to blind production. Moreover, the information base of most rural areas in China is weak, and the cost of obtaining data information is relatively high. In this situation, the speed and breadth of farmers’ access to information are constrained.
III. Measures to Promote the Development of Agricultural Products E-commerce Model under the Background of Agricultural Supply Side Reform

With the development of the Internet, the circulation channels of agricultural products have become network-like, and then five major agricultural product e-commerce models have been derived: 1. C2B/C2F mode (consumer customization mode) 2. B2C mode (business to consumer mode) 3. B2B mode (business to merchant mode) 4. F2C mode (farm direct supply mode) 5. Agricultural community O2O mode. The above five different agricultural product e-commerce models are suitable for different agricultural products, each of which has advantages, but they also have certain drawbacks. The following are some measures to promote the development of the e-commerce model of agricultural products.

3.1 Promote visualization of agricultural products

Visual agriculture refers to the use of modern information technology, including the Internet, radar technology and modern video technology. Publicize the process of crop growth and the processing of agricultural products, so that consumers can be assured of the quality of agricultural products; visual agriculture can also realize the effect of futures orders. It can be seen that agricultural consumers or investors can observe and place orders remotely, and observe the whole process of production and management of livestock, fruits, pigs, cattle and sheep. Therefore, the promotion of agricultural product visualization can meet the needs of high-end consumers and some emerging needs, and promote the healthy development of agricultural products e-commerce towards high-quality marketing, green marketing, and service marketing.

3.2 Develop “Agricultural Products + Webcast” Marketing Model to Enhance Brand Awareness

At present, with the improvement of people's living standards, brands are increasingly valued when purchasing agricultural products, but the number of agricultural products brands in China is relatively small. Therefore, we can use the promotion of the Internet to create agricultural product brands and enhance brand awareness. At present, the webcasts that have received much attention, some stars have also participated, and the products they use have been rapidly promoted. Develop the “Agricultural Products + Webcast” marketing model, the founders of the enterprises or stars conduct live broadcasts of agricultural products, and consumers can participate in interaction and gain satisfaction; Secondly, in the environment where consumers pay more attention to quality and leisure, but the quality of online sales is mixed, the consumers who can see the products by the live broadcast can improve their purchasing confidence.
3.3 Accelerate the Construction of Infrastructure in Rural Areas

The development of agricultural e-commerce is closely related to rural infrastructure construction. Improving rural infrastructure can promote the development of agricultural e-commerce. The specific measures are as follows: First, to continuously expand the rural network coverage rate, the government should introduce relevant support policies, strengthen the training of farmers' professional knowledge, and improve the computer application level of farmers; Secondly, multimodal transport is a project promoted by the logistics industry in recent years, but it requires a high degree of infrastructure. Therefore, we need to improve road and railway construction, ensure efficient transportation, reduce logistics costs, and improve punctuality.

3.4 Establish Data Processing Center

Each region establishes a data processing center based on the e-commerce platform to integrate and forecast sales data. Provide suppliers with a consulting service platform to let them know the products needed on the market and increase their sensitivity. According to changes in market demand, timely adjust crop planting plans, product production plans, etc., to prevent waste of resources caused by blind production.

References

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