The Development and Policy Suggestions of Cross-border E-commerce of Agricultural Products in Our Country

DOI: 10.23977/msom.2023.040301

ISSN 2616-3349 Vol. 4 Num. 3

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Keywords: Agricultural Products, Cross-border E-commerce, Foreign Trade

Abstract: Development and Policy Recommendations of cross-border e-commerce of Agricultural Products in China With the continuous development of Internet technology, cross-border e-commerce has become one of the main drivers of business innovation in the 21st century. The use of cross-border e-commerce platform for agricultural products can not only effectively shorten the trading time of agricultural products and control the problematic links in trade, but also meet the diversified demands of various countries in the world for Chinese agricultural products and bring huge economic benefits to agricultural producers. However, compared with developed countries, there are still many problems in China's cross-border e-commerce operation system, distribution channels and local enterprises, which need to be solved.

1. Introduction

According to the statistics of the General Administration of Customs, China's total import and export of agricultural products in 2022 has reached 334.32 billion US dollars, up 9.9 percent year on year. The flourishing development of cross-border e-commerce has brought an opportunity to expand and improve the quality of China's import and export trade of agricultural products [1]. In recent years, with China's vigorous development of cross-border e-commerce, China's total import and export volume has been increasing rapidly. Imports and exports to ASEAN, the European Union, the United States, Japan and South Korea, the top five trading partners, all increased. Cross-border e-commerce not only promotes the prosperity of China's foreign trade, but also has played a positive role in China's agricultural and economic development [2]. However, with the continuous development of cross-border e-commerce, compared with developed countries, China still has many problems to be solved, such as insufficient technology, imperfect standard system and poor quality of enterprises.

2. Development Status and Characteristics of Cross-Border E-Commerce

2.1. Development Status of Cross-border E-commerce

The output of grain, oil, cotton, vegetable, fruit, meat, eggs and aquatic products in China ranks among the top in the world. China is also an important exporter of tea and aquatic products in the world. Cross-border e-commerce refers to a transnational transaction mode in which enterprises or individuals with different customs conditions conduct international trade through e-commerce platforms. International trade through cross-border e-commerce can reduce costs, broaden export channels and improve logistics and distribution, thus making up for the shortcomings of the traditional foreign trade industry and promoting the transformation and upgrading of the modern foreign trade industry [3].

In recent years, the ravages of the novel coronavirus pandemic pose a new challenge to vulnerable agriculture, the demand in overseas markets has decreased, which has indirectly caused the growth rate of China's foreign trade to slow down [4]. In 2022, against the backdrop of the global epidemic, the total value of China's import and export of goods trade reached 42.07 trillion yuan, an increase of 7.59 percent over 2021. Among them, the scale of China's cross-border e-commerce transaction in 2022 is expected to reach 15.7 trillion yuan, up 10.56% year on year, and the growth rate is 3.04 percentage points lower than that in 2021, slowing down the pace of growth decline, making outstanding contributions to the stabilization of foreign trade import and export. At the same time, exports of China's cross-border e-commerce trade are much higher than imports, accounting for 77.47% of exports and 22.53% of imports in the first half of 2022. The import and export structure of cross-border e-commerce is generally relatively stable, and the absolute advantage of export trade determines the enthusiasm of China's cross-border e-commerce development in the new era [5]. (Fig.1)

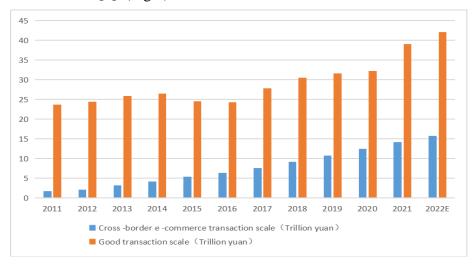


Figure 1: China's cross-border e-commerce transaction volume from 2010 to 2022

The penetration rate of cross-border e-commerce is gradually increasing and has become a new driving force for China's foreign trade growth. In 2022, China's cross-border e-commerce transaction volume will account for 37% of China's total import and export of goods, up 7.5 percentage points in the past five years. The trend of online transformation of traditional foreign trade is obvious. Under the background of normalized epidemic prevention and control, offline consumer demand continues to be released, and cross-border e-commerce has become an important force to stabilize China's foreign trade. (Fig.2 & Fig.3)

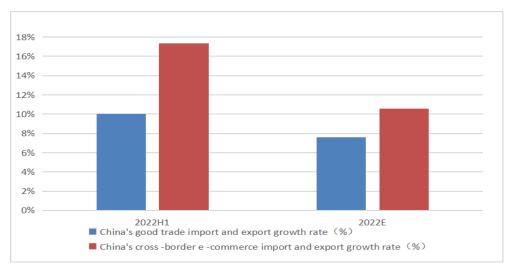


Figure 2: Comparison of China's goods trade and cross-border e -commerce imports and exports in 2022

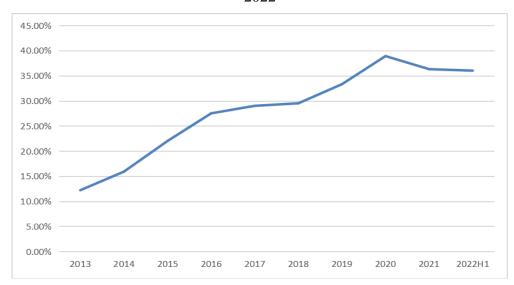


Figure 3: 2013-2022 China cross-border e-commerce industry penetration rate (%)

2.2. Characteristics of Cross-border E-commerce

Cross-border e-commerce is also called foreign trade e-commerce [6]. E-commerce is a concept of trade whereby customers order and pay for products via the Internet, and sellers deliver the products in either a physical or digital form [7]. China's cross-border e-commerce has the characteristics of globality, intangibility, immediacy and rapid evolution. E-commerce can also be very useful for promoting the development of the rural economy and society in such facets as economic growth, poverty alleviation and employment [8].

2.2.1. Global

With the Internet as the medium, it breaks through the traditional geographical location limitation. Enhance the convenience and speed of both buyers and sellers.

2.2.2. Intangibility

Compared with physical transactions in traditional trade, cross-border e-commerce transforms physical objects into digital symbols in the network. For example, traditional listening to music, you need to go to the video store to buy physical records to listen to, but now you only need to buy music in the mobile phone software to listen to any music you want, which has greatly improved people's living standards and living convenience.

2.2.3. Timeliness

In traditional cross-border transactions, both parties often need letters, emails and telephone calls to conduct transactions, which takes a long time. Cross-border e-commerce, with the network as a bridge, can communicate with each other anytime and anywhere, greatly improving the efficiency of transactions.

2.2.4. Rapid Evolution

With the continuous rapid development of the Internet, cross-border e-commerce using the Internet as a transaction tool is also developing rapidly. Various new trading modes emerge at the historic moment, which greatly enriches the diversity of trading and improves the convenience of life.

3. A New Development Model

In the past a few years, China officially opened some cross-border agricultural trade platforms, and now government is accelerating the development of them [9], namely B2B, B2C and C2C. From the perspective of transaction costs, the existing three models will lead to the rise of transaction costs of agricultural products, thus weakening the competitiveness of Chinese agricultural products in the international market, which is not conducive to the development of China's agricultural products export market. Therefore, it is necessary to innovate the cross-border e-commerce model of agricultural products and build the F2B2C model of agricultural products e-commerce [10]. (Fig.4)

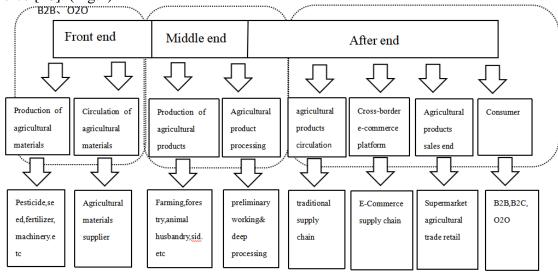


Figure 4: Cross-border e-commerce business system of agricultural products

F2B2C mode, F2B2C is the abbreviation of Factory to Business to Customer. It is a mode in which manufacturers display product or service information through third-party platforms and lead end users to their own platforms for transactions.F2B2C mode greatly facilitates the three parties. For the manufacturer, it expands the sales area, expands the sales scope, reduces the intermediate platform, reduces the cost required in the transaction process, and greatly improves the interests of the seller. For buyers, F2B2C mode provides sellers with a series of information and a series of regulations and standards for selling products to ensure the quality of goods and protect the rights and interests of consumers. At the same time, for the third-party platform, the platform can be used as an intermediary to enhance the popularity of the platform, so that more enterprises and consumers can use the platform and enhance the popularity and interests of the platform. Under the F2B2C model, the third-party platform only exists as a medium of information interaction. In the logistics and distribution link, sellers can choose the logistics platform and mode by themselves, not limited to the original single distribution logistics company, so as to improve the distribution efficiency. The third-party platform can also play a role in supervising and tracing products, improving the safety and efficiency of distribution.F2B2C mode has strong feasibility under certain circumstances, which further lays a foundation for the feasibility of "Internet + ecological chain agriculture" model[11]. (Fig.5)

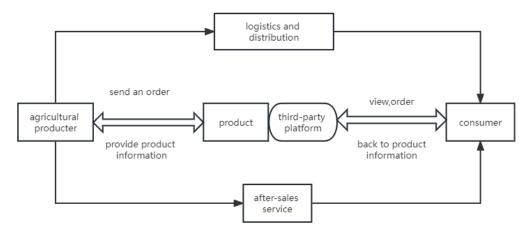


Figure 5: Brief analysis of F2B2C operation mode

4. The Main Problems

At present, the e-commerce industry of agricultural products plays a pivotal role in promoting income growth and helping rural revitalization. Still, there are many problems with cross-border e-commerce.

4.1. Agriculture System Morbidity

4.1.1. The Cross-Border E-Commerce Model is Unclear

With the continuous development of cross-border e-commerce, three trade modes, namely B2B, B2C and C2C, have been gradually formed. In fact, the choice of cross-border e-commerce model depends on two aspects. On the one hand, unnecessary intermediate processes in the circulation process often lead to excessive cost waste and reduction of efficiency. On the other hand, the excessive shortening of the intermediate process in logistics leads to the decrease of the transaction cost instead of the increase, and finally leads to the failure of the transaction. When conducting

cross-border e-commerce transactions, enterprises should choose the transaction mode that is more suitable for their own products and reduce unnecessary losses.

4.1.2. The Cold Chain Logistics Construction System is not Perfect

The cold chain logistics construction system is not perfect. Compared with developed countries, our country is limited in technology and capital. Agricultural products, especially cold chain products, have high requirements for logistics. Compared with other foreign countries, China's cold storage has a small volume and lagging function, and the market scope it can cover is very limited. At the same time, the infrastructure of cold chain logistics is not perfect. For example, there are few logistics transfer stations.

4.2. Defects in the Logistics System

The export trade is inefficient. The logistics network lacks systematic planning and fails to optimize transportation mode, tools and routes, resulting in long distribution time, large loss and high cost [12]. The local territory is vast, and cross-border e-commerce routes cover the first and second tier cities. However, for the third tier cities and remote areas such as rural areas, cross-border e-commerce routes cannot be fully covered, resulting in the difficulty of receiving and distributing goods in remote areas. Rural express delivery has problems such as low efficiency, long delivery time and secondary mark-up. In addition, the rural logistics construction system is slow, the infrastructure is backward, the logistics technology is backward, and the business volume of rural e-shops is small and the operating cost is high. As a result, various types of logistics and express delivery companies are reluctant to set up outlets in rural areas, making many high-quality agricultural products "unable to go out".

5. Policy Suggestions

5.1. For Government

First of all, the state should set a series of perfect quality standards for agricultural products. Secondly, the country should enhance its scientific and technological competitiveness and carry out more technological innovation. We will build rural logistics base stations and increase the coverage of cross-border routes to reduce unnecessary cost waste, so as to make cross-border e-commerce more available to the people and facilitate their lives. Moreover, build a sound logistics body. A sound logistics service system can not only provide consumers with fast and high-quality agricultural products, but also effectively optimize after-sales service. Ensure the credibility and timeliness of delivery, return and exchange, and promote the upgrading of cross-border e-commerce industry chain of agricultural products with digital logistics system. Finally, related institutions should implement industry ideals and norms for material flow [13].

5.2. For Enterprises

At the beginning, if our country agricultural export wants to occupy a place in the international market, we must establish own brand [14]. The first step is to improve the overall quality of exported agricultural products and establish the image of China's high-quality agricultural products. Then, we should look for agricultural products with Chinese characteristics, such as tea and green and pollution-free agricultural products, and promote them to the international market to form Chinese brands. Moreover, entrepreneurs should actively participate in various cross-border e-commerce forums of agricultural products, communicate with and learn from each other, and strive

to create high-quality brands belonging to China, so as to enhance the attractiveness and competitiveness of their enterprises and enhance the comprehensive national strength of China. Finally, Cross-border e-commerce enterprises should have clear positioning and select the most suitable logistics mode, as only in this way can cross-border e-commerce and logistics enterprises jointly achieve sustainable development [15].

References

- [1] He C., He W. (2021) An empirical analysis of the level of cross-border e-commerce development on China's export trade: 11 countries in Southeast Asia as an example. J. Simul, 9, 65.
- [2] Zeng Y. M, Zhang C. (2020) The Impact of Cross-border E-commerce on China's Agricultural Products Export:— An Empirical Study Based on Big Data Processing. 2020 International Conference on Big Data and Social Sciences (ICBDSS). IEEE, 2020, 106-110.
- [3] Liu Y. (2018) Research on the Impact of Cross-border E-commerce on Agricultural Export and Countermeasures. Northern Economy and Trade, 12, 80-82.
- [4] Chen Y., Fu W., Wang J. (2022) Evaluation and influencing factors of China's agricultural productivity from the perspective of environmental constraints. Sustainability, 5, 2807.
- [5] Chen A. (2018) An Empirical Study on the Influencing Factors of China's Cross-border E-commerce Export Trade: Based on the Improved Trade Gravity Model. Beijing: Beijing Foreign Studies University.
- [6] Liu W., Yang Y., Xu D. (2019) Research on Optimization of Cross-border E-commerce Marketing Strategy of Agricultural Products under the Background of Environmental Protection. IOP Conference Series: Materials Science and Engineering. IOP Publishing, 5, 052031.
- [7] Yin Z H., Choi C. H. (2021) The Effects of China's Cross-border E-commerce on Its Exports: A Comparative Analysis of Goods and Services Trade. Electronic Commerce Research, 2021, 1-32.
- [8] Tang S S., Fang C X. (2022) Evolutionary Game Analysis of Agricultural E-commerce Model based on F2B2C Mode. ICETIS 2022; 7th International Conference on Electronic Technology and Information Science. VDE, 2022, 1-6.
- [9] Song Y D., Dang Y., Chen C. (2017) The Status Quo and Strategy of Cross Border E-commerce Export Trade for Agricultural Products.3rd Annual International Conference on Management, Economics and Social Development (ICMESD 17). Atlantis Press, 2017, 355-360.
- [10] Xiao H. (2020) Research on development status and strategy of cross-border e-commerce of agricultural products in our country. Guangdong Sericulture, 06, 89-90.
- [11] Chen Y., Fu W., Wang J. (2022) Evaluation and influencing factors of China's agricultural productivity from the perspective of environmental constraints. Sustainability, 14(5), 2807.
- [12] Li K. (2020) Research on Development Status and Strategy of Cross-border E-commerce of Agricultural Products in Our Country. Farm Staff Officer, 05, 249.
- [13] Liu A., Osewe M., Shi. (2021) Cross-border E-commerce Development and Challenges in China: A Systematic Literature Review. Journal of theoretical and applied electronic commerce research, 17(1), 69-88.
- [14] Xiao H. (2020) Research on development status and strategy of cross-border e-commerce of agricultural products in our country. Guangdong Sericulture. 06, 89-90.
- [15] Li Z., Gao, G., Xiao, X. (2023) Factors and Formation Path of Cross-Border E-Commerce Logistics Mode Selection. Sustainability, 15(4), 3685.