

Influencing Factors and Countermeasures of Cross-border E-commerce Export of Agricultural Products in China

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Abstract: Agricultural products have always been China's traditional trade products, but the export situation of agricultural products in China in recent years is not optimistic. With the rapid development of the Internet economy, cross-border e-commerce as a new trade model is rising rapidly, and China's agricultural exports are also affected. Due to the imperfection of the cross-border logistics system and logistics technology, the asymmetric information access of both parties, the inconsistent quality standards of agricultural products export, and the lack of relevant talent reserves in the cross-border e-commerce export of agricultural products, these problems hinder the further development of the cross-border e-commerce export of agricultural products. This paper puts forward corresponding countermeasures and suggestions for these problems to promote the better development of cross-border e-commerce export of agricultural products.

1. Introduction

With the wide application of information technology in agriculture and the innovation and integration of agriculture and cross-border e-commerce, the new form of cross-border e-commerce of agricultural products is booming, and more and more Chinese agricultural products are entering the international market through cross-border e-commerce. Cross-border e-commerce to help agricultural products export can not only break the time and space constraints, shorten the traditional agricultural products trade process, improve the efficiency of agricultural products export, and stabilize agricultural products trade, but also drive the upgrading of China's rural e-commerce, and promote the construction of a long-term mechanism for e-commerce to alleviate poverty and promote agriculture. In the future, with the in-depth promotion of rural revitalization, digital rural and other strategies, and the in-depth implementation of RCEP, the cross-border e-commerce export of agricultural products will usher in important development opportunities. However, problems in the cross-border logistics, information acquisition, quality standards and talent reserve of China's cross-border e-commerce export of agricultural products have hindered its further development. Therefore, we should actively explore the development strategies of China's cross-border e-commerce export of agricultural products to expand the development space of China's cross-border e-commerce export of

agricultural products. In terms of the development status of cross-border e-commerce, scholars generally believe that cross-border e-commerce can reduce transaction costs by reducing transaction links [1], and the development of the Internet in the target country can reduce the negative impact of geographical distance [2], but only when the development of cross-border e-commerce reaches a certain level and can control trade risks within a certain range, can it further promote exports [3]. Although the current cross-border e-commerce development momentum is good, there are still shortcomings such as platform threshold, logistics costs, regional development, category distribution, and lack of talent [4], the enterprise's ability to gain profits is not strong, and there is a monopoly phenomenon in shopping malls [5]; The strong development of big sellers and the difficulties of small sellers have produced the Matthew effect [6].

2. Analysis of the current situation of China's cross-border e-commerce agricultural trade

2.1 Export amount of Chinese agricultural products e-commerce

In 2019, China's cross-border e-commerce trade in agricultural products reached US \$5.29 billion, up 19.2% year on year, accounting for 2.3% of China's total trade in agricultural products. Among them, the import volume was 4.98 billion US dollars, up 18% year on year, and the main trade mode was bonded e-commerce (up to 4.46 billion US dollars); The export volume was US \$310 million, up 44.2% year on year. The main trade mode was also bonded e-commerce, with an amount of about US \$290 million. In 2021, China's total import and export trade will be about US \$6060.89 billion, of which the total import and export of agricultural products will be about US \$340.17 billion, up 23.2% year on year, accounting for about 5% of the total import and export of the country. At the same time, with the sharp reduction of world agricultural tariffs in 2001, agricultural trade has developed rapidly, and its market share in world trade is also rising, currently about 7%. In 2020, the export value of global agricultural products is about 1810707 billion US dollars. It can be seen that agricultural trade is very important in both world trade and China's foreign trade.

2.2 China's agricultural e-commerce trading partners

From the perspective of trading partners, the top five sources of China's cross-border e-commerce agricultural products imports are Australia, the United States, New Zealand, the Netherlands and Germany. Among them, agricultural products imported from Australia, the United States and New Zealand were US \$1.145 billion, US \$853 million and US \$851 million respectively, accounting for 57.2% of the total. The top five markets for China's cross-border e-commerce agricultural products export are Hong Kong, Taiwan, China, the Philippines, Malaysia and Russia. Among them, the amount of agricultural products exported to Hong Kong, China, was about US \$300 million, accounting for 96.8%.

2.3 E-commerce trade categories of agricultural products in China

From the perspective of trade products, livestock products are the most involved in cross-border e-commerce agricultural products trade. In 2019, the import volume was 2.35 billion US dollars (of which, dairy imports were 2.31 billion US dollars), and the export volume was 270 million US dollars (of which, dairy exports accounted for more than 99%). Drinks and aquatic products are also important agricultural products imported by e-commerce in China. In 2019, the import value of drinks reached US \$240 million (including US \$130 million for alcohol-free drinks and US \$50 million for alcohol and alcohol), and the import value of aquatic products reached US \$120 million (including fish oil accounting for about 98.8%).

3. Problems in China's cross-border e-commerce export of agricultural products

3.1 Incomplete cross-border logistics system

China's cross-border logistics system is not perfect, the logistics network is lack of systematic planning, the logistics technology, especially the cold chain logistics technology in the field of agricultural products, is still not perfect, the cold storage volume is small, the function is relatively lagging, and the area covered is also limited. For cross-border e-commerce with a long supply chain, if there is a problem in one link, it will affect the quality of agricultural products. At the same time, the imperfect cross-border logistics system and logistics technology make the transportation efficiency of the goods low, and the goods are in transit for a long time. The buyer usually needs enough patience to wait for the goods to arrive, and the inefficient cross-border logistics will even make the buyer return the goods. At present, under the influence of the COVID-19, epidemic control and other factors have seriously affected the speed of cross-border logistics transportation. The restrictions of epidemic prevention policies in some countries and regions will also lead to the reduction of logistics efficiency, which will reduce the willingness of overseas buyers to buy agricultural products across the border, and further impact the cross-border e-commerce export of agricultural products in China.

3.2 Asymmetric information acquisition by both parties

Cross-border e-commerce export of agricultural products is conducted through online platform for transaction negotiation. While online transaction mode helps buyers and sellers quickly negotiate and reach a deal, it also has certain risks. The virtual transaction on the online platform makes the acquisition of information between buyers and sellers asymmetric. If one party gives false information or commits fraud in the course of trade, the other party may not be able to detect and take measures at the first time, resulting in loss of interest. At the same time, the limitations of the online platform also make the after-sales service of products extremely vulnerable to lack, which greatly increases the risk of cross-border e-commerce export of agricultural products. In addition, the cross-border e-commerce export platform of agricultural products often does not have a complete information protection system and credit mechanism. The construction of credit system is relatively weak, information security is not guaranteed, relevant laws and regulations are not sound, and the awareness of enterprise information protection is not strong, which may lead to insufficient private information protection for those buyers who buy agricultural products through the online platform, and thus cannot guarantee their interests well, This will further affect the integrated development of cross-border e-commerce and agricultural exports. Therefore, the risks brought by information access and information security deserve attention, which are related to the reputation of agricultural products export enterprises and affect the future development of cross-border e-commerce export of agricultural products.

3.3 Uneven export quality standards of agricultural products

In the field of cross-border e-commerce export of agricultural products, the formulation of scientific and unified quality standards for agricultural products plays an important role, which is conducive to avoiding the uneven quality of exported agricultural products and even failing to meet the import quality standards of importers or consumers. At present, due to the inconsistent quality standards for agricultural products export, most cross-border e-commerce enterprises have not made strict management on the quality of exported agricultural products, and the production links of agricultural products are not strictly controlled. The production standards of many agricultural

products are not compatible with international standards, and some enterprises are only satisfied with the simple production of agricultural products, or blindly pursue the high output of products and ignore the quality. It is not uncommon to find that the content of organic substances in exported agricultural products exceeds the standard. As a major exporter of agricultural products, the frequent unqualified quality inspection of exported agricultural products has not only caused economic losses, but also damaged the reputation of China's agricultural products. In addition, the rules of different cross-border e-commerce platforms are different, and the standards for agricultural products are not uniform. In particular, some developed countries have strict requirements for the quality of agricultural products, which makes the cross-border e-commerce export of agricultural products more difficult.

3.4 Insufficient talent reserves

Engaging in cross-border e-commerce export of agricultural products requires knowledge of agricultural products trade, certain experience in agricultural products trade, professional knowledge in e-commerce and electronic technology, and understanding of the international market of agricultural products. Before that, the demand for talents in relevant fields was not large, the government's training policies and training mechanism for relevant talents were not mature enough, and the number of training institutions related to cross-border e-commerce of agricultural products was relatively small, resulting in the lag of relevant talents output, resulting in the increasing talent gap, the inability of talent cultivation to meet the needs of enterprises, and the talent crisis of agricultural products export enterprises. To this end, some enterprises have begun to introduce a large number of talents, and there has been a situation in which enterprises use bad competitive means to compete for people. This situation will not only destroy the benign competitive atmosphere of the industry, but also have a negative impact on the sustainable and healthy development of cross-border e-commerce exports of agricultural products.

4. Countermeasures for cross-border e-commerce export of Chinese agricultural products

4.1 Improve cross-border logistics system and improve logistics technology

First of all, governments at all levels should make reasonable planning, build a complete cross-border logistics network, expand the coverage of the logistics network, improve the logistics efficiency of each region, and actively cooperate with other countries and regions to improve the overall logistics level of the country, while improving the efficiency of cross-border logistics, and provide support for the cross-border e-commerce export of agricultural products. Secondly, relevant enterprises should strengthen the research on cold-chain logistics technology and continuously improve the logistics technology of agricultural products. The government should encourage relevant enterprises to increase technology investment in policy, provide human and material support in the technology development stage, and give corresponding subsidies to enterprises with technological innovation. Finally, governments at all levels should also encourage the establishment and development of cross-border logistics enterprises for agricultural products, promote domestic logistics enterprises to actively develop cross-border logistics business, improve cross-border logistics efficiency, and further improve cross-border logistics service capabilities.

4.2 Broaden access to transaction information

The establishment of a public information exchange service platform not only helps buyers quickly and accurately find sellers who want to trade, but also shortens the duration of cross-border e-

commerce transactions of agricultural products. At the same time, buyers can learn about sellers' relevant information through more channels, such as sellers' credit information, historical transactions, etc. More sellers can also understand the needs of buyers at the first time through new channels to avoid unsalable goods, strengthening the diversity of online platform functions and improving the accuracy of information acquisition of both parties in cross-border e-commerce transactions of agricultural products can not only reduce transaction risks, but also protect the interests of both parties to a certain extent. Through online negotiation, reduce the intermediate links and shorten the process, which is conducive to expanding the export volume of agricultural cross-border e-commerce and promoting the rapid development of agricultural cross-border e-commerce export business. In addition, the government can strengthen the supervision of information, formulate relevant laws and regulations for the false information or fraud in online platform transactions, and strengthen the supervision and monitoring of online platforms.

4.3 Improve the quality of exported agricultural products

First of all, in view of the imperfect quality standardization system of agricultural products, the government and relevant departments should actively cooperate with the formulation of relevant policies and regulations, establish and improve the export quality standards of agricultural products, and restrict the quality of exported agricultural products. The customs and other relevant departments should be more strict in each inspection. Secondly, the origin of agricultural products is also a key factor restricting the quality of agricultural products. With the development of information technology, the origin of agricultural products can be traced through big data, and the status of different agricultural products can be monitored and rated. Only agricultural products that meet the standards can be exported through cross-border e-commerce, thus improving the quality of agricultural products at the source. Finally, the government can impose penalties or other punishment mechanisms on enterprises that export agricultural products with substandard quality from cross-border e-commerce, and praise and reward high-quality brands of agricultural products, so as to reduce the behavior of enterprises exporting substandard products and promote the healthy development of cross-border e-commerce export of agricultural products.

4.4 Accelerate the training of relevant talents

First of all, by formulating talent training policies, college students are encouraged to choose relevant majors to study, and the number of talents in cross-border e-commerce of agricultural products is increased. Secondly, it is necessary to support the establishment of relevant training institutions in terms of policies. The training institutions for cross-border e-commerce talents of agricultural products should be given teaching subsidies or be able to enjoy other preferential policies. The training of relevant talents needs cooperation and support from all sectors of society. Only with the efforts of all sectors of society can the training mechanism of relevant talents be improved step by step. Finally, improve the flexibility of relevant departments and make timely countermeasures in case of such problems in the future. At the same time, some enterprises that recruit talents through bad competition will be warned if the circumstances are minor, and punished according to law if the circumstances are serious. At the enterprise level, we can attract professional talents to take office by improving the welfare of the scarce talents. In addition, for college students who have just graduated but lack relevant experience, post training is provided before entry. After entry, "bringing the new with the old" is conducive to increasing the experience value of new employees, helping them integrate professional knowledge into real work as soon as possible, and improving the proficiency of new employees in cross-border e-commerce export business skills of industrial and agricultural products.

5. Conclusion

The scale of China's agricultural cross-border e-commerce export transactions has grown rapidly, the marketing model has been continuously innovated, and the transaction costs have also been continuously reduced. However, the imperfect cross-border logistics system and technology, the asymmetric information access of both parties to the transaction, the inconsistent quality standards and the lack of relevant talents have hindered the further development of agricultural cross-border e-commerce. To this end, Chinese governments at all levels and cross-border e-commerce export enterprises of agricultural products should further strengthen the innovative development of cross-border e-commerce export of agricultural products, improve the cross-border logistics system and logistics technology, broaden the access to information of all parties to the transaction, continuously improve the quality of exported agricultural products, and deepen the training of talents at all levels of cross-border e-commerce for agricultural products export, so as to promote the high-quality development of agricultural products trade, promote the continuous integration of rural digital economy and real economy.

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