

# ***Research on the Current Situation and Suggestions of China's Agricultural Product Futures Market***

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**Abstract.** The Chinese market for modern agricultural products now includes the agricultural futures market, which is also one of the most significant investment and risk management tools in the country due to the rapid development of China's economy and the globalization of the international market. This paper provides a detailed introduction to the historical history, market development, policy environment, institutional design, trading system, and risk management of China's agricultural commodity futures market. This study also offers some solutions in response to some issues that are now present in the market for agricultural products. The development of China's agricultural future has experienced a tortuous course, despite the efforts of all parties to benefit the country and its people. This research is from the investment subject, market regulation, and market environment analysis and gives detailed suggestions.

**Keywords:** agricultural futures market; historical evolution; market development; policy environment; trading system

## **1. Introduction**

At the beginning of the 21st century, with the rapid development of China's economy and the globalization of the international market, China's agricultural futures market gradually rose, becoming an important component of China's modern agricultural product market, and one of the most important investment and risk management tools in the Chinese market. The agricultural futures market plays an important role in protecting farmers' interests, promoting rural economic development, realizing the marketization of agricultural products, and improving international competitiveness. This research will introduce the development of China's agricultural product futures market in detail from aspects of historical evolution, market development, policy environment, institutional construction, trading system, and risk management. The stability of China's financial system and a more standardized development of the country's futures market are both facilitated by this study.

## **2. Analysis of the Current Situation of China's Agricultural Products Market**

The trading varieties of China's agricultural futures market involve a variety of agricultural products. As of March 25, 2023, China's agricultural product futures market has gradually developed into a relatively complete market system. Current varieties include soybeans, soybean

meal, soybean oil, palm oil, sugar, cotton, corn, rapeseed oil, iron ore, and electric coal. With the deepening of China's agricultural supply side structural reform, the quality of trading varieties has gradually improved, and the futures market is also gradually optimized. Currently, China's soybean futures have been introduced into option and period arbitrage trading, and the quality of related futures contracts has further improved. In 2019, China's soybean futures arbitrage trading also introduced standardized contract varieties, which helped improve contract liquidity and market competitiveness, and also provided institutional investors in the futures market with more trading strategy options.

The agricultural futures market in China has increasingly risen to the forefront of centralized trading due to the country's clear development trend of agriculturally intensive and large-scale production. So far, the transactions in China's agricultural futures market have mainly involved some large agricultural enterprises, agricultural cooperatives, and farmers' professional cooperatives and institutions, as well as many well-known futures funds, securities companies, and other institutions. This series of trends indicates that China's agricultural product futures market is moving towards a more standardized, market-oriented, and specialized development direction. Since the establishment of Zhengzhou Commodity Exchange in 1990, China's futures market has undergone multiple rounds of formulation, revision, and improvement of policies and regulations, forming a relatively complete standard system. The trading system of China's agricultural futures market includes standardized contracts, spread trading, delivery methods, and option trading. Among them, the standardized contract is the most basic trading unit in futures trading, and is also one of the important means to ensure transaction standardization and transparency. In addition, the futures market has also adopted other effective trading systems, such as price difference trading, period arbitrage, cross variety arbitrage, and other trading strategies, improving trading efficiency and market liquidity.[1]

The agricultural futures market in China has currently set up a system for managing risk that covers trading systems, margin management, price fluctuation risk control, and other areas. At the same time, futures companies also need to improve their risk tolerance by setting up risk reserves and controlling transaction sizes.[2]

### 3. Existing Problems in China's Agricultural Product Market

In recent years, China's futures market has gradually improved and developed, and entered a benign development stage. Nonetheless, the agricultural futures market continues to reveal a number of issues, which are mostly classified in the following areas.

#### 3.1. Small Market Size and Single Product Variety

Although after years of development, the scale of the market is gradually expanding and the variety is gradually increasing, the scale of the agricultural futures market is relatively small, and the trading volume and turnover of agricultural futures exchanges are lower than other futures varieties. On the one hand, the market size is insufficient, and liquidity and market size are the basis for futures varieties to play a role. Adequate liquidity can provide the necessary conditions for agricultural enterprises to manage the risk of price fluctuations. [3]Table 1 lists the monthly futures market for agricultural products in China's futures market. It can be seen that there are significant differences in agricultural product futures trading, with fewer product varieties.

Table 1: Monthly market table of agricultural products futures on March 25,2023.

Variety name	volume	turn volume
A bean	2068152	131.28

Table 1:(continued)

Bean 2	1428651	623.32
bean pulp	18215575	6760
soya-bean oil	12251783	10266.56
palm oil	15304429	11942.31
corn	10197208	2853.81
corn starch	3561948	1091.63
egg	2182814	957.5
polished round-grained rice	173830	58.61
beaverboard	22266	2.73
plywood	0	0
live pig	501341	1326.05

Data source: Dalian Commodity Exchange by the author statistics

### 3.2. Few Types of Investor Groups

The investor group in the agricultural product futures market is mainly farmers, agricultural product processing enterprises, and some investors, which are relatively narrow and lack the participation of a large number of retail and institutional funds, which also limits the activity and depth of the market. In addition, the futures market which is dominated by individual investors has significant price fluctuations, poor market stability, frequent investment capital flows, and high market risks.[4]

### 3.3. Imperfect Price Discovery Function

The price discovery function of the agricultural futures market still needs to be improved. From time to time, some futures prices are artificially raised or falsely lowered, which differs greatly from actual prices, leading to market distortions. Manufacturers and operators cannot make corresponding decisions based solely on the various signals provided by the market and the supply and demand situation of the futures market.[5]

### 3.4. Imbalance in the Structure of Hedges and Speculators

Chinese farmers have a small capital scale, a low cognitive level, a lack of professional financial knowledge, and do not have the ability to participate in hedging. Currently, few farmers in China participate in the trading of agricultural product futures markets. Most of them are large agricultural product sellers, agricultural product processing enterprises, institutional investors, and individual investors. It can be seen that farmers have not really benefited from the futures market. In China's current agricultural product market, the vast majority of farmers and producers are scattered, with small production scales, poor information, and no higher level of cultural and professional knowledge. In the process of futures trading, there is no ability to predict the future price trend of agricultural product futures, nor is there the ability to skillfully use various hedging techniques, and the ability to bear risks is weak. Therefore, it is difficult to actively participate in the agricultural futures market and when people do not have the conditions for hedging. Although some grain purchasing, selling, and processing enterprises have a certain scale and the ability to bear risks, the existing system reform in China has not yet been fully implemented, and enterprises have not established a mechanism for assuming sole responsibility for their profits and losses, resulting in insufficient motivation to engage in agricultural product futures hedging transactions.[6]

## **4. Suggestions for Future Development**

### **4.1. Strengthen Supervision and Promote Market-oriented Reform**

We will strengthen supervision of the futures market for agricultural products, rectify market order, and crack down on illegal activities. Promulgate corresponding laws and regulations to improve the access conditions for agricultural products to enter the futures market, limit unreasonable speculative trading of agricultural products, and avoid malicious market operations; On the other hand, relevant law enforcement agencies should strictly enforce the law and severely crack down on illegal activities in the agricultural product futures market. We will continue to promote market-oriented reform, deepen the reform of the price discovery mechanism, focus on solving the problem of artificially high and artificially low prices, make the futures market more fair and transparent, and deepen the market. In addition, the futures market monitoring center is required to strengthen monitoring, risk monitoring and early warning, closely track cross-market capital flows, and effectively prevent and defuse operational risks in the agricultural futures market.[7]

### **4.2. Expand the Variety of Agricultural Products**

On the premise of ensuring market stability, timely launching new varieties, and continuously expanding the coverage of varieties according to market demand, so that more participants can obtain reasonable trading opportunities in the agricultural futures market. In view of this, relevant departments should not only arrange for special personnel to carry out research on new varieties of agricultural product futures and continuously explore innovation in agricultural product futures products, but also increase institutional, technical, financial, and other support efforts to continuously optimize and improve the agricultural product sector and industrial chain.

### **4.3. Optimize the Trading Mechanism and Layout**

Improve the price discovery mechanism, promote the reform of delivery methods, improve market efficiency and liquidity, and provide investors with a more convenient and safe trading environment. It is recommended to optimize the layout and development strategy of exchanges, encourage cooperation and complementarity between exchanges, and increase the total volume and depth of the market in response to the current irrational layout of agricultural futures markets.[8]

### **4.4. Strengthen the Cultivation of Investors**

Strengthen the promotion of the agricultural product futures market, increase the popularization of agricultural product futures knowledge, attract more institutional and retail investors to participate, expand the investor group, and promote market activity and depth.[9]

### **4.5. Improve Information Transparency**

Strengthen market information disclosure, enrich market services and information release, provide more comprehensive, accurate, and timely information, and help investors achieve effective support in risk control, decision analysis, and asset allocation. For example, with the continuous development of information technology, there will be more technological innovations in the agricultural futures market, such as electronic trading and smart contracts. These technological innovations can not only improve transaction efficiency, but also improve risk management and regulation. For example, the Chicago Mercantile Exchange of the United States has now implemented electronic trading, making trading faster and more convenient.

#### 4.6. Promote International Development

With the development of international trade and the integration of financial markets, the agricultural product futures market will become increasingly international. This means closer cooperation and information sharing between exchanges, making it easier for investors and companies to invest across borders.[10] For example, China's Zhengzhou Commodity Exchange is establishing links with other futures exchanges around the world. As a result, more work needs to be done to increase agricultural products' level of opening up and their ability to command higher prices on the global market, actively encourage the connection between domestic and global agricultural futures markets, boost global competitiveness, and improve market position.

#### 5. Conclusion

This paper studies the development of futures market and draws conclusions. The agricultural futures market plays an important role in the modern economy. It can help farmers and agricultural enterprises conduct risk management and improve the price discovery and circulation efficiency of agricultural products. With the development of globalization and technology, the agricultural futures market will also face more opportunities and challenges. We need to actively respond to these changes to ensure the stability and development of the agricultural futures market. In the future, we should take measures to promote the internationalization, technological innovation, and environmental development of the agricultural futures market, and strengthen supervision to ensure the fairness and transparency of the market. Currently, there are still some problems and challenges in China's agricultural product futures market, which require the joint efforts of the government, exchanges, and investors to promote the healthy development of the market and maximize value. In the future, it is expected that further study the development of the Chinese market from the perspective of quantitative analysis.

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