# **Analysis on Influencing Factors of the Unbalance between Supply and Demand** of Agricultural Products

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Abstract: In recent years, the self-sufficiency rate of agricultural products in China has shown a downward trend. In the future, the relationship between supply and demand of agricultural products will become tighter, and there will be an increasing situation of structural and regional imbalances. The information asymmetry in the circulation of agricultural products is very significant, which leads to the unbalanced supply and demand of agricultural products, price fluctuation and quality safety. The industrial system for the construction of agricultural products shall be configured in accordance with the direction of regionalization, specialization and quality. Starting from the ability to cope with risks, the resource proposes a coordination of imbalance between supply and demand, so that the agricultural product supply chain can be coordinated. It not only stabilizes the supply of important agricultural products, but also increases the employment and income of farmers. This paper studies the causes of the imbalance between supply and demand of agricultural products, and the risk prevention and resolution measures for the imbalance of supply and demand faced by agricultural products.

#### 1. Introduction

Promotion of agricultural products is not only conducive to strengthening the quality of agricultural products, but also conducive to the sustainable development of the environment [1]. The main factor affecting the price stability of agricultural products is the change of supply and demand, which is the change of value (cost). In the case of unbalanced supply and demand, the lower price of the product depends on the gap between supply and demand of the product. Agricultural supply chain is a complex, dynamic and non-linear large-scale system. Any change of node or partner may lead to the breakdown of the whole supply chain [2]. However, crop production is inevitably affected by factors such as means of production, natural conditions and so on, which leads to the randomness of agricultural output, price of substitutes, complementary products, changes in human demand and other factors [3]. The supply and demand pattern of agricultural products has shifted from the past to the tight balance. With the continuous development of the feed industry and the deep processing industry of agricultural products, the gap between supply and demand will gradually increase [4]. From the perspective of information asymmetry, this paper analyzes the operation mechanism of different agricultural product supply chain models, and believes that establishing agricultural product information backtracking system and promoting e-commerce platform trading can reduce the impact of information asymmetry on supply chain performance [5].

With the further development of industrialization and urbanization, the supply-demand relationship of agricultural products in China is gradually tightening. In the whole circulation chain of agricultural products, too many branches make the structure of agricultural supply chain more complex, which makes the information transmission process of agricultural products at both ends longer [6]. China attaches great importance to the comprehensive production capacity of domestic agriculture. The central government clearly pointed out that "ensuring national food security and ensuring the effective supply of important agricultural products is always the primary task of developing modern agriculture" [7]. The price of a product depends on the change of its value (production cost). Therefore, whether supply and demand can be balanced is the main contradiction of price stability, and the overall price level can be sTable [8]. A large number of imports of

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high-quality and low-cost agricultural products such as grain, cotton, oil and sugar have reached a new balance of supply and demand by reducing domestic production and expanding imports. Significant changes in lighting, irrigation, and climatic factors often lead to crop growth and even death, which contribute to the randomness of agricultural output [9]. In quantitative research, Liu Qiao, Shen Xin, and Sun Wei used the risk fuzzy comprehensive evaluation method to estimate the risk factors in the agricultural product supply chain, indicating the risk of oversupply of agricultural products. Kang Wei listed risk factors such as insufficient production, overproduction, and price fluctuations, and used fuzzy set theory to solve the problem of risk ranking in the supply chain. The price of agricultural products is the key to determining whether the agricultural product market can exist for a long time and is healthy and healthy. It is of great significance to protect the ecological environment and improve the safety of agricultural products [10].

#### 2. Materials and Methods

With the continuous improvement of the consumption level of urban and rural residents in China, the consumption of agricultural products will be more diversified in the future, and restricted by the increasingly scarce water and soil resources in China. Farmers' employment and income growth were lower than expected because of the impact of falling export prices, slowing down export growth, restraining export-oriented production, and the balance between supply and demand. About 68% of the agricultural products in China are distributed centrally in the wholesale market, among which the circulation in the intermediate link is mainly through the wholesale market with different division of labor, and its main business body is the wholesalers at all levels in the intermediate link of the agricultural supply chain. In the perception and reaction of market signals and economic information, it may be rationally determined, or it may blindly follow the trend. Once the risk is encountered, it is difficult for farmers to take real-time measures against risks, resulting in low efficiency and poor stability of the entire supply chain. problem. Although the policy support for the construction of the agricultural product market system has been continuously increased, the construction of modern circulation facilities and the use of means are still insufficient. There is no clear boundary between basic needs and purchasing power needs. There are differences in space and time. For example, the level of productivity development in A and B is different, the level of basic consumption is different, and the level of basic consumption is inevitably different.

On the basis of the supply and demand situation of agricultural products in China, it is proposed to further strengthen and improve market regulation and control to promote the stability of agricultural production. An investigation on the balance between supply and demand of agricultural products is shown in Table 1. The decision on the risk of imbalance between supply and demand of agricultural products is shown in Table 2.

Table 1 The Balance of Supply and Demand of Agricultural Products

	Demand	Equilibrium
	value	point
Structural contradictions stand out	15.60	9.15
Increased regional imbalances	13.24	10.90
The supply-demand relationship of agricultural products will be	12.08	8.17
tightened in the future		

Table 2 Risk Decision-Making of Unbalanced Supply and Demand of Agricultural Products

	Preservation	Transmit
Establishing Market Information Feedback Mechanism	21.03	3.05
Establishing a Reasonable Contract Mechanism	16.51	4.71

If the production of agricultural products does not reach the lower limit of basic demand, prices will rise in an all-round way, causing people to be nervous in an all-round way. The latter is the demand brought about by purchasing power, reflecting the multi-level needs brought about by

different currency holdings. Supply chain is a dynamic form of alliance, if there is not enough profit space and reasonable profit distribution scheme, it is difficult to make enterprises closely united. At the same time, agricultural products are fresh and perishable, and are not durable for storage and transportation. The impact of disastrous weather, repeated and frequent occurrences, coupled with the serious lag of infrastructure construction, will increase seasonal, structural and regional fluctuations in production. Consumers' perception of crop safety of agricultural products. Consumers' perception of crop safety of agricultural products as a whole. On the whole, respondents are very concerned about the quality and safety of agricultural crops. Establish a public information platform for logistics information based on agricultural product supply chain. Through this platform, it can reduce the transaction cost of agricultural products in the supply chain, improve the speed and quality of information transmission, and solve the supply chain risks caused by information asymmetry. The market demand for agricultural products is decreasing year by year, but the supply is rising, resulting in a growing difference in the supply and demand of agricultural products.

On the basis of keeping the prices of agricultural products basically sTable, the price of agricultural products should be allowed to rise reasonably. The key point is to promote sTable development of production, ensure effective supply, and prevent fluctuations in the supply of agricultural products and sharp fluctuations in market prices. The change of value mainly lies in the change of labor productivity. Generally speaking, the improvement of labor productivity is restricted by the improvement of scientific and technological level and the limited resources. The improvement of labor productivity is a gradual process, and there is no abrupt change of abnormal high and low. Improving the ecological environment of regional farmland can properly increase the purchase price of agricultural products. The reason why citizens refuse to pay a higher premium is that too high a price will increase family living expenses, and protecting the environment should be within their capabilities. The government has provided important support and protection for the development of agricultural product supply chain, with emphasis on providing financial support, preferential policies, etc., and developing a number of highly competitive agricultural leading enterprises. From the perspective of market regulation, the problems that arise can not be adjusted in time, and the adjustment effect errors will be relatively large. The overall situation of achieving the balance of supply and demand of important agricultural products under open economic conditions is that the focus of grain production and supply will be further shifted to the central and northern regions, and the food gap in the western and southeastern coastal areas will be expanded one step. Use the existing information to analyze and forecast the agricultural market risk, and formulate corresponding prevention and control measures according to the level of risk issued.

## 3. Result Analysis and Discussion

The changing characteristics and trends of the supply-demand balance of agricultural products are rooted in the growth of food demand and resource constraints. In the case of unbalanced basic demand, do not rush to adjust the price-to-price relationship to maintain the relative stability of production costs. The formation of commodity price-to-price relationship is a complex process. Demand side, that is, grain-deficient provinces, will have more and more total demand, and the speed will be accelerated. From the perspective of supply, the main producing areas of agricultural products do not encounter mega- or irresistible natural disasters. The new form has increased the productivity and capacity of farmers, and has increased the bargaining position of farmers due to the increase in scale. It has weakened the disadvantages of farmers in the purchase of agricultural materials and the sales of agricultural products, with the increase of state support. Establish a reserve system, strengthen the construction of urban agricultural product supply emergency capacity; raise the standard for the collection of new vegeTable land construction funds, make overall arrangements for land transfer income, increase investment in agricultural production; improve the quantitative assessment index system and clarify responsibilities.

From a regional perspective, it especially affects the income and employment of farmers in the main agricultural production areas. Specifically, accession to WTO and opening up the agricultural

products market will have an impact on the choice of Income-increasing policies for farmers and the realization of different agricultural producers and different regions. Effectively promote the reform of agricultural scientific research and technology extension system, and strengthen the implementation of intellectual property rights and provide preferential policies to provide incentives for enterprises to enter the field of agricultural scientific research. Agricultural products involve the people's livelihood of the country. Only with the assistance and supervision of governments at all levels can we gradually establish a relatively perfect supply chain of agricultural products, ensure the smooth flow of information in the supply chain of agricultural products, and alleviate the information asymmetry in the circulation of agricultural products. Planning input products, social services in production, market circulation, storage and processing, and at the same time, we must strengthen the cultivation and organization of production and management. In addition, the government can establish a special fund for agricultural risks to realize the application of new technologies in agriculture to improve the ability of agriculture to withstand natural disaster risks and reduce the risk of natural disasters in agricultural product supply chains. In addition to reducing non-production expenses and increasing the production capacity of markeTable products, you can consider opening the price. Use price levers to achieve the goal of stimulating production, curbing consumption, and meeting the purchasing power of different levels.

To study and establish a dual-linkage price control mechanism between agricultural product price and opportunity cost of agricultural production and subsidies for urban low-income groups. It will not only synchronize the rising prices of agricultural products with the rising costs of agricultural production, but also protect farmers' enthusiasm for production and gradually defuse the pressure of soaring prices of agricultural products. In order to maintain the basic stability of the overall price level, we must first achieve a balance between the demand for and supply of compilation books. The most important thing is to ensure the necessary means of production and production capacity for the production of basic means of livelihood. Establishment of agricultural product quality and safety standards and logistics standards system. Identification of key standards for agricultural products, such as agricultural product quality control standards, packaging standards, storage standards, logistics and transportation standards, after-sales service standards, etc. We will develop and improve the rural social security system, build a social safety net and safety valve suiTable for rural areas, integrate rural areas and farmers into the social security system, and enhance farmers' ability to resist risks. The traditional policy ideas for maintaining the balance of supply and demand of agricultural products in the past must be changed. Should be measured in the perspective of opening up, and selectively follow the principle of comparative advantage.

# 4. Conclusion

In this paper, the factors influencing the imbalance between supply and demand of agricultural products are analyzed. When we take some measures to balance supply and demand, the prices of most agricultural products have gradually stabilized at a new and reasonable level. Summarizing the experience and lessons from the liberalization of agricultural prices will help deepen the understanding of how to rationalize prices. Where conditions permit, grain production capacity should be gradually restored and improved. The tasks of protecting cultivated land and basic farmland, stabilizing grain planting area, and enriching local reserves will be implemented in all provinces (regions and cities), and incorporated into the performance appraisal system of provincial people's governments. A comprehensive and scientific assessment of the effects of agricultural production and food security is ensured, so that national financial input can maximize the improvement of agricultural productivity and the effective supply of agricultural products. In order to prevent disorderly competition affecting the balance of supply and demand of domestic agricultural products The industry associations or chambers of commerce can coordinate the export quantity and price of agricultural products, and the government must actively cultivate and support the development of various intermediary organizations and industry associations.

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