

# Research on the Construction of Agricultural Products Export Agglomeration Regions in Shandong Province

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## Abstract

**This paper summarizes the current situation of the construction of agricultural products export agglomeration regions in Shandong Province in 5 perspectives, by analyzing 4 typical cases, demonstrates the difficulties of the construction of agricultural products export agglomeration regions in Shandong Province, such as the influence of the Epidemic COVID-19, weak deep processing and lack of brand building, difficult and expensive financing, consequently provides the relevant suggestions.**

## Keywords

**Agricultural Products Export; Industry Agglomeration Regions; Shandong Province.**

## 1. Current Situation

In recent years, Shandong province has comprehensively expanded the opening up of agriculture to the world, and the export of agricultural products has spread to more than 120 countries and regions. In 2020, the export of agricultural products increased with the export value of 125.74 billion RMB, a year-on-year increase was 1.9%. Upon to October 2021, the export volume of agricultural products in the province was 99.08 billion RMB. In 2020, 10 counties including Rongcheng City, Anqiu City, Laiwu City, Jinxiang County, Laixi City, Cao County, Laiyang City, Junan County, Feicheng City, and Yucheng City were identified as the first batch of provincial-level agricultural products export industry agglomeration regions. In 2021, 8 enterprises were recognized as the high-quality development bases for national agricultural international trade, and 5 enterprises were identified in the management system of high-quality development bases for national agricultural international trade. At present, Shandong province is steadily promoting the construction of agricultural product export industry clusters, accelerating the cultivation of agricultural product export enterprises, actively participating in the identification of high-quality agricultural international trade development bases, and gradually forming an agricultural product export pattern of "clustering regions + enterprises + bases".

### 1.1. Management System and Mechanism of Export Agglomeration Regions

Mostly the management of the agricultural products export agglomeration regions has been established, the main leaders of the local people's government are the head of the management, and the head of the relevant departments, such as agriculture and rural affairs, finance, commerce, and market supervision, are the members of the management. The management has an office, which is located in the Bureau of Agriculture and Rural Affairs, responsible for the organization, management and coordination of the construction of export clusters, conscientiously formulates project plans, strengthens the management and real-time supervision of project funds in the process of project implementation, and ensures project construction funds earmarked and completed on time. The office establishes and improves the scheduling work mechanism, implements regular scheduling and reporting on the progress of the work in the agglomeration regions, and holds joint meetings on a regular basis for each member unit to discover and solve problems. The office also establishes and improves the

assessment mechanism, including the development index system of the export agglomeration regions in the assessment content of the town.

### **1.2. Optimization of the Industrial Layout of Agglomeration Regions**

Based on characteristic agricultural products such as ginger and garlic, Laiwu District plans the overall industrial layout of the export cluster around “1 center and 4 major sectors”. Laixi City focuses on 6 major industrial chains including milk, broiler, pork, vegetables, fruit and peanut processing. As the only marine food export industry cluster, Rongcheng City has built 2 core areas, the marine product deep processing industrial park and the marine high-tech industrial park, which is the largest marine food export industry cluster in Shandong province, and has been selected as the first batch of national export agricultural product quality and safety demonstration region. Feicheng City focuses on the organic agriculture and builds export clusters in accordance with the overall plan of “organic vegetables in the south, organic grains and organic fat peaches in the middle, and organic tea in the north”. Jinxiang County is dominated by the garlic industry, and has embarked on a development path for the export industry of characteristic agricultural products in the direction of “large-scale base construction, clustered industrial development, intensified product processing, close interest linkage and social services”. Cao County is dominated by the asparagus industry, and in accordance with the general layout of “1 county, 1 park, 1 characteristic”, it coordinates various agricultural science and technology resources and build an asparagus export industry cluster. Yucheng City promotes the establishment of functional sugar and characteristic agricultural product export industrial clusters, and builds functional sugar production and processing bases and industrial belts with national competitiveness. The functional sugar products account for about 75% of the national market share and about 40% of the global market share.

### **1.3. Promotion of the Standardized Production Bases of Export Agricultural Products**

Laiyang City takes the high-quality development of Yantai apples and the high-quality development of Laiyang pears as the starting point to improve the construction of a standardized base for export fruit. The city has 13 provincial-level agricultural standardized production bases, 603 registered agricultural product export bases, 605 standardized livestock and poultry breeding bases, and the proportion of standardized breeding is over 85%. Laiwu District focuses on promoting the cultivation, quality improvement, brand building and standardized production of ginger, garlic and other varieties, improving the organization, scale and standardization level of the export agricultural product production base, and creating a standardized “raw material workshop”. Laixi City has formulated and implemented the production technical regulations for 18 leading agricultural products, supports enterprises to produce in accordance with international standards, and builds a number of standardized production bases and standardized breeding bases for agricultural products that meet international standards. The city has passed the acceptance of the demonstration counties (cities) of the pollution-free fruit and carrot production bases, and was rated as the demonstration counties (cities) of agricultural standardization by the Ministry of Agriculture and Rural Affairs. Junan County implements the “3 unifications”, and implements unified seed supply, unified fertilization, and unified pesticide use for the export agricultural product base, and arranges a specialist to implement the whole process tracking service for the peanut base to achieve standardized production and planting.

### **1.4. Establishment and Improvement of the Quality and Safety Management System**

Laiyang City strictly controls the quality standards of exported food, establishes and improves the food safety management system, also improves the city, town, and village three-level

agricultural product quality and safety supervision system. After years of continuous docking with international markets such as Japan and South Korea, the city's food safety has been fully integrated with international standards, and a leading domestic food safety standard system has been established. Jinxiang County strictly implements the agricultural product quality traceability management system, and guides and regulates export agricultural product production bases, farmers' cooperatives, and agricultural product processing enterprises to establish agricultural production and processing record files, strictly records all aspects of crop planting, production and processing, finally realizes the traceability of the whole process of food safety and quality. The traceability management system has covered more than 95% of the products in the food industrial park, and the pass rate of sampling inspection has maintained above 99%.

### **1.5. Demonstration Driving Effect of Export Agglomeration Regions**

From January to September 2021, the total import and export volume of Rongcheng City is 9.434 billion RMB, and the total export value is 7.65 billion RMB, accounting for 73% of Weihai City. From January to October 2021, Anqiu City exported 221,000 tons of agricultural products, a year-on-year increase was 6.4%, and the export value was 1.76 billion RMB, accounting for 31% of Weifang City's total exports. Among them, the export of vegetables was 188,000 tons, and the export was 1.31 billion RMB, accounting for 74.4% of the export of agricultural products in Weifang City. Jinxiang County's garlic and garlic products are exported to more than 170 countries and regions, and the annual export volume accounts for more than 70% of the country's total exports of similar products. Cao County is a high-quality asparagus production base in the country. The planting area of asparagus is 150,000 mu, accounting for 1/6 of the country. The annual export of asparagus is 70,000 tons, accounting for more than 70% of the national white asparagus export. From January to October 2021, the export value of agricultural products in Laixi City was 920 million RMB, a year-on-year increase was 8.9%. The peanut area and output ranks 4th in the country, the annual output value of the peanut industry chain reaches 5 billion RMB, and the export volume accounts for 28% of the country's total.

## **2. Typical Cases**

### **2.1. Building the International Platform for Global Resources**

With the help of the construction of the Pilot Free Trade Zone, Qingdao City has taken the lead in building an agricultural "International Guest Room" that integrates functions such as exhibition, promotion, roadshow, and transaction, creating a new platform for high-quality agricultural development. Through holding international exhibitions such as China International Import Expo and Asian Agriculture and Food Industry Expo, a 10,000-square-meter international agricultural exhibition and trading center was built to attract domestic and foreign resources and promote the construction of agricultural exports. Qingdao City cooperates with the United Nations Food and Agriculture Organization and more than 10 business associations at home and abroad, establishes more than 100,000 domestic and foreign cooperative enterprise resource banks, introduces 6 associations, alliance groups and 313 enterprises as "International Guest Room" members, and recommends more than 80,000 products. Weifang City actively builds a platform for international agricultural cooperation and exchange, hosts key events such as the Cross-Strait Agricultural Forum every year, and organizes a series of online and offline agricultural exchange activities such as Weifang International Food and Agricultural Products Expo, China Anqiu Export Agricultural Products Expo. By the agricultural products exhibition, trade negotiation, investment promotion and other activities, Weifang City seizes the important opportunities of the Belt&Road, RCEP and other regional organizations.

## 2.2. Increasing Farmers' Income

Laiwu District actively adopts business models such as “company + base + farmer”, “company + cooperative + family farm + farmer”, and “company + village collective + farmer”. The methods such as shareholding, dividend distribution, employment placement have effectively connected with the vast number of farmers, and established an efficient “risk sharing, benefit sharing” mechanism to drive farmers to increase their income. Jinxiang County implements the “leading enterprise + base + cooperative + farmer” model. The enterprise establishes a planting base, signs an agreement with the garlic professional cooperative, drives the local farmers to plant according to the needs of the enterprise through the base and the cooperative organization, and agrees to purchase the cooperative’s products at a protective price. At the same time, the company implements secondary dividends and rebates, and returns the profits from production, processing and sales to the members in proportion, which strengthens the relationship between the company and farmers, the market and farmers, and effectively drives local farmers to increase their income .

## 2.3. Collaborating with Universities and Research Institutes

Rongcheng City has established a long-term and stable technical support relationship with universities and scientific research institutes, so that scientific research projects and scientific research achievements are prioritized for research, demonstration and application in the park. Leading enterprises in the park sign technical contracts with universities and scientific research institutes to connect interests in accordance with the market operation mechanism. It has attracted 12 universities and 5 scientific research institutes to settle in the park, and completed 23 marine biological scientific research projects such as fish protein peptides. Rongcheng City improves the talent security policy in the agglomeration region, sets up a special fund of 13 million RMB, and strengthens the introduction of high-level scientific and technological personnel. Since 2020, a total of 23 senior talents have been introduced. Laiwu District adopts the methods of affiliation, alliance and joint construction to promote cooperation between agricultural product export enterprises and scientific research institutes, professional R&D institutions and scholars, and continuously improves the processing capacity and level of agricultural products. 32 companies have established long-term technical cooperation relationships with 61 universities and institutes such as Jiangnan University, and more than 150 high-level experts, and established more than 20 scientific and technological innovation platforms, such as Shandong Ginger Technology Engineering Research Center, Shandong Ginger Industry Technology Innovation Strategic Alliance, and Shandong Ginger Processing Technology Joint Research and Development Center.

## 2.4. New Model “Cross-Border E-commerce +”

Jinxiang County actively carries out the activity of “Cross-border E-commerce Enterprises”, promotes the new model of “industrial cluster + brand products + e-commerce platform + overseas warehouse”, and improves enterprises’ awareness of cross-border e-commerce. Anqiu City establishes a cross-border e-commerce industrial park with the registered capital of 100 million RMB. The Union Port cross-border e-commerce platform independently developed by the industrial park is the first B2B cross-border e-commerce export platform mainly focusing on agricultural products in Weifang City. By opening cross-border e-commerce enterprises, Anqiu City develops the cross-border e-commerce headquarters economy, and builds the cross-border e-commerce headquarters base in Weifang. Relying on the green onion, ginger, garlic and other special agricultural products, Anqiu City builds a cross-border e-commerce export platform. In the first half of 2021, nearly 160 companies have settled in, and the transaction volume on the platform is more than 10 million US dollars.

### 3. Difficulties

#### 3.1. Influence of the Epidemic COVID-19

The continuous spread of the global COVID-19 epidemic has, on the one hand, led to a slowdown in the growth of the world economy, weak demand in the international market, increased uncertainty in the external demand market, and a certain decline in export orders from some agricultural product companies; on the other hand, the prices of raw materials in domestic production have risen sharply, logistics and labor costs have grown rapidly, and the profit margins of enterprise' export agricultural products have been severely compressed. In particular, due to the repeated epidemics abroad and the decline of international logistics capacity, international container shipping costs have risen sharply, corporate costs have increased, and orders have decreased, which has seriously affected the export business of agricultural products. From January to October 2021, the export value of agricultural products in the province was 99.08 billion RMB with a year-on-year decrease of -2.91%. The export of agricultural products was seriously affected by the epidemic.

#### 3.2. Weak Deep Processing and Lack of Brand Building

In export clusters, there are generally small-scale agricultural export enterprises and weak deep processing capabilities. The export products are mainly semi-finished products and primary products, with single product types, short industrial chains and low added value. Especially small and medium-sized enterprises are limited by factors such as funds, equipment, and talents, and they are slow to solve problems in key areas, key links, and key technologies, and their independent research and development capabilities are relatively weak. It is still relatively backward in brand cultivation and building, and a group of core technologies and brands with independent intellectual property rights have been formed, but OEM production, low brand added value, and weak brand influence are common.

#### 3.3. Difficult and Expensive Financing

Agricultural investment has a long payback period and high investment risks, and banks are less willing to lend to agricultural projects. Orders from agricultural export processing enterprises, agricultural product inventories, forest tenure certificates, and circulating land management right certificates cannot all be used as collateral for financing loans. Enterprises are prone to difficulties in capital operation, especially the problem of joint guarantee, which seriously affects the healthy development of enterprises and has the risk of chain reaction.

### 4. Suggestions

#### 4.1. New Pattern of Agricultural Products Export

It is necessary to implement the export project of advantageous agricultural products, to implement preferential policies for the origin, to open up "green channels" for the export of agricultural products, to innovate "online and offline" exhibition formats, and to expand the export of vegetables, fruits, peanuts, livestock and poultry, and aquatic products. Enterprises exporting agricultural products are encouraged to register their trademarks abroad, and cultivate a number of agricultural product brands with international competitiveness. It is the high time to guide the identified export clusters to further establish and improve the management system, to improve the planning and layout, and to guide actively the industry with obvious advantages, relatively concentrated export enterprises, high degree of resource intensification, strong integration demonstration driving ability, complete government supporting service facilities, and large export scale. It is important to cultivate and promote agricultural product export leading enterprises to declare national-level agricultural

international trade high-quality development bases and provincial-level agricultural product export demonstration enterprises.

#### **4.2. Increase of the Policy Support**

It is necessary to make full use of the policies on fiscal funds, tax and fee policies, financing credit, insurance services, and provision of customs clearance facilities, and to guide financial institutions to expand the credit line for enterprises in export clusters and agricultural export demonstration enterprises, and to improve the level of financial services and support. It is important to make good use of the policies of relevant departments in the province, to strengthen cooperation with policy banks, commercial banks, export credit insurance companies, to help enterprises effectively solve the problem of shortage of funds and enhance their ability to prevent risks. It is the high time to support the creation of 5-10 agricultural product export industry clusters yearly, each with a subsidy of 2 million RMB for basic construction costs; to create 15-20 high-quality development bases for agricultural international trade, each with a subsidy of 1 million RMB; to create 30 agricultural product exporters demonstration enterprises, each reward is 300,000-500,000 RMB.

#### **4.3. Construction of the Quality and Safety Supervision System**

It is necessary to encourage agricultural product exporting enterprises and farmer cooperatives in the agglomeration regions, to build production bases which are in line with international standards, support applications for good agricultural practices, organic and other domestic and overseas quality and brand certifications, and to establish a whole-process quality control and traceability system. It is important to organize agricultural experts to provide technical guidance on production, and to carry out technical training on relevant standards and regulations for agricultural product export enterprises and third-party testing institutions, so as to improve the level of self-inspection and self-control of enterprises.

#### **4.4. Cultivation of Multinational Leading Enterprises with International Competitiveness**

Under the background of economic globalization, it is necessary to strengthen agricultural foreign cooperation, to accelerate the global allocation of agricultural production factors, and to make great efforts to cultivate enterprise groups with international competitiveness. On the one hand, it is important to develop from pure planting and breeding to the whole industry chain integrating planting and breeding, processing, warehousing, and logistics, innovate cooperation models and business concepts, and to strive to grow into an excellent enterprise with high brand awareness, strong innovation ability and strong competitiveness. On the other hand, it is important to select a group of large-scale, well-growing and powerful agricultural export leading enterprises to provide key guidance, follow-up services, and support enterprises to carry out the development of the entire industry chain through overseas investment, cross-border mergers and acquisitions and capital operations, and to improve the ability to operate internationally and enhance its position in the global agricultural value chain.

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