Research on the Optimization Path of High-Quality Development of Rural Characteristic Industrial Parks under the Strategy of Rural Revitalization

-- Take the Crispy Melon Industrial Park in Panji District, Huainan City, Anhui Province, as an Example

Shanshan Chen*, Jinhao Liu and Xiaowen Guo

School of Economics, Anhui University of Finance and Economics, China

Abstract

During the "Thirteenth Five-Year Plan" period, China's agricultural modernization has been comprehensively promoted. In order to promote the development of rural areas, the report of the 19th National Congress proposed for the first time the implementation of the rural revitalization strategy and adhered to the priority development of agriculture and rural areas. How to solve the practical dilemma faced by the high-quality development of rural industrial parks, explore the optimization path of high-quality development of Panji Crispy Melon Industrial Park under the rural revitalization valve, so as to provide suggestions for the development of rural characteristic industries under the rural revitalization strategy and help the high-quality development of rural characteristic industrial parks. In addition, it will promote the development of characteristic industrial parks, form the source driving force of regional economic development, create an industrial chain with strong local areas, implement the "three rural areas" policy, promote the implementation of the national rural revitalization strategy, build high-quality rural characteristic industrial parks, and improve the vitality of rural economic development.

Keywords

Rural Revitalization; High-quality Development; Featured Industries.

1. Introduction

Panji District, Huainan City, Anhui Province is located in the middle reaches of the Huaihe River, which is a warm temperate semi-humid zone with abundant rainfall; Plenty of sunshine and four distinct seasons; The soil in Panji area is fertile, mainly horse liver soil, sand ginger soil, rice soil, etc., which is very suitable for the production of crisp melons. Panji pastry melon is crispy and delicious, clearing heat and relieving heat, and its fruit is rich in a variety of nutrients, which can meet the needs of the human body.

2. First, The Theoretical Analysis of High-Quality Development of Rural Industrial Parks under the Perspective of Rural Revitalization

2.1. The Theory of High-Quality Development was Proposed for the First Time

With the continuous improvement of China's economic strength, the development ideas of agricultural construction are also constantly changing. Following the footsteps of rural revitalization, the pursuit of high-quality development of agricultural industrial parks has become the general trend. The high-quality development of rural industrial parks was first proposed at the 19th Congress of the Communist Party of China in 2017, which clearly pointed

out that the high-quality development of agricultural industrial parks is the only way to agricultural modernization, and at the same time it is one of the important starting points for rural revitalization, and it is also an important strategy to promote China's transformation from an agricultural country to an agricultural power. At present, China's economic macro environment has gradually matured, and it has shifted from high-speed economic growth to the pursuit of high-quality economic development. Therefore, the implementation of new development concepts, the planning of new development patterns, and the implementation of relevant requirements for high-quality economic development are not only to follow objective economic laws, but also to be an inevitable requirement for the industrial transformation of rural industrial parks.

2.2. Theoretical Basis for High-Quality Development of Rural Industrial Parks

In the "Government Work Report" released by the central government in 2022, it is pointed out that agricultural production should be grasped as a starting point and the comprehensive revitalization of rural areas should be accelerated, especially pointing out that "poverty alleviation areas are encouraged to develop industries with their own characteristics" and "promote the development of rural industries". Focusing on the high-quality development of rural industrial parks to promote rural revitalization fully highlights that an important means to change the dilemma of rural development is industrial prosperity. At the same time, it is also an inevitable requirement to help farmers increase income and promote agricultural production. The prosperity of the industry must take the high-quality development of the park as the foothold, take improving food production and the supply of important agricultural products as the focus of work, pay attention to supply-side structural reform and effective demand-side management, and take further measures to promote the modernization of rural agriculture. In 2017, the Central Document No. 1 proposed to build a modern agricultural industrial park of "production + processing + science and technology", and the government work report also proposed to build a modern agricultural industrial park. The Ministry of Agriculture and Rural Affairs and the Ministry of Finance established a promotion and coordination mechanism, set up a working group headed by the Minister of Agriculture and Rural Affairs and the Minister of Finance, and carried out the construction of modern agricultural industrial parks in 2017. The construction of modern agricultural industrial parks is a major measure to promote agricultural supply-side structural reform and accelerate agricultural modernization, and is an important carrier for cultivating new momentum for agricultural and rural economic development and promoting the innovation of farmers' income increase mechanism.

2.3. Successful Cases of High-Quality Development of Rural Industrial Parks

2.3.1. Domestic:

Yunzhou District, Datong City, Shanxi Province, relying on the long history of local yellow flower cultivation for 600 years, has reached an area of 260,000 mu so far, with a total annual output value of more than 9 trillion yuan, becoming a pillar industry for local economic development and farmers' income increase. Over the years, the Yunzhou District Party Committee and Government have grasped the main idea of "one district, one industry and one brand" as the main idea of the development of characteristic industries in the region, maintained the spirit of perseverance, and concentrated on the development of the yellow flower industry. Due to the problem that farmers had no income before planting yellow flowers, the local government set up planting subsidies to improve the degree of organization. The local yellow flower planting area has invested heavily in the construction of water conservancy facilities to effectively solve the problem of yellow flower planting limited by natural conditions. The local government also participates in planting insurance to reduce planting risks and solve the worries of growers. Over the years, under the leadership of leading enterprises and cooperatives, the output and

quality of yellow flowers have been greatly improved, sales and prices have been guaranteed, the planting scale of yellow flowers has continued to grow, and the planting income has gradually increased. With the joint efforts of the district government and the people, the prospects of yellow flower planting are bright, and the high-quality development of rural areas has been reflected, promoting local rural revitalization and achieving common prosperity.

2.3.2. Abroad:

Australia gives full play to the role of smart agriculture and uses current modern information technology to promote the development of agricultural industrial parks. At the end of the 90s of the 20th centuries, Australia's agricultural industrial parks have gradually used computers and the Internet and other technical methods, and by 2007, Australia's modern agricultural industrial parks have realized mechanized information office, reducing the use of human labor. Since the beginning of the 21st century, the comprehensive digital era has spread all over the world, Australia has focused on the development of precision agriculture, and comprehensively promoted the wide application of advanced technologies such as big data, cloud computing, and RS in modern industrial parks related to smart farms and digital farms. The practice of the operation mode of Kirby smart farm shows the success of smart agriculture, it is one of the earliest cases of smart agriculture application in rural industrial parks in the world, farmers working in the park can use modern remote sensing technology to obtain relevant parameters of crop production, and through the evaluation and analysis of parameters, the owner to develop strategies to improve production efficiency, so as to bring more benefits to the development of the park. According to the continuous growth of smart agriculture application cases and gradually accumulated successful experience, Australian rural industrial parks have been fundamentally transformed, building broadband network hotspots in the park, promoting the large-scale implementation of digital mode management into a reality, the popularization and large-scale use of related advanced equipment, allowing farmers to obtain useful information more efficiently, and the modernization level of the park has achieved a leap and breakthrough.

3. Development Status of Panji Crispy Melon Industrial Park

3.1. Production Development

Panji District has a long history of producing pastures. Since the 80s of the last centuries, it has been cultivated in pieces, and since then, crisp melon has long become a well-known local fruit. At present, Panji melon planting area of 20,000 mu, a total of 26 melon production cooperatives and enterprises, about 3,000 growers, nearly 20,000 employees, forming a professional village and town of melon, with an annual output value of 200 million yuan. In order to promote the culture of melons, five consecutive melon planting competitions have been held since 2010. Through the festival activities, the exchange and cooperation of pastry melon practitioners were promoted, the charm of Panji pastry melon and the characteristics of Panji pastry melon products were fully displayed, the popularity of Panji crisp melon was further improved, and the rapid development of the melon industry was promoted; In addition, in order to launch the puff melon signboard, the industrial park has also carried out a variety of activities in recent years: the crisp melon culture festival, the crisp melon e-commerce competition, etc., so as to increase the exposure of the crisp melon industry in Panji District.

3.2. Industrial Development Advantages

3.2.1. Geographical Advantage

Panji District is located in the subtropical monsoon climate zone. Affected by the monsoon climate, winter, summer is long, spring and autumn are short, and the four seasons are distinct. The annual average temperature is 15.1 °C, the average sunshine hours are 2298 hours, the

average annual precipitation is 905.6 mm, and the average annual frost-free period is 215.5 days. The suitable geographical and climatic conditions provide an ideal natural foundation for the development of Panji pastry melon industry. In addition, the soil in Panji District is fertile, mainly horse liver soil, sand ginger black soil, rice soil, etc., which is very suitable for the production and planting of crisp melons.

3.2.2. Brand Advantage

In order to promote the better development of the melon industry, Panji District established the Huainan Crispy Melon Research Institute and the Huainan Crispy Melon Engineering Technology Research Center in the early stage of the development of the melon industry; In addition, Panji pastry melon has long been certified by the Ministry of Agriculture as a pollution-free production base and a pollution-free agricultural product certification; In 2013, two provincial local standards for Panji pastry melon were released and protected by national geographical indication products, and Panji District was known as the first district of China's crisp melon.

3.2.3. Policy Advantages

In recent years, Panji District of our province has vigorously responded to the call of the state, implemented the strategy of rural revitalization, actively adjusted the agricultural industrial structure, continuously cultivated and expanded the melon industry, promoted the rapid and stable development of the melon industry, and provided a strong starting point for realizing rural revitalization.

4. The Practical Dilemma Faced by the High-Quality Development of Panji Crispy Melon Industrial Park under the Rural Revitalization Valve

4.1. The Practical Dilemma Faced by the High-Quality Development of Panji Crispy Melon Industrial Park under the Rural Revitalization Valve

As one of the products protected by national geographical indications, Panji pastry melon has successively registered "Nanlong", "Tian Niu", "Jinxiang" and other crisp melon brands, but due to the late development of the melon industry, the brand awareness and brand value are generally low. In addition to the annual melon culture festival and the melon planting competition, there are few effective publicity channels for melons in Panji District. In addition, the role of activities such as the melon culture festival is time-sensitive, its influence in the market is relatively limited, and it lacks systematic and long-term operation. As a latecomer in the fruit market, the competitiveness of crisp melon is also difficult to compare with other melon fruits.

4.2. Shortcake Products Lack Innovation

In recent years, in order to better promote the development of the melon industry, researchers in the industrial park have actively developed new varieties, improved the taste of crisp melon, improved the quality of crisp melon, and pursued to occupy the maximum market share; In addition, the melon milk tea launched by the industrial park at the Crisp Melon Culture Festival is also very refreshing. However, due to the fact that melon products are limited to crisp melon fruits and milk tea, and lack of diversified innovative products, it is still unable to form a sustained high-quality state for the development of the melon industry.

4.3. The Development Model is too Traditional

The development of modern industrialization of Panji agriculture started late, the development was slow, and the development mode was relatively traditional. Panji Pastry Melon Industrial Park has developed rapidly with the strong support of the government, but because the development model of the industrial park is limited to the traditional form, the development of

the pastry melon industry has been limited to a certain extent. In addition, due to the single development model, the production capacity and output value of crisp melon have also been greatly affected.

4.4. Single Sales Channel

At present, the sales of Panji pastry melon are mainly offline sales, the channels are relatively single, and the sales scope is limited to the surrounding areas. The main sales channel is the concentrated transportation of melon growers to the surrounding markets or near the plantation park, which accounts for more than half of the total sales in the region, and a small number of melon farmers with small planting area will take advantage of the convenient transportation location to adopt the sales channels of wholesale markets and road markets. With the continuous popularization of the Internet and the widespread use of big data, the online sales model of pasture in Panji District is also promising, but a variety of factors have caused a lot of obstacles to the development of the e-commerce business of pasture: first, the lack of a perfect melon sales website; Second, there is a lack of Internet e-commerce professionals; The third is the lack of large-scale supporting e-commerce cold chain logistics distribution centers.

5. Analysis of the Optimal Path of High-Quality Development of Panji Crispmelon Industrial Park under the View Valve of Rural Revitalization

5.1. Innovate Pastry Varieties and Change Product Convergence

Meet market demand and accelerate the upgrading of pastry melon varieties. As a local characteristic agricultural product of Huainan, "Panji Crisp Melon" relies on the special climatic conditions of Huainan to achieve the special taste of Panji Crisp Melon. The consumer market of crisp melon is gradually developing towards diversification and quality, and the traditional varieties no longer meet the market requirements, it is necessary to strengthen the technical research and development of new products of crisp melon to achieve transformation and upgrading. Encourage qualified regions to introduce professional and technical talents to help develop new varieties. For example, the development of crisp melons with different sugar proportions to meet the needs of different consumer groups. Strive to create a development model of "one county, one industry" and "one village, one product". Enhance market competitiveness through product differentiation and lay a solid foundation for farmers to increase production and income.

5.2. Develop the Culture of Crisp Melons and Drive the Development of the Park

As one of the "National Geographical Indication" products in Huainan City, Panji pastry melon has a unique flavor and a long cultivation history. Deeply explore the cultural trend of the new era of Panji pastry, innovate crispy melon souvenirs, and hold pasture picking festivals and food festivals to further expand the popularity of Panji pastry. At the same time, the melon culture will empower the development of local tourism and create a unique, seasonal and melon cultural tourism industry. So that customers can "enter, stay, and take away", get close to nature, and experience the joy of picking. With melon culture as the core, the development of tourism drives the development of local parks.

5.3. The Digital Economy Empowers the Development of the Pastry Melon Industry

Expand the "digital economy" + new industry of crisp melon. Use Internet big data technology to change the traditional production mode. Take data as a new production factor, give full play

to the information value generated by data, and improve the production and operation capacity of crisp melons more accurately and effectively. Accelerate the integration and development of new factors and traditional factors, and use the multiplier effect generated by integration to optimize the industrial structure of crisp melons, rationally allocate resources, and improve the output rate of land. Use big data technology to digitally manage the growth process of crisp melons, and establish a higher quality melon industry base. Through information technology, a more scientific, efficient and healthier food economic system has been established to achieve economies of scale and help farmers increase production and income.

5.4. Extend the Industrial Structure and Create Derivative Products

Extend the industrial chain and develop product diversification. Establish local enterprises to carry out pasture food processing work. For example, in terms of food, after the crisp melon is picked, dried fruits can be made through dehydration and air-drying technology to create a series of industries, and the product image packaging can be designed and sold; Or extract some ingredients in crisp melon and use it in pharmaceutical production cosmetics (such as the cosmetic product derived from the cucumber industry - Ji Cunxi cucumber gum) and so on. While developing diversified product forms, it also creates more income for farmers, creates new jobs, and drives the employment of local people.

5.5. Rely on New Media Platforms to Unlock New Sales Models

Seize the dividends of the Internet era to promote production through sales and increase farmers' confidence. Make full use of the Internet platform to develop the "net red economy", publicize the melon brand, actively develop the online market, and develop a new model of "Internet + crisp melon". Accelerate cooperation between enterprises and farmers, establish an online Panji Crispy Melon brand flagship store, and open up online markets from Taobao, Douyin and other channels. Form a new sales model of "user-flagship store-farmer" to reduce the intermediate price cost and compress the time cost. It not only ensures product quality, but also allows users to enjoy higher quality services; At the same time, compared with the traditional sales model, it reduces the risk of information asymmetry, increases the economic income of farmers, and improves the enthusiasm of farmers.

5.6. Optimize the Logistics System and Improve Logistics Efficiency

Crispy melon products are very crispy when ripe, and they are easily damaged during transportation. The traditional multi-level market logistics model is obviously not suitable for the logistics service of crisp melons. Therefore, it is necessary to break down the logistics barriers in different regions and accelerate the exchange of information between regions. Gather crisp melon logistics services in different regions to form a common logistics service platform, establish a global, flexible and linked logistics system, and realize the interaction and efficient allocation of resources. Through multi-party coordination, the corresponding time of orders is accelerated, the damage during transportation is reduced, and the risk cost of logistics companies and farmers is reduced, and logistics efficiency is improved.

Acknowledgments

This article is funded by the National College Students Innovation and Entrepreneurship Training Program, project number:202210378046, and the ownership of the project research results belongs to Anhui University of Finance and Economics.

References

[1] Zeng Zhiyong. Problems and countermeasures of integration of e-commerce and logistics in modern agricultural industrial parks[J]. Southern Agriculture ,2022,16(16):153-155.

- [2] TANG Zhankui, LUO Xiaoqin, HUANG Xiao, YIN Canyang, Analysis of Lanping Modern Agricultural Industrial Park Model under the Background of Rural Revitalization (Kunming Survey and Design Institute, State Forestry and Grassland Administration, Kunming, Yunnan, 650031).
- [3] GUO Zhiming, DING Kunming, MA Mengjun, et al. Research on the high-quality development path of tea industry in Xianning City under the background of rural revitalization[J]. Hubei Agricultural Sciences, 2021, 60(15):188-191.
- [4] Chen Yiming, Mechanism Innovation of Digital Economy and Rural Industry Integration Development (School of Economics and Management, Southwest University, Chongqing, 400715).
- [5] GUO Junhua, LU Jingyu. Model Selection and Path for Promoting Rural Revitalization with Prosperity of Industry Journal of Northwestern University (Philosophy and Social Sciences Edition), November 2021, Vol. 51, No. 6.
- [6] WANG Wen, LV Jun, YANG Xiaowen, ZHOU Zhirou, CHANG Zhiguang. Research on construction mode and key technology of modern agricultural industrial park[J]. Chinese Journal of Agricultural Mechanization, 2020,41(12): 210-216.).
- [7] Xing Tianbao, Innovative Analysis of Fresh Product Logistics Model of E-commerce Enterprises: Modern Economic Information.
- [8] HUANG Fuhua, JIANG Xuelin. Research on influencing factors and improvement mode of logistics efficiency of fresh agricultural products[J]. Journal of Beijing Technology and Business University (Social Science Edition), 2017,32 (2): 40 49.