

# Research on the Integrated Development of Rural Industries in China under the New Development Pattern

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## Abstract

Promoting the integrated development of rural primary, secondary, and tertiary industries is an important measure to achieve China's rural revitalization strategy. Based on the current situation of a new development pattern with domestic systemic circulation as the main body and domestic and international double circulation promoting each other, this paper analyzes the connotation and development mode of rural industrial integration, and constructs the evaluation index system of rural industrial integration development with five main primary indicators, namely, the extension of rural industrial chain, the expansion of agricultural multi-function, the cultivation of new business types, the integration of agriculture and service industries, and the improvement of interest linkage mechanism, And analyze the influencing factors that promote the integration and development of rural industries. Finally, propose corresponding policy recommendations.

## Keywords

Rural industrial integration; Rural revitalization New development pattern; High quality development.

## 1. Introduction

In the "Proposal of the Central Committee of the Communist Party of China on Formulating the 14th Five Year Plan for National Economic and Social Development and the Long Range Goals for 2035", one main line runs through the entire text, namely the new development stage, new development concept, and new development pattern. Among them, the new development pattern with domestic systemic circulation as the main body and domestic and international double circulation promoting each other is a strategic choice made according to China's current development situation, which plays a vital role in social stability and improving people's living standards. The Twentieth National Congress of the Communist Party of China pointed out that "without a solid material and technological foundation, it is impossible to build a socialist modern power in an all-round way." We must adhere to a high level of opening up, and accelerate the construction of a new development pattern with domestic systemic circulation as the main body and domestic and international double cycles promoting each other. Building a new development pattern is a major decision made based on the changes in China's development stage, environment, and conditions, especially the changes in China's comparative advantage, and taking into account the situation.

From a long-term and overall perspective, if the nation wants to revive, the countryside must be revitalized. Rural revitalization is a fundamental project for the strengthening of the Chinese nation, which requires continuous development in practice and a clear path. As for the "three rural" issues, they are fundamental issues closely related to the people's livelihood of the country, and solving them well is the top priority of the entire Party's work. In the context of the new development pattern, implementing the rural revitalization strategy is conducive to effectively implementing the policies and deployments of the Party Central Committee on "agriculture, rural areas, and farmers" work, and helping to achieve the great rejuvenation of the Chinese nation. The key to building a new development pattern is to expand domestic demand, and at the same time, China will continue to promote supply side structural reform and optimize the rural industrial chain. Effectively enhance the internal driving force within rural areas, improve rural internal construction, enhance rural governance capabilities, strengthen urban-rural connections, and coordinate urban-rural development.

According to data, in 2022, China's gross domestic product reached 121 trillion yuan, which is a new level after continuously breaking through 100 trillion yuan and 110 trillion yuan in 2020 and 2021. At the annual average exchange rate, China's total economic output reaches 18 trillion US dollars, firmly ranking second in the world. The monthly increase of China's consumer price index (CPI) has always been less than 3%, and the annual increase was only 2.0%, significantly lower than the increase of developed economies such as the United States of America of 8.0%, the euro area of 8.4%, and the United Kingdom of 9.1%, and also significantly lower than the increase of emerging economies such as India, Brazil, South Africa of 6-10%. "China's price stability" and "global inflation" form a very sharp contrast [2].

The construction of a new development pattern of "dual circulation" is an inevitable decision to adapt to China's development towards a new stage and face the new requirements of international competition. This is of great significance for the growth of China's consumer market and the improvement of the domestic demand system, as well as for the formation and reshaping of the global supply chain. As a new form of economy today, the digital economy has the characteristics of high innovation, strong penetration, and wide coverage. It is not only a new economic growth point, but also a fulcrum for transforming and upgrading traditional industries. From its development and performance, it has become an important engine for building a modern economic system and an important lever for promoting the construction of China's "dual circulation" new development pattern. The integrated development of rural industries is a strong support for the dual economic cycle and a powerful measure to unblock the "bottleneck" of the dual economic cycle. With the development of the new economy, the Digital transformation of the agricultural industry has become the core of the digital economy. The Internet, big data and other information technologies have promoted the emergence of new business types and new models. The new economy has been integrated into all aspects of our lives, promoting the transformation and upgrading of the industrial structure and consumption structure.

## **2. The Development Status of Rural Industrial Integration in China**

In 2015, the "Central No.1" document proposed for the first time to promote the integration and development of rural primary, secondary, and tertiary industries to increase farmers' income. The integrated development of rural industries is an important means to broaden the channels for increasing farmers' income, an important measure to build a modern agricultural industry system, an inevitable requirement to accelerate the transformation of agricultural development methods, explore the path of modernization of agriculture with Chinese characteristics, and an important way to implement the rural revitalization strategy, accelerate the promotion of agricultural and rural modernization, and promote urban-rural integration

development. According to the development strategy of the State Council, various regions have formulated a series of policies to accelerate the integration and development of rural industries, and have achieved certain results, mainly manifested in the following aspects:

The main body of diversified industrial integration is constantly developing and growing. Since the reform and opening up, agricultural production and operation entities have achieved a diversified system that coexists from farmers to farmers, professional cooperatives for farmers, agricultural enterprises, professional large households, and family farms. These business entities have advanced modern management concepts, large scale operations, and strong comprehensive strength, gradually becoming an important force in promoting the integration of rural industries.

Leading enterprises integrate capital, technology, advanced management elements, and are the most capable and innovative entities in rural industrial integration. Farmers' cooperatives are an important force driving the development of farmers in China, which can effectively improve the level of farmers' organization, enhance their production and operation efficiency, and enhance their ability to resist risks. From the perspective of the number of cooperatives, the number of farmers' cooperatives has maintained stable growth.

After 2012, the government gradually replaced "agricultural socialized services" with "agricultural productive services" in policy documents. The construction of agricultural socialized service system is an important part of the implementation of rural revitalization strategy and has become an indispensable part of China's modern agricultural industry system. The service content continues to expand, and agricultural socialized services have expanded from production to a network system covering agricultural supply, agricultural production, circulation, sales, finance, insurance, and information.

The integration of industry and city is an important task in the development of rural industrial integration. In current practice, there are still certain problems, including unscientific overall spatial planning, inadequate utilization of existing industrial resources, and insufficient financial support. The average comprehensive efficiency of industrial integration development in 30 provinces, autonomous regions, and cities in China from 2009 to 2018 increased from 0.755 in 2009 to 0.913 in 2018, an increase of 15.8%, indicating that the resources of industrial integration in China have been effectively utilized and the efficiency of industrial integration has significantly improved. However, there is still a gap compared to the effectiveness of DEA, indicating that there is still significant room for development in promoting the integration and development of rural industries in China. At present, in the planning and design of regional spatial development layout, there is a lack of practical consideration for optimizing the construction of regional characteristic industry demonstration zones and modern agriculture demonstration zones. The utilization of unique resources and characteristic agricultural resources in rural areas is maintained at a low level, leading to an increasing disparity in economic income between urban and rural areas. From the perspective of financial support, although the current regional government departments provide a certain degree of special funding subsidies for rural industrial integration, the overall investment amount is difficult to effectively meet the existing construction needs, and there are few financing channels and sources, which makes it difficult to achieve the expected speed and quality level of industrial urban integration construction.

### **3. Selection of the Integration Mechanism Model for Rural Industries in China**

According to the basic current situation of agriculture and rural areas in China and the laws of industrial integration development, China adopts a rural industrial integration mechanism of "Government Promotion+Market Orientation+Farmers" as the main body.

At present, the foundation of agricultural development in China is still relatively weak, the level of agricultural technology is relatively backward, and agricultural labor productivity is relatively low, resulting in low comparative interests in agriculture. In the case of adopting market allocation of resources, resource factors will further gather in urban areas and secondary and tertiary industries, which is not conducive to the development of rural agriculture. Agricultural enterprises, social capital, and other new business entities have significant advantages over farmers in terms of technology, capital, scale, and market. Farmers have a small operating scale and are at a disadvantage in market competition, and have not yet become competitive market entities. Therefore, China needs to adopt a government driven model to develop rural industries. On the one hand, through government intervention to enhance the endogenous driving force of integration entities, and on the other hand, government interest coordination can ensure that more agricultural value-added benefits remain in rural areas, and effectively guide and constrain relevant entities, forming a good situation of coordinated development between agriculture and other industries, and close connection between farmers and other operating entities.

Secondly, the integration of rural industries in China is in its early stage, with a relatively low level of development and insufficient conditions for market evolution based development. It is necessary for the government to coordinate and guide the development of industrial integration through policies, forming a pattern of division of labor and cooperation between regions. The government needs to strengthen the supply of systems and public services with strong externality to provide strong support for the integrated development of rural industries. The government needs to strengthen support for weak links such as talent cultivation, technology promotion, and funding. At the same time, it is necessary to strengthen supervision, maintain the order of industrial integration and development, create a fair competition and encourage innovation atmosphere. Establish a sound risk prevention mechanism, establish a negative list, and standardize and guide the business behavior of entities such as industrial and commercial capital. Moreover, we will vigorously cultivate new types of business entities, innovate interest linkage mechanisms, encourage alliances and cooperation between various business entities and farmers, establish close connections, improve the agricultural management system, and enrich modern agricultural management methods.

Market demand is a prerequisite for industrial development and growth. Therefore, the development of industrial integration needs to be market-oriented, following the development laws of rural industrial integration, and the market determines the way, type, and speed of industrial integration development. The government should respect the independent decision-making status of production and operation entities such as farmers and enterprises, and ensure the sustainability of industrial integration and development. From the perspective of industrial development laws, government intervention can play a positive supporting role in the initial stage of industrial development. With the development and growth of the industry, the government should gradually withdraw, and the role of market law is becoming stronger and stronger. If the government intervenes too much in the market during a more mature period of industrial development, it can easily lead to low resource allocation efficiency and hinder industrial development. Moreover, market orientation is in line with the trend of China's rural agricultural economic reform. Building a market economy system is the basic direction of China's reform and development, and the key is to handle the relationship between the government and the market well.

#### **4. Construction of China's rural industry integration indicator system**

The integrated development of rural primary, secondary, and tertiary industries is a new trend in future rural development, an internal driving force for achieving agricultural transformation

and upgrading, and an important way to narrow the urban-rural wealth gap and promote farmers' income growth.

#### 4.1. Principles for selecting evaluation indicators

One is the principle of scientificity. The evaluation index system is the scale for measuring the research object, and its scientific nature directly affects the objectivity, rationality, and accuracy of the evaluation results. The second is the principle of system integrity. The integrated development of primary, secondary, and tertiary industries in rural areas is an important component of urban-rural integration development, and is crucial for the development of rural agriculture and rural areas. Therefore, the construction of the indicator system for the integrated development of rural primary, secondary, and tertiary industries is a systematic and integrated project, with indicators at all levels interconnected but independent. The third principle is comparability and operability. The construction of the indicator system for the integration of rural primary, secondary, and tertiary industries is an objective, comprehensive, and accurate measurement of the effectiveness of integrated development, providing a scientific and reasonable evaluation scale for the effective management of relevant departments of central governments at all levels. Therefore, the construction of the indicator system should take into account the differences in different regions, resource allocation, economic development, and other aspects. It should be comparable and operable, while also avoiding difficult to obtain indicator data or quantifiable indicators.

#### 4.2. Establishment of evaluation index system

This article is based on the requirements of the "National Rural Industry Development Plan (2020-2025)" document released in 2020. Following the principles of scientific, systematic, obtainable, and measurable evaluation index system construction, and referring to previous research results, based on the organizational form of "process result", it constructs a rural industrial chain extension, agricultural multi-functional expansion, new industry cultivation, integration of agriculture and service industry A comprehensive evaluation system for the integration and development of rural industries, with five main primary indicators as the improvement of the interest linkage mechanism.

Table 1. Evaluation index system

Target layer	Secondary indicators	Third level indicators	Indicator attribute
Comprehensive development level of rural industrial integration	Extension indicators of rural industrial chain	The proportion of agricultural product processing business income to total agricultural output value	+
		The proportion of added value of the primary industry to GDP	-
		Rural e-commerce penetration rate	+
		Utilization rate of agricultural mechanization	+
	Rural multifunctional development indicators	Proportion of employed population in rural service industry	+
		The proportion of added value of rural tertiary industry to total agricultural output value	+
		Per capita grain production	+
	New business format cultivation indicators	Total area of facility agriculture/total area of cultivated land	+
		Fertilizer application intensity	-



	Integration indicators of agriculture and service industries	Income from rural tourism industry	+
		Rural household toilet renovation ratio	+
		Number of newly added telephone and broadband users in rural areas	+
		Rural road mileage	+
	Indicators for improving the mechanism of interest linkage	Number of farmer cooperatives per 10000 people	+
		Per capita utilization rate of agricultural mechanization	+
		Proportion of rural fixed assets investment in total rural investment	+

## 5. Factors Influencing the Integration and Development of Rural Industries in China

Factors such as consumer demand, land transfer, technological progress, infrastructure, environmental quality, human capital, and financial development have different effects on the integrated development of rural industries.

Consumer demand has a positive impact on the integrated development of rural industries. In recent years, the income of urban and rural residents has increased, and the consumption of urban and rural residents has been continuously upgrading. There is a strong demand for processed products, which has promoted the integration and development of rural industries. The increasing consumption demand of villagers will also increase the efficiency of industrial integration and development. Land transfer has a significant impact on the integration and development of agricultural function expansion, and has limited impact on other rural industry integration modes. Land, as an important carrier for the integration and development of rural industries, relies on leisure and vacation venues, various amusement parks, and farmhouses. Strengthening land transfer and formulating relevant policies can help accelerate the integration and development of rural industries. Technological progress represents innovation, aligns with the concept of innovative development, and can radiate new vitality for the integrated development of the agricultural industry. The progress of agricultural technology can improve agricultural labor productivity, promote modernization development, and new thinking and technologies such as the Internet of Things, big data, and intelligence provide greater and broader development prospects for the integrated development of agriculture. Rural roads are rugged, infrastructure accessibility is poor, network facilities are lagging, and villages and towns with low internet penetration rate limit the development of rural industrial integration. The quality of rural environment is a prerequisite for the integrated development of rural industries. Reducing the use of fertilizers, pesticides, agricultural films, etc., improving the remediation capacity of domestic waste and sewage pollution problems, and transforming rural ecological benefits into economic benefits, can help promote the integrated development of rural industries. Human capital has a positive effect on the integration and development of industries. The abundance of human resources is conducive to the integration and development of industries. However, many young laborers flow out of rural areas, leading to an increasingly severe aging phenomenon of rural labor force. This creates a contradiction between the current structural shortage of rural labor force and the demand for rural labor force in the transformation of agricultural industrial structure, hindering the transformation and upgrading of agricultural industrial structure. This phenomenon poses enormous challenges to rural economic and social development. The development of rural finance can generally

promote the integration of rural industries, but the effect on the extension of the agricultural industry chain and the penetration of high-tech into agriculture is not significant enough.

## **6. Suggestions**

### **6.1. Cultivate diversified industry integration entities**

Accelerate the development of cultivating new agricultural management organizations, encourage and support family farms, agricultural socialized service organizations, and other forms of integrated development of rural industries. Encourage new business entities to explore integration models, innovate business models, and cultivate well-known brands. The level of agricultural technological innovation is the cornerstone of the integrated development of rural industries, and it promotes the transformation of the agricultural industry by improving the level of agricultural technological innovation in the region. Therefore, the government should adopt a series of policies and measures to vigorously encourage innovation in financial products, increase investment in agricultural technology, strengthen digital inclusive finance to promote agricultural technology and rural facility construction, improve rural living conditions, create conditions for efficient and sustainable optimization of industrial structure in various links of the agricultural industry chain in various regions, promote rural industrial development, and further improve the high-quality development level of China's economy.

### **6.2. Deepen the reform of rural management system and improve the level of integrated agricultural management services**

Actively promote the reform of rural property rights system, with a focus on promoting the separation of land ownership, land ownership, and collective asset ownership reform. Continue to deepen the reform of the rural financial system, while ensuring the supply of policy oriented finance, actively carry out financial system innovation, improve the coverage of rural banks, expand the scope of commercial banks' rural credit business, and support the healthy development of new rural cooperative financial organizations. In the new development pattern, we need to start from reality, based on the basic characteristics, advantages, and ecological civilization construction requirements of rural industries, promote diversified development within agriculture, establish a more comprehensive industrial mechanism, create good conditions for realizing the rural revitalization strategy, and comprehensively promote the great rejuvenation of the Chinese nation.

### **6.3. Realize value co creation and sharing as a guarantee for rural integrated development**

The process of integrating rural three industries is a process of value creation and value sharing. Interest linkage is the material foundation for maintaining industrial integration and development. When choosing the path of rural three industry integration, it is necessary to ensure that all participating entities enjoy the fruits of value appreciation and achieve value co creation and sharing. Optimizing value distribution is the key to building a healthy, sustainable, and functional industrial deep integration ecosystem. In this process, it is necessary to integrate and control the value chain system through shareholding, equity participation, alliances, and other means, construct a mutually agreed benefit distribution mechanism, and based on this, construct a path for the integration of rural three industries.

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