

Research on the Effects of COVID-19 on Guangdong Province Agricultural Products Export and Countermeasures Under Digital Trade

Xiaomei Li¹

¹ School of Economic and Management, Guangdong Technology College, Guangdong, China

Correspondence: Xiaomei Li, School of Economic and Management, Guangdong Technology College, Guangdong, China.

doi: 10.56397/LE.2022.08.09

Abstract

Abstract: With the outbreak of Corona Virus Disease 2019 (hereinafter referred to as COVID-19) in Wuhan starting in 2020 spreading worldwide, domestic and foreign trade in all walks of life in all countries in the world has been affected to varying degrees. In many industries, COVID-19 has brought greater impact and challenges to agricultural trade. Guangdong Province is China's leading agricultural export destination, which has suffered the greatest resistance to development under the influence of COVID-19. However, with the rapid development of digital trade, the foreign trade of agricultural products in Guangdong Province has ushered in a "spring". Therefore, under digital trade, this paper analyzes the challenges faced by Guangdong's agricultural exports due to COVID-19, and puts forward effective countermeasures to help the steady progress of the province's agricultural foreign trade.

Keywords: digital trade, COVID-19, Guangdong agricultural exports, countermeasures

1. Introduction

1.1 Research Background and Significance

Guangdong Province is a major agricultural export province in China. In 2019, the export of agricultural products was 68.064 billion yuan, ranking second among all provinces, regions and cities in China. It can be seen that the export of Guangdong agricultural products plays an important role in China's foreign trade of agricultural products. However, COVID-19 that broke out in China and spread all over the world in 2020 has greatly traumatized China's foreign trade. As China's second largest agricultural trade province, COVID-19 is bound to cause great obstacles to the export of agricultural products in Guangdong Province, and seriously threaten the inherent advantages of the export of agricultural products in Guangdong Province.

Therefore, it is of great practical significance to study the current situation of COVID-19 and its various impacts on the export trade of agricultural products in Guangdong Province, analyze the reasons for this impact, and then put forward countermeasures to deal with COVID-19, so as to improve the agricultural productivity of our province, enhance the competitiveness of agricultural export trade, and further expand the export of agricultural products in our province.

1.2 Literature Review

In the context of digital trade, there are few research and analysis papers on the impact of the new coronal pneumonia COVID-19 on the export of agricultural products in Guangdong Province and its countermeasures, most of which are related to the export of agricultural products in China or other provinces. For example, Liu Xin's "the impact of COVID-19 on domestic agricultural enterprises" analyzes the impact of COVID-19 on

Chinese agricultural enterprises from the negative impact. This article mentions that COVID-19 has had a negative impact on all aspects of agriculture to varying degrees, especially on trade and exports. This research result leads to my research direction, which mainly analyzes the impact of COVID-19 from both positive and negative aspects; Secondly, in the study of Zhang Shengli's "analysis of foreign trade of agricultural products in Henan Province under COVID-19", she analyzed the basic situation, existing problems, causes and Countermeasures of foreign trade of agricultural products in Henan Province under COVID-19; Another is Li Shufeng's "difficulties and solutions of China's agricultural exports in the context of digital trade". This article deeply analyzes the problems and opportunities faced by China's agricultural trade under digital trade. After synthesizing the research of the above three scholars, I established the research direction of this paper as the impact of COVID-19 on the export of agricultural products in Guangdong Province under the background of Digital Trade and its countermeasures.

2. Foreign Trade of Agricultural Products in Guangdong Province Under COVID-19

2.1 COVID-19 Development

COVID-19 first broke out in Wuhan, Hubei Province, China on December 16, 2019. As of 19:18 on July 26, 2022 (Beijing time at 1:18 on July 27), the cumulative number of COVID-19 confirmed cases in China has reached 5,054,540, the cumulative number of overseas COVID-19 confirmed cases has reached 567,290,541, the cumulative number of COVID-19 confirmed cases in the world has reached 572,345,081, and more than 200 affected countries, as shown in Figure 1. In view of this situation, and out of concern about the speed of COVID-19 and the inadequate response of some countries, which announced that COVID-19 had constituted a "pandemic". Under the situation that China has basically blocked the spread of the domestic COVID-19, the severe spread of COVID-19 abroad has brought great case input risks to China, which urgently needs close attention. In the United States, Britain, France, Italy, Iran, Germany, Spain and other countries, COVID-19 has occurred to varying degrees, especially in the United States. Such a large-scale outbreak has seriously affected global economic, political, cultural, social and other activities, especially foreign trade.

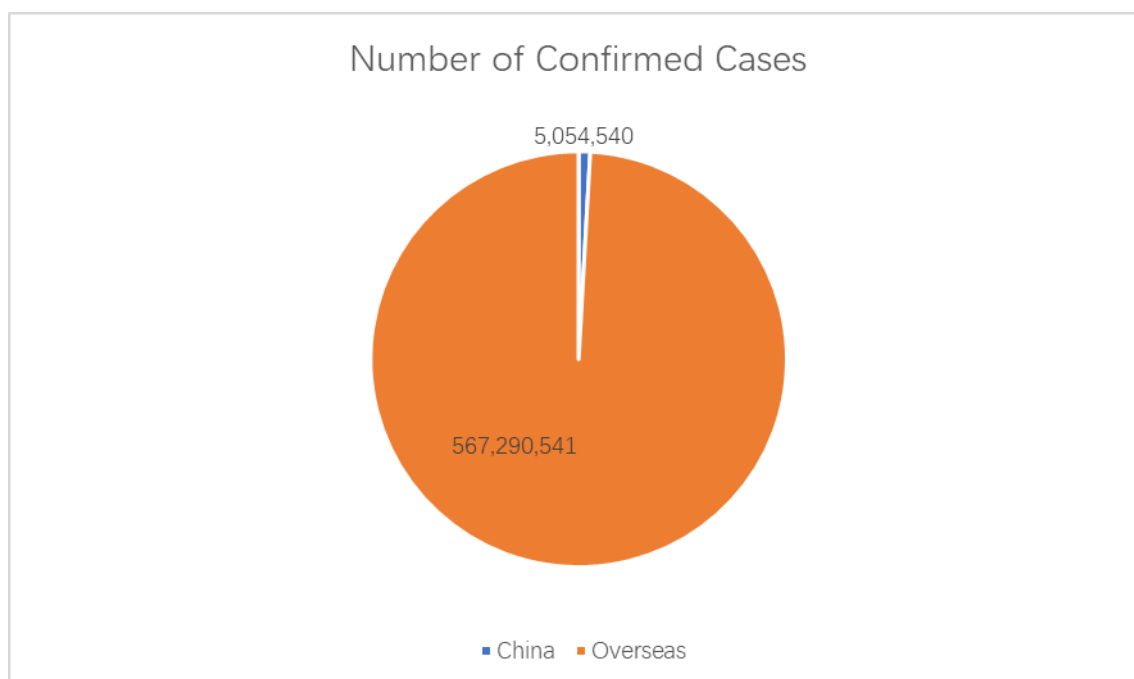


Figure 1. Number of people confirmed to be infected with novel coronavirus worldwide as of July 27, 2022:
People

Source: World Health Organization

2.2 Overview of the Production Scale of Agricultural Products in Guangdong Province

Guangdong Province is located in the southernmost part of the Chinese Mainland, belonging to the East Asian monsoon region. From north to south, it has a subtropical, subtropical and tropical climate, respectively. It is an area rich in light, heat and water resources in China. The main crops produced in Guangdong Province are rice, tea, fruits, mulberry, vegetables, etc. There are many kinds of fruits in Guangdong, which can be called the

hometown of fruits in the country. Forty or fifty kinds of fruits are developed and cultivated as cash crops. They are known as the “four famous fruits in Lingnan”, including bananas, pineapples, oranges and lychees. The production bases of crops in Guangdong Province are all over every county and district in Guangdong. The main production bases are Huizhou, Jiangmen, Maoming, Zhanjiang, Yunfu, Zhaoqing, Meizhou, Yangjiang and other regions. In recent years, the output of major agricultural products in Guangdong, including grain crops, rice, potatoes, soybeans, sugar cane, peanuts, tobacco leaves, vegetables, tea and fruits, has increased year by year as a whole, as shown in Table 1. At the same time, Guangdong’s agricultural output total value increased year by year, but the growth rate from 2019 to 2021 slowed down due to the impact of COVID-19, as shown in Figure 2. However, on the whole, the production scale of agricultural products in Guangdong is very objective, which can not only supply the demand in the province, but also carry out foreign trade on a large scale.

Table 1. The Output of major agricultural products

| Unit: | (10000 tons) | | | | |
|-------------|--------------|---------|---------|---------|---------|
| Year | 2016 | 2017 | 2018 | 2019 | 2020 |
| Grain Crops | 1204.22 | 1208.56 | 1193.49 | 1240.80 | 1267.56 |
| Rice | 1039.53 | 1046.34 | 1032.07 | 1075.05 | 1099.58 |
| Tubers | 96.53 | 95.43 | 94.67 | 97.41 | 97.29 |
| Soybean | 8.63 | 8.48 | 8.71 | 9.04 | 9.10 |
| Sugarcane | 1096.56 | 1144.14 | 1207.97 | 1241.64 | 1176.25 |
| Peanuts | 95.48 | 98.42 | 104.40 | 108.69 | 112.05 |
| Tobacco | 4.40 | 4.26 | 4.33 | 4.17 | 4.12 |
| Vegetables | 3036.45 | 3177.49 | 3330.24 | 3527.96 | 3706.85 |
| Tea | 8.92 | 9.29 | 9.99 | 11.08 | 12.82 |
| Fruits | 1331.99 | 1421.23 | 1547.81 | 1644.38 | 1756.16 |

Data source: Guangdong statistical yearbook 2021

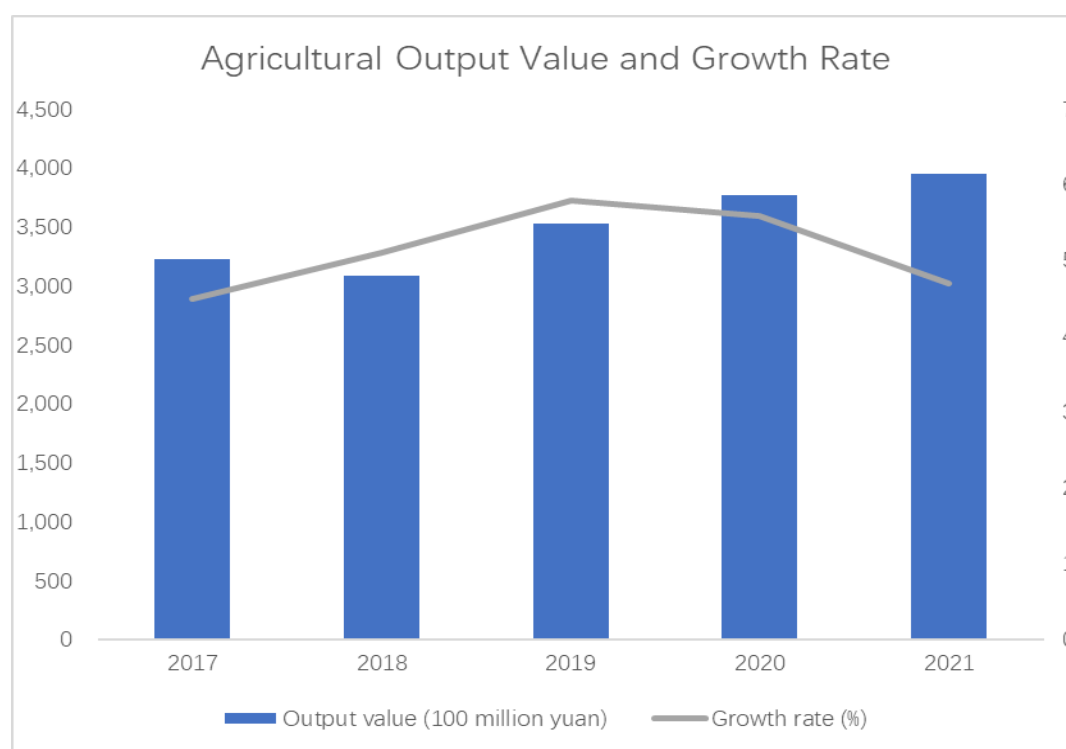


Figure 2. Agricultural output value and its growth rate from 2017 to 2021

Data source: Guangdong statistical yearbook 2021

2.3 Current Situation of Agricultural Products Export in Guangdong Province

In 2020, COVID-19 had a negative impact on Guangdong's agricultural exports, which fell. In the survey of nearly 100 agricultural products export enterprises in Guangdong, most enterprises said that the orders in 2020 had decreased compared with the same period last year, and more than 80% of enterprises expected the export volume to decline, so the situation was not optimistic. As shown in Figure 3 below, the export value of Guangdong's agricultural products increased from 2018 to 2019, but by 2020, the export value of Guangdong's agricultural products was only 64,468 million, a decrease of 5.28% from 2019. This phenomenon is not only caused by the global economic slowdown, Sino-US trade frictions, technical trade measures and trade relief measures, but also because COVID-19 has seriously spread all over the world, causing major obstacles to foreign trade in all walks of life, especially the import and export trade of agricultural products, which makes the environment of global agricultural trade worse. This also invisibly increases the difficulty of agricultural products export in Guangdong Province, and the impact on enterprises engaged in foreign trade of agricultural products is also devastating. COVID-19 area makes enterprises engaged in foreign trade of agricultural products suffer heavy losses and even close down.

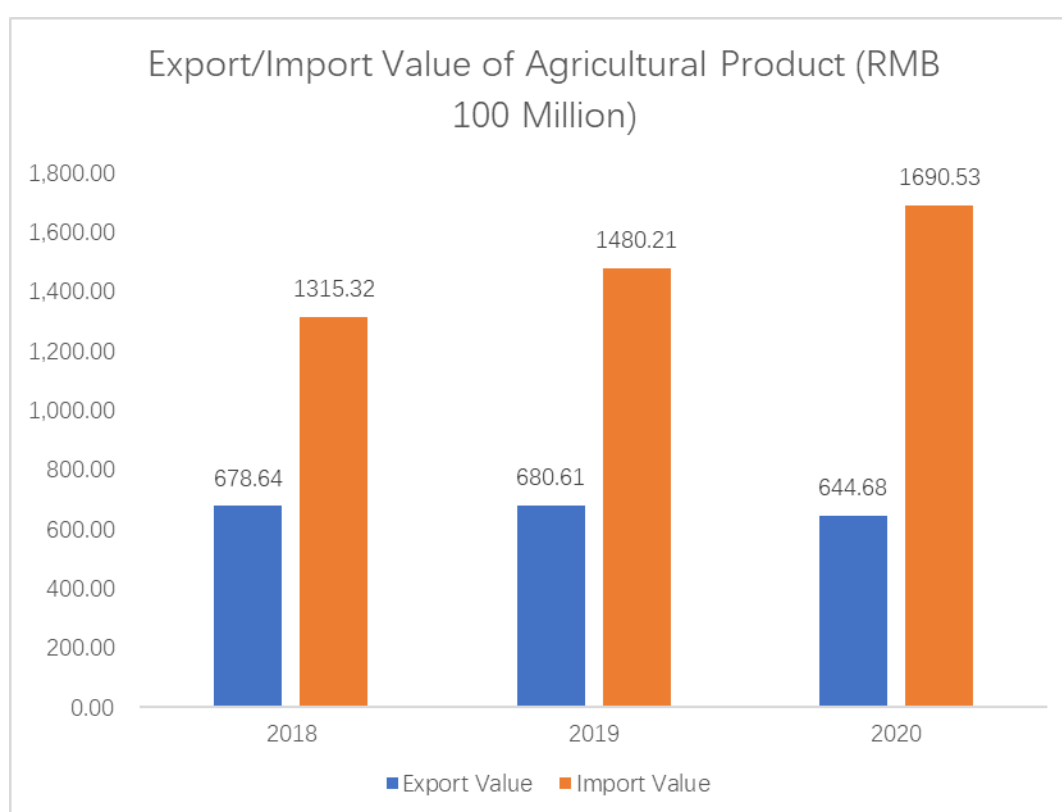


Figure 3. import and export volume of agricultural products in Guangdong Province from 2018 to 2020

Data source: Guangdong statistical yearbook 2021

2.3.1 Decrease in Export Orders of Agricultural Products

Since 2018, affected by Sino US trade frictions, Guangdong's agricultural exports have been greatly hindered, showing the current situation of increased imports, decreased exports, increased trade deficit and no increase or decrease in total trade volume, as shown in Figure 3 above. In 2020, COVID-19 hit the export of agricultural products in Guangdong Province. Most of the deliveries involved in import and export in 2020 are still goods orders at the end of 2019. Affected by the continuous deterioration of the overseas COVID-19, the export delivery volume of agricultural products fell rapidly, and foreign trade orders decreased significantly, and even the previous orders were directly cancelled, impacting the foreign trade of agricultural products.

2.3.2 The Importing Country Takes Restrictive Measures to Reduce the Demand

COVID-19 has spread all over the world. Many countries or regions have implemented stricter measures to control the flow of people and traffic logistics, including closing some ports and refusing ships from countries in COVID-19 area to enter the country, forming a logistics bottleneck and blocking the deeply intertwined global

value chain. The closure of restaurants and the reduction of people's shopping time have reduced the demand for fresh agricultural products, and the export of agricultural products is facing more and more external challenges. It can be seen from this that the restrictive measures taken by importing countries and the reduction of demand are the problems causing difficulties in the export of agricultural products in Guangdong Province.

3. Analysis of the Negative Impact of COVID-19 on the Export of Agricultural Products in Guangdong Province

3.1 There Is Supply Chain Interruption in the Trade Structure of Agricultural Products

In 2020, in order to understand the impact of COVID-19 on China's agricultural exports, relevant departments organized a questionnaire survey for agricultural export enterprises. The results showed that in the field of production and processing, 40% of the surveyed enterprises said that the worker response rate was less than 30%, and 42% of the surveyed enterprises said that the capacity utilization rate was less than 30%; In the logistics industry, 70% of the surveyed enterprises believe that the logistics cost of exported agricultural products has increased significantly, and 64% of the surveyed enterprises believe that the main difficulty at present is logistics obstruction; In the import market, 73% of the surveyed enterprises said that more than 15% of the enterprises canceled orders. This makes agricultural products in the state of shutdown, and the trade structure of agricultural products naturally appears the phenomenon of supply chain interruption. At the same time, the domestic trade protection momentum of the United States, the European Union, Japan and other countries has become prominent, and the improvement of pesticide quarantine standards for agricultural products has exacerbated the contraction of agricultural trade among countries. With the improvement of the domestic COVID-19, the government timely issued a series of policies related to agricultural transportation logistics, taxes, credits and so on to restore the agricultural economy, and the export agricultural products supply chain gradually returned to the right track. In addition, the export of agricultural products has been restricted due to the measures announced by various countries to prohibit the entry of Chinese citizens.

3.2 Decline in Agricultural Production Capacity

The sustainability and stability of the input of agricultural production factors is the key to the normal operation of agricultural production. COVID-19 has had a negative impact on the variability of labor, material and financial resources in agricultural production. The strict control measures in the early stage of COVID-19 reduced or directly interrupted the input of some agricultural industries, which had a serious impact on the production industry, especially the livestock and poultry breeding industry for many years. It is mainly manifested in the shortage of feed supply and labor, the shortage of COVID-19 prevention materials such as classical swine fever and chicken plague, the obstruction of product sales, the lack of follow-up capital investment, and the decline of pig slaughter. While COVID-19 has reduced the production capacity of China's livestock and poultry industry, it will inevitably lead to the reduction of agricultural exports.

3.3 The Export of Agricultural Products is Severely Blocked

In the first half of 2020, the impact of COVID-19 on trade mainly occurred in China, manifested in market supply. However, with COVID-19 spreading all over the world, international trade has also been adversely affected. The import and export trade of Chinese agricultural products is an important part of the international agricultural trade, and the foreign dependence of Guangdong agricultural products plays an important role in the import and export trade of Chinese agricultural products. Therefore, China will be blocked and Guangdong will be blocked. Under COVID-19, countries around the world have adopted non-tariff trade barriers to restrict China's import and export trade, which will not only have a huge impact on China's agricultural exports, but also restrict the agricultural exports of Guangdong Province. This kind of influence has been shown in some agricultural enterprises. The enterprises that mainly focus on Guangdong characteristic agricultural products such as litchi, pineapple and pitaya are the key leading agricultural enterprises in Guangdong. Due to COVID-19, the export channels have been blocked, and the export of Guangdong characteristic agricultural products such as litchi, pineapple and pitaya has been severely hit. China has always been highly dependent on foreign countries. As the world's largest agricultural import and export trading country, Guangdong agricultural products are an indispensable part of it. Therefore, the blocked export trade of agricultural products in Guangdong will inevitably affect the overall good operation of the global agricultural economy.

4. Strategies for Guangdong Agricultural Products Export to Cope with COVID-19 Under Digital Trade

4.1 Formulate Financial Support Policies for Agriculture

First, strengthen the loan support for new agricultural business entities, optimize the handling procedures, and correspondingly increase the loan amount and the upper limit of the financing guarantee. The second is to reduce the financing costs of agricultural enterprises, and give a certain proportion of financial discount subsidies to the loan interests of agricultural enterprises during COVID-19 prevention and control period. Third, exempt policy agricultural insurance premiums and allocate a certain proportion of financial funds to bear the policy

agricultural insurance costs of agricultural production entities.

4.2 Improve the Sustainability of the Agricultural Industry

The Guangdong provincial government should give full play to its guiding role and actively encourage Guangdong agricultural export enterprises to strive to transform product production technology, improve product research and development capabilities, improve the competitiveness of enterprises, and achieve long-term and sustainable development through policy guidance, law enforcement, and other methods. In order to ensure the stable development of Guangdong's economic order and reduce the impact of COVID-19 on Guangdong's enterprises, the Guangdong provincial government must strengthen the inspection and quarantine of agricultural products, encourage agricultural enterprises to produce more green products, increase the export volume of agricultural products containing green prevention and control technology, improve the international competitiveness of agricultural products, improve the agricultural industrial structure, optimize the industrial chain, and enhance the sustainability of Guangdong's agricultural exports.

4.3 Respond to the Internationalization Strategy of the "Belt and Road"

In 2020, the total trade volume between China and countries along the "Belt and Road" reached US \$1.35 trillion, an increase of 1.9%, 12 percentage points higher than the overall growth rate of the country, accounting for 32% of China's total foreign trade, and the proportion increased by 4 percentage points. It can be seen that China's external dependence on countries along the "Belt and Road" is gradually increasing. The government should attach importance to the markets of countries along the Belt and Road and countries and regions that have signed free trade cooperation with our country, and continue to explore emerging markets. These markets have great potential for development and will be the hot spots in the international foreign trade market this year. Therefore, the government should seize this opportunity in advance, set an example, actively respond to the countries along the "Belt and Road", adjust overseas markets, and enhance the international competitiveness of China's agricultural export enterprises.

4.4 Strengthen the Facilitation of Digital Trade Operation

According to the trade characteristics of agricultural products, we will launch better trade facilitation measures around the customs clearance, inspection and quarantine of agricultural products, and constantly optimize the business environment. First of all, with reference to the operation of Shanghai Pilot Free Trade Zone, a single window mechanism suitable for the requirements of Digital Trade and the characteristics of the cross-border e-commerce should be created, so that all parties involved in cross-border trade of agricultural products can quickly complete customs clearance, custody, inspection and quarantine with the help of the single window mechanism. The key point is to set up a green channel for agricultural products trade, and introduce preferential policies such as tax reduction according to the needs of self-employed households and small and medium-sized enterprises, allowing them to declare at one time and clear customs many times, so as to ensure the quality of agricultural products with higher efficiency and reduce the loss rate of agricultural products. Secondly, efforts should be made to promote the efficient docking of agricultural products trade under digital trade. The single window mechanism should be appropriately improved to make it more in line with the internationally accepted digital trade standard system. Finally, strengthen negotiations with other countries, take the single window mechanism of agricultural trade as the content of negotiations, and realize the rapid declaration of agricultural digital trade with the help of regional trade agreements and free trade agreements signed by China and other countries.

4.5 Improve the Utilization of Cross-Border E-Commerce Platforms

Agricultural export enterprises should innovate "Internet + activities", actively explore and carry out a series of online forums, online forums and online sales by using information means and Internet platforms, and change "face-to-face" into "line-to-line" and "key-to-key", so as to ensure that services do not drop and work does not stop in special periods. Under the situation that all traditional offline foreign trade export modes are seriously blocked, we should strengthen the training of agricultural e-commerce marketing for agricultural practitioners in the province, explore the establishment of new marketing modes such as direct selling of agricultural products, build a fresh agricultural product distribution service system covering urban and rural areas, enhance the online and offline marketing ability of agricultural enterprises, and meet people's needs for convenient and fast shopping. Therefore, agricultural export enterprises should make full use of the cross-border B2B model represented by Alibaba's digital trade to the sea and the cross-border B2C model represented by Amazon, wish and eBay to effectively solve the overseas market crisis and actively explore external channels.

4.6 Strengthen Self Reflection and Promote Brand Building

In the face of export obstacles and business difficulties, agricultural export enterprises should reflect on their own problems and shortcomings. Under the crisis, the operators of export enterprises can better see the problems and shortcomings of enterprises. First of all, in view of the current situation that the domestic and foreign

markets are very depressed and tend to decline, export enterprises and factories should choose the lowest cost human, material and financial resources to ensure the good operation of the enterprise economy. Secondly, consider whether the past overseas markets exported by enterprises are single, such as exporting to the United States alone. If the export market is single, export enterprises can choose to develop diversified markets, such as emerging markets, newly signed ASEAN markets, or develop the Korean market. At the same time, agricultural export enterprises can also consider domestic sales. Finally, promote the brand construction of agricultural products. Under the damage of traditional foreign trade and the general downturn of foreign trade cross-border e-commerce industry, enterprise branding is even more necessary. Promote the overseas brand construction of the enterprise, improve the profit margin, further refine the internal management of the enterprise, minimize the cost, optimize the performance appraisal, constantly strengthen self reflection, enhance the awareness of “crisis”, be good at cultivating new opportunities in the crisis, grasp the market initiative, and lay the foundation for future development.

5. Conclusion

With the current high development of digital trade, the economic ties between countries are closer. However, at present, the superposition of various trade protectionism and COVID-19 of new-type coronal pneumonia has greatly restricted the further development of agricultural export enterprises in Guangdong Province and even the whole country. Therefore, under the background of digital trade, it has become an urgent problem to analyze how Guangdong agricultural export enterprises deal with the negative impact of COVID-19.

First of all, this paper has made a deep understanding of the development of COVID-19 situation of new-type coronal pneumonia; Secondly, combined with the data, analyze the production of agricultural products in Guangdong Province, the current situation and existing problems of export overseas markets; Once again, analyze the negative impact of COVID-19 on the export of agricultural products in Guangdong Province. Finally, based on the above analysis, countermeasures and suggestions are put forward for the Guangdong provincial government and enterprises to deal with the negative impact on the export of agricultural products in Guangdong Province under COVID-19.

References

- Gao Weixin, Quan Haien. (2020). The impact of COVID-19 on China Japan agricultural trade. *Contemporary Rural Finance and Economics*, (10), pp. 23-27.
- Li Congxi, Tan Yanwen. (2020). The main impact of COVID-19 on the effective supply of agricultural products in China and its countermeasures. *Rural South*, 36 (02), pp. 16-22.
- Zhang Chengming. (2020). Research group of Sichuan Provincial Association of county economy. Impact of COVID-19 on agriculture and countermeasures. *Contemporary County Economy*, (03), pp. 18-21.
- Jiang Heping, Yang Dongqun, Guo Chaoran. (2020). The impact of COVID-19 on China's agricultural development and countermeasures. *Reform*, (03), pp. 5-13
- Zhu Ying, Li Wei. (2020). Current situation of agricultural development in Jiangsu Province and the impact of COVID-19 and countermeasures. *Agricultural Economy*, (12), pp. 15-17
- Yuan Lixin, Su Yongling. (2020). Brief discussion on the impact of COVID-19 on leisure agriculture and countermeasures. *Agricultural Economy*, (10), p. 34.
- Liu Xin. (2020). The impact of COVID-19 on domestic agricultural enterprises. *Farm Economic Management*, (07), pp. 23-24
- Li Mingzhen, Lao Huimin, Tian Tian. (2020). Research on the impact and Countermeasures of COVID-19 on agricultural development in Zhejiang from the perspective of scientific and technological innovation. *Science and Technology Bulletin*, 36 (08), pp. 100-103
- Liu Weijun. (2020). Analysis of the impact of COVID-19 on Guangdong's exports and policy recommendations. *China Foreign Trade*, (05), pp. 48-50.
- Liu Weijun, Zhang minheng. (2020). Special topic of “anti COVID-19 and stabilizing the economy” ④ analysis of the impact of COVID-19 on Guangdong's exports and policy recommendations. *Guangdong Economy*, (04), pp. 24-27.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).