

Analysis on the Development Path of Innovative Agricultural Industrialization from the Perspective of Rural Revitalization

Youyou Tu

Wuhan University of Technology, Wuhan 430070, Hubei, China

Abstract: With the continuous promotion of the strategy of rural revitalization in China, the development of rural agricultural industrialization has gradually become a key link in China's social and economic development. Based on the significance of the development of innovative agricultural industrialization, this study aims at solving the problems faced by the current development of agricultural industrialization from the perspective of rural revitalization, such as poor awareness of industrialization development, insufficient labor force in rural areas, backward infrastructure for industrialization development and less investment in industrialization development. In order to provide a useful reference for the development of innovative agricultural industrialization under the background of rural revitalization in China, some strategies were put forward, such as actively publicizing the concept of industrialization development, implementing the policy of talent introduction, strengthening the infrastructure construction of industrialization in rural areas and strengthening the financial support for agricultural industrialization.

Keywords: Rural Revitalization; Agricultural Industrialization; Development Path; Innovation

Published: Sept 11, 2024

Introduction

With the advancement of globalization and the rapid growth of China's economy, the economic development of rural areas, as the cornerstone of the national economy, has increasingly shown its irreplaceable role, but the transformation of China's rural economic structure, industrial upgrading and resource integration are relatively lagging behind^[1]. Agriculture has been one of the pillars of China's economy for a long time, but the proportion of agricultural output value is declining year by year, and the income of farmers is growing slowly. At the same time, the problems faced by rural areas, such as the influx of migrant workers into cities, the lag of rural infrastructure, and the poor land circulation, have aggravated the plight^[2, 3] of rural development.

As an important part of the national macro-policy in the new era, the strategy of Rural Revitalization aims to build a socialist modern country in an all-round way, promote agricultural and rural modernization and strive to solve the "three rural" problems^[4]. However, how to ensure the real revitalization of the countryside and the real modernization of agriculture, we need to explore and study the new development path of agricultural industrialization. Innovative agricultural industrialization is an inevitable requirement for the development of modern agriculture, but also an effective way to^[4]revitalize the countryside. Only by truly realizing the deep integration of agriculture and modern industry, agriculture and city, agriculture and modern countryside, can we truly promote the sustainable and healthy development of rural economy.

This paper makes an in-depth analysis of the development path of innovative agricultural industrialization from the perspective

of rural revitalization, aiming to provide useful theoretical guidance for relevant policy formulation and practical operation, and to provide reference and enlightenment for promoting the sustainable and healthy development of agriculture and rural areas in China.

1. Significance of Innovative Agricultural Industrialization Development from the Perspective of Rural Revitalization

1.1 Increase the Added Value of Agricultural Industry

The industrialization of innovative agriculture plays a significant role in promoting the added value of agricultural industry. On the one hand, it emphasizes the application of scientific and technological innovation in agricultural production, using innovative tools and methods such as modern biotechnology, agricultural information technology and intelligent agricultural machinery, which can greatly improve the quality of agricultural products and make them change from low added value to high added value. On the other hand, the industrialization of innovative agriculture also promotes the deep processing of agricultural products and the extension^[5]of the value-added chain. Traditional agricultural products often only carry out basic processing, such as shelling and peeling, while modern innovative agriculture transforms agricultural products into various functional, portable and ready-to-eat foods, which greatly broadens the market scope of products.

1.2 Fully Explore Agricultural Development Resources

The development of innovative agricultural industrialization, as an agricultural development model driven by innovation and deeply integrated with modern science and technology, management experience and market mechanism, has natural advantages for fully exploring agricultural development resources. Innovative agricultural industrialization focuses on the introduction and utilization of advanced agricultural science and technology, such as biotechnology, agricultural big data, intelligent agricultural machinery and so on. The application of these technologies can more accurately understand the status and changes of traditional agricultural resources such as soil, water and climate, and then scientifically manage and rationally utilize^[6]these resources. Innovative agricultural industrialization also emphasizes the optimization and upgrading of the whole production process, including seed breeding, land use, production management, post-processing and marketing. In this mode, agricultural resources are maximized and most efficiently utilized, avoiding waste and mismatch of resources.

1.3 Promoting the Integration and Development of Rural Industries

As a new direction of current agricultural development, the development of innovative agricultural industrialization provides a solid foundation and an effective way for the integration of rural industries. Firstly, the development of innovative agricultural industrialization pays attention to the comprehensive integration of resources, which includes not only agricultural production resources, but also rural culture, history and natural resources. On this basis, the countryside can create a comprehensive system that integrates agriculture, tourism, culture, education and other industries, making the countryside not only a place of production and living, but also a tourist attraction, cultural experience area and education base^[7]. Secondly, the industrialization of innovative agriculture can fully explore the history, tradition and culture of the countryside, integrate these elements into agricultural production and marketing, and form agricultural products with local characteristics and cultural connotations. In addition, rural culture can also be combined with tourism, education and other industries to form cultural experience, cultural

dissemination and cultural education and other fields.

2. Problems Faced by the Development of Innovative Agricultural Industrialization from the Perspective of Rural Revitalization

2.1 Poor Awareness of Agricultural Industrialization Development

Under the background of rural revitalization, agricultural industrialization is the inevitable trend and direction of contemporary agricultural development, but the promotion of innovative agricultural industrialization is still facing the problem of poor awareness of industrialization development, which is mainly affected by a variety of deep-seated factors.

First, agricultural production in many rural areas still remains in the traditional small-scale production mode with the family as the unit. This mode of production makes many farmers deeply attached to it, but its use of land, labor and other resources is inefficient. Influenced by traditional concepts, many farmers have not really realized the economic and social benefits brought about by agricultural industrialization.

Second, the mechanism of information dissemination and access in rural areas is not yet perfect. As a result, many farmers have misunderstandings about agricultural industrialization or lack of awareness of its advantages and values. Compared with urban areas, there are obvious gaps in educational resources, educational models and training systems in rural areas, which leads to the lack of a comprehensive and forward-looking perspective in agricultural production and management.

Third, the external environment, such as the instability or uncertainty of policy, market and capital, also affects farmers' attitude towards agricultural industrialization. In the face of these uncertainties, many farmers are more inclined to stick to the traditional and stable mode of operation than to take risks to try new agricultural industry models. There are also some farmers who misunderstand that agricultural industrialization is a simple scale expansion, ignoring the technology, management, brand, market and other dimensions it actually involves. This one-sided understanding further aggravates the cognitive bias of agricultural industrialization.

2.2 Labour Shortage in Rural Areas

The shortage of labor force in rural areas is an important constraint to the development of innovative agricultural industrialization, which involves multiple social, economic and cultural factors, as well as the interaction between them.

First of all, the sustained development of China's economy has led to the acceleration of urbanization, and a large number of rural labor force has flowed to cities. The migration of rural people to cities in search of more stable and relatively higher-paying jobs has significantly reduced the rural population, especially the young and productive population, and this large-scale population movement has led to a continuous contraction of the labor supply in rural areas.

Then, the labor intensity of agricultural production is high and the economic benefits are relatively low. Compared with other industries in cities, the ratio of agricultural labor input to economic return is not attractive to farmers. Even the labor force staying in rural areas may choose to engage in non-agricultural activities, such as rural tourism, handicraft production and other industries, in order to obtain higher income.

Finally, the education and training system in rural areas does not fully match the market demand. With the updating of agricultural technology and production mode, agricultural production needs not only the traditional labor force, but also the

labor force with technical and managerial capabilities. However, the training and introduction mechanism of such labor force in rural areas is not perfect, which leads to a certain disconnection between rural labor force and the needs of agricultural industrialization.

2.3 Backward Infrastructure for Rural Industrialization Development

The backward infrastructure of rural industrialization development is also one of the key problems restricting the process of innovative agricultural industrialization from the perspective of rural revitalization.

There are significant deficiencies in rural transportation facilities. Many rural areas still rely on gravel roads, narrow bridges and limited public transport, which not only means that the connection between rural and urban areas is limited, but more importantly, it is difficult for local products and resources to enter the larger market smoothly, which affects the price and market share of agricultural products.

Water supply, power supply and information and communication facilities in rural areas are relatively backward. Although there have been improvements in these areas in recent years, there are still significant disparities compared to urban areas. For example, the speed and coverage of broadband access in rural areas are relatively low, which undoubtedly limits the development of informatization, e-commerce and distance education in rural areas.

Storage and processing facilities in rural areas are relatively scarce. This directly affects the storage, transportation and marketing of agricultural products, which results in a large number of agricultural products that cannot be properly stored or sold within a short period of time after harvest, resulting in waste.

There are also deficiencies in ecological environment management and public service facilities in rural areas. Many rural areas lack effective garbage disposal and sewage treatment facilities, resulting in increasingly serious environmental pollution problems. At the same time, there is a gap between the distribution and conditions of public service facilities such as health and education, which indirectly affects the personnel training and population structure in rural areas.

2.4 Less Investment in Industrialization Development

Under the background of the strategy of rural revitalization, the relatively small investment in the development of agricultural industrialization is also a prominent problem. Compared with other industries, agricultural industrialization often faces a shortage of start-up funds, R & D funds and operating funds, which directly affects the R & D and promotion of agricultural technology, the improvement of the quality of agricultural products and the improvement of the agricultural industry chain, and some potential agricultural projects are difficult to start or carry out to the end due to the lack of sufficient financial support. This directly affects the efficiency and effectiveness of agricultural industrialization in rural areas.

3. Development Strategies of Innovative Agricultural Industrialization from the Perspective of Rural Revitalization

3.1 Actively Promote the Concept of Industrial Development

Actively publicizing the concept of industrialization development is the premise of realizing the development of innovative agricultural industrialization under the background of rural revitalization.

Firstly, through large-scale rural revitalization forums, seminars and other platforms, agricultural experts, scholars and

representatives of successful cases from all over the country can be attracted to discuss the trends, models and cases of agricultural industrialization, thus providing an opportunity for local farmers and entrepreneurs to understand and learn. This kind of platform communication can directly present the benefits and practical experience of agricultural industrialization, and guide people to realize that this is a feasible and favorable development direction.

Secondly, we can use various media resources, such as television, radio, Internet, to produce a series of promotional films, special programs, online courses to comprehensively and systematically introduce the basic concepts, development models and successful practices of agricultural industrialization. These contents can not only help farmers and agricultural practitioners understand the specific operation methods of agricultural industrialization, but also stimulate their interest and motivation to participate in it.

Thirdly, in cooperation with agricultural departments at all levels, the concept of agricultural industrialization should be incorporated into various rural training courses and the educational content of farmers'schools, so that more farmers can systematically come into contact with this concept in their daily learning and training, thus forming a broad social consensus.

3.2 Implementation of Talent Introduction Policy

Under the background of Rural Revitalization and the development of agricultural industrialization, talent has become one of the most critical resources. The shortage of talents not only limits the ability of science and technology, management and innovation in rural areas, but also becomes a key factor^[7]restricting the sustainable development of innovative agricultural industrialization under the background of rural revitalization.

First, a clear and specific list of talent needs should be formulated. This requires an in-depth analysis of the current rural industrial structure, development direction, technical equipment and so on, so as to know exactly what types and levels of talents are needed. The formulation of the list should not only look at the current situation, but also predict the future direction of technology and market development, so as to ensure that the talents introduced can meet the needs of long-term development.

Second, we should establish a sound incentive mechanism. Including but not limited to providing competitive salary, good working environment, perfect career development opportunities, etc. Further, we can consider providing housing subsidies, preferential education for children, professional skills training and other benefits for talents to ensure that they can live and work in peace and contentment in the countryside.

Third, establish close cooperation with institutions of higher education and scientific research. This can not only directly introduce graduates and postgraduates to the countryside, but also enable students and teachers to better understand the actual situation and needs of the countryside through cooperative projects and practice, laying the foundation for future cooperation and introduction.

Fourthly, we should actively promote exchanges and cooperation with overseas rural and agricultural organizations, attract foreign agricultural experts and technical personnel to exchange and work in China's rural areas, and share their experience and knowledge.

In addition, for those already working in the countryside, we should continue to strengthen training and capacity-building to ensure that they can keep up with the development trend of technology and management, and continue to contribute to the revitalization of the countryside and the development of agricultural industrialization.

3.3 Strengthening the Construction of Industrialized Infrastructure in Rural Areas

Strengthening the construction of industrial infrastructure in rural areas is the key link to ensure the smooth development of rural revitalization and agricultural industrialization. It involves many aspects of layout and investment, and is the material basis and guarantee of rural economic transformation.

Strengthen the construction of agricultural production facilities. We should strengthen the construction of irrigation and water conservancy facilities, improve irrigation efficiency and water use efficiency, and ensure the stability of crop growth. At the same time, we should build efficient and water-saving agricultural production modes, such as drip irrigation and sprinkler irrigation. Further promote the application of agricultural mechanization and automation, improve agricultural production efficiency and reduce labor costs.

We should strengthen the construction of agricultural products processing and storage facilities. A number of deep processing parks and logistics centers for agricultural products will be built to transform primary agricultural products in rural areas into agricultural products with high added value and increase the added value of rural economy. In addition, modern storage facilities for agricultural products can ensure the quality and safety of agricultural products and provide strong support for the export of agricultural products and their entry into urban markets.

We will improve the construction of rural transportation facilities and link rural areas more closely with cities and villages. The construction and transformation of rural roads and the addition of bus lines will make the transportation of agricultural products and the travel of farmers more convenient. In addition, the coverage of digital infrastructure, such as broadband network, will connect rural areas to the tide of digital economy and promote the exchange of information between rural areas and the outside world.

Green and sustainability are also necessary directions for modern infrastructure construction. Build renewable energy facilities such as solar energy and wind energy to meet rural electricity demand and reduce carbon emissions. At the same time, we should promote the utilization of agricultural waste resources, such as the construction of rural biomass energy projects to convert agricultural waste into energy.

Pay attention to the construction of rural community service facilities. Such as cultural and entertainment centers, medical and health centers and education and training centers, to provide farmers with rich living and learning resources, improve the comprehensive quality of life in rural areas.

3.4 Strengthen Financial Support for Agricultural Industrialization

Under the background of Rural Revitalization, capital has always been the core driving force to promote the deep development of agricultural industrialization. Strengthening financial support for agricultural industrialization is undoubtedly the cornerstone^[8, 9]of ensuring its steady progress and truly realizing rural revitalization.

First, we should establish a fund for the development of characteristic agricultural products. Such funds focus on supporting agricultural products with regional characteristics and differentiated competitive advantages. Because of its uniqueness, this kind of product has a strong market demand, but it is often difficult to promote on a large scale because of the shortage of funds. By setting up such funds, it can provide strong financial support and promote its marketization process.

Two, we should encourage financial institutions to provide more preferential loan policies for agricultural industrialization. Agricultural industrialization projects can be given greater convenience in terms of loan interest rate, term and guarantee mode. At the same time, we can also set up a credit risk compensation fund for agricultural industrialization to provide a certain degree

of risk protection for financial institutions and encourage them to increase the enthusiasm of agricultural industrialization loans. Third, special bonds for agricultural industrialization can be introduced. The bond market is an important part of the capital market. The introduction of special bonds for agricultural industrialization can not only provide a long-term and stable source of funds for projects, but also provide investors with a stable investment channel with considerable returns.

4. Conclusion

As the key strategy of contemporary China's social development, the core of Rural Revitalization lies not only in material prosperity, but also in the innovation of ideas and models. The further promotion of agricultural industrialization has undoubtedly become an important part of Rural Revitalization. From the deep development of industrial integration to the attraction of talents, the improvement of infrastructure, and the strong support of funds, it has created a sustainable and healthy development blueprint for the countryside.

In the future, Rural Revitalization will go beyond its traditional framework and transform into a complex and pluralistic development model, which not only emphasizes economic growth, but also focuses on the coordinated progress of social, cultural and ecological levels. The countryside will no longer be just a place for economic production, but a platform for the exchange of knowledge, technology and culture, and a demonstration area for the combination of innovation and practice.

References

- [1] Chen Jing, Zhang Guangyuan, Bi Huangkai. Thoughts on Agricultural Industrialization under Rural Revitalization Strategy *Modern Rural Science and Technology*, 2022 (10): 13-14.
- [2] Zhang Xue, Yao Xiaoyao. Discussion on Agricultural Industrialization under the Background of Rural Revitalization Strategy [J]. *New Agriculture*, 2023(05):79-81.
- [3] Yang Xiangjun. Research on the Development of Agricultural Industrialization under the Strategy of Rural Revitalization [J]. *Modern agriculture*, 2022(04):49-51.
- [4] Zhang Xiaojun. Current Situation, Problems and Optimization Measures of Agricultural Industrialization Development in Lu'an City, Anhui Province under the Strategy of Rural Revitalization [J]. *Agricultural Engineering Technology*, 2023, 43 (04): 10-11.
- [5] Li Mingdong. Thoughts on the Development of Agricultural Industrialization [J]. *Farm Economic Management*, 2023 (06): 34-35.
- [6] Zhao Shasha, Li Xiaoya. Agricultural Industrialization Management Model and Innovative Ideas from the Perspective of Rural Revitalization [J]. *Shanxi Nongjing*, 2022 (13): 57-59.
- [7] White cloud. Research on the Transformation of Agricultural Industrialization Support Policy under the Background of Rural Revitalization [J]. *Continental bridge view*, 2022(04):84-85.
- [8] Hu Pan. Finance Helps the Development of Agricultural Industrialization in Guizhou Province. *Modern Agriculture*, 2023 (01): 5-8.
- [9] Zhang Lei, Zhang Jie. Research on the Financing Problems of Leading Enterprises in Agricultural Industrialization — Taking Shanxi Province as an Example [J]. *Business Accounting*, 2023 (14): 100-102.