

# Research on the Problems and Countermeasures of the Integrated Development of Fuping Persimmon Industry

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**Abstract:** The integration of the three industries in persimmon industry, namely the organic combination of persimmon cultivation, deep processing of agricultural products, and rural tourism, is an important measure to promote the upgrading and development of agricultural industry. This integration model has great potential and advantages in improving the added value of agricultural products, increasing farmers' income, promoting local economic development, and rural revitalization. However, achieving organic integration of industries is not an easy task and requires overcoming various problems and challenges. This study aims at explore the issues and countermeasures of the three-industry integration in Fuping persimmon industry. By analyzing the current situation of the three-industry integration in the persimmon industry chain, studying the improvement and innovation of deep processing technology and facilities for agricultural products, and combining with the changes in market demand, this study proposes solutions to the existing problems.

**Keywords:** Fuping persimmon; Industrial chain; Integration.

## 1. Introduction

Industrial revitalization is an important basis for realizing rural revitalization, and the development of agricultural industry chain is the key to rural industry revitalization. With the rapid development of agricultural economy in modern society, the industrial chain plays an irreplaceable role. Problems such as the short agricultural industrial chain, the lack of connection between industries, and the lack of prominent role of important links in the industrial chain are relatively common, and these problems, to some extent, hinder the development of the competitiveness of China's agricultural economy. Therefore, the formation and development of the industrial chain have become a very important topic in the field of agricultural economic development. In recent years, the No. 1 central document of Chinese government has repeatedly mentioned the promotion of agricultural industrialization and the construction and improvement of the industrial chain. In 2015 No.1 pointed out to "extend the agricultural industry chain, improve agricultural added value". In 2016, it is required to promote the close connection of agricultural production and marketing, the deep integration of rural industries, and promote the integration of agricultural industrial chain and the promotion of the value chain. In 2017 and 2018, clear support was given for the development and extension of the agricultural industrial chain. In 2019, the construction of the whole industrial chain, and in 2021, to foster the growth of farmers. In 2022, it is proposed to "improve the quality and safety traceability system of the whole industry chain" to ensure the quality and safety of agricultural products, and we should start from the whole chain of agricultural products circulation. In 2023, No.1 mentioned the upgrading of agricultural industry chain again. It can be seen that the formation and

development of the industrial chain have become a very important topic in the field of agricultural economic development.

## 2. The Basic Conditions on the Integration of Three Industries

The integration of three industries in Fuping persimmon industry refers to the organic combination of farmland tourism, persimmon planting and deep processing of agricultural products to form a good complementary relationship and coordinated development in the agricultural industrial chain. The integration of persimmon secondary and three industries driven by intensive processing and the distinct natural tourism resources are the premise of the integration of Fuping persimmon industry. At present, Fuping persimmon industry has advantages in the development, which has created a good basic condition for the integration of the three industries.

### 2.1. Rich in Persimmon Planting Resources

Fuping area has a suitable climate and fertile soil, which is an ideal area for persimmon cultivation. Fuping persimmon planting area is wide, persimmon quality, high market recognition. This provides a stable supply of raw materials for farmland tourism and agricultural products processing. As can be seen from Table 1-1, in the past ten years, the planting area of persimmon industry in Fuping County expanded from 110000 mu in 2013 to 360,000 mu; the fruit area of persimmon also increased from 55000 tons to 180000 tons; the output of fresh persimmon increased by 5 times in ten years; the output reached 70000 tons; the output value of persimmon fruit is obvious, achieving rapid growth from 100 million to 6.5 billion.

**Table 1.** The Production Capacity of Fuping Persimmon

	Planting Area (10000 Mu)	Fruit Area (10000 Mu)	Fresh Persimmon (10000 Tons)	Persimmon Pie (10000 Tons)	Output Value (100 million Yuan)
2013	11	5.5	5.5	0.9	1.26
2014	11	5.5	5.5	0.9	1.80
2015	11	5.5	5.5	0.9	1.80
2016	11	6.0	5.0	1.0	6.50
2017	20	8.0	6.0	1.2	8.00
2018	30	9.0	14.0	3.0	20.0
2019	35	11.0	20.0	5.0	32.0
2020	36	13.0	25.0	6.0	40.0
2021	36	16.0	20.0	5.0	50.0
2022	36	18.0	28.0	7.0	65.0

## 2.2. Unique Rural Tourism Resources

Fuping is rich in tourism resources and have a unique farmland scenery and rich rural culture. Through the development of farmland tourism, the persimmon industry and tourism will be organically combined to attract tourists to visit the planting base, experience picking and taste persimmon products, and further increase the added value of the persimmon industry.

## 2.3. Good Policy Environment

Fuping local government attaches great importance to the development of persimmon industry, and promotes the upgrading and integrated development of persimmon industry through the introduction of relevant policies. Encourage agricultural products to invest in enterprises and build factories, and provide capital, technology and market support to provide a good policy environment for industrial integration.

## 2.4. Improvement of the Deep-Processing Technology of Agricultural Products

The persimmon processing technology in Fuping area is constantly innovated and improved, and a number of leading enterprises with industry knowledge and technology have emerged. By improving the processing methods and technological processes of persimmon, a variety of high value-added persimmon products are produced to meet the diverse needs of the market.

## 2.5. Changes and Upgrading of Market Demand

With the improvement of consumers' health awareness and the pursuit of the quality of agricultural products, high-quality, green and organic persimmon products are favored by more and more consumers. This provides a huge market potential for the Fuping persimmon industry, making the integration of the three industries more attractive and feasible.

Based on the above basic conditions, the integration of Fuping persimmon industry and three industries have a good prospect for development, and has favorable conditions in promoting farmers' income, promoting agricultural modernization and local economic development.

## 3. The Development Status of the Integration of the Three Industries

In the past, Fuping persimmon industry mainly focused on the planting, processing and sales of persimmon, and the lack

of deep processing of primary products led to the low added value of persimmon products. In fact, persimmon, as a multi-functional agricultural product, persimmon can also be used to make persimmon tea, persimmon vinegar, persimmon wine, persimmon cosmetics, persimmon cultural and creative products. These unexplored directions provide new development potential for the persimmon industry. With the introduction of the concept of productive integration, through continuous efforts and exploration, Fuping persimmon industry has gradually found its own suitable development model. From the previous development of single industry to the current integration of secondary industry and even the integration of three industry, Fuping persimmon industry has shown the potential of developing from a single link to the whole industrial chain. Through the organic combination of planting, processing and modern tourism, Fuping persimmon industry has realized the development mode of productive integration. The integrated development of Fuping persimmon industry benefits from the deep processing and rich natural tourism resources. The construction of planting and picking areas, standardized processing sites and complete infrastructure, the emergence of leading persimmon processing enterprises such as Dafang Tianxi and Gathering persimmon industry have emerged, laying a solid foundation for building persimmon tourism resort. At the same time, the combination of persimmon park and entertainment consumption realizes the integration of agriculture and tourism. Modern agricultural leisure and sightseeing park, Fuping persimmon Festival, persimmon style town and other characteristic industries is developing in Fuping, and the government led the persimmon tasting festival and other activities. Tourists can enjoy persimmon in Fuping, taste farmhouse meals, visit the persimmon museum, and experience the characteristic tourism of persimmon township, thus accelerating the integration of the three industries of the persimmon industry. Fuping persimmon industry has gradually realized the diversified development transformation from single persimmon processing to modern planting, processing and production and modern tourism.

## 4. The Existing Problems of Integration of Three Industries

The development situation of various industries in Fuping County is good, but it lacks close connection with the development of industrial chain, supply chain and value chain. Especially in the Fuping persimmon industry, the production, processing, sales and other links of the connection effect are not obvious, the industrial integration is mainly concentrated

between the primary and secondary industries. In addition, the number of large leading enterprises in Fuping persimmon industry is not sufficient, and the coverage area is small, resulting in the overall processing technology and equipment of persimmon industry is relatively backward, with insufficient product advantages, single market operation mode and low added value. Fuping persimmon product marketing mainly relies on agricultural professional cooperatives, but the small scale makes it difficult to promote the high-quality development of the local persimmon industry. The operating entities of agricultural products are crucial to the development of the integration of the three industries. However, most of the operators of Fuping persimmon industry are loose farmers, and the development of the operating entities is not perfect, so there is still a large room for improvement in production capacity and technical level. Although Fuping persimmon is well-known to some extent, it lacks competitive advantages in the market, so its ability to participate in the integration of the three industries needs to be improved.

#### **4.1. Lack of Industry-Wide Coordinated Development Mechanism**

Persimmon planting, processing and sales are three interdependent and complementary industrial links, which should form a close cooperation mechanism to promote the development of the industry and the improvement of competitiveness. The current problem is the lack of close coordination and cooperation between these three links. First of all, the planting link and the processing link is disconnected from each other. Farmers plant and quality according to their own understanding and conditions, and lack of understanding of the needs of processing enterprises. The processing link should be processed and processed according to the raw materials provided by planting, but due to the lack of farmers solution to the processing link, there are some incompatible problems in the processing process. Secondly, the connection between the processing link and the sales link is not close enough. The processing process often only focuses on the quantity and cost of the product, and does not take into account the demand of the market and consumer preferences. The sales link should be promoted and sold according to the market demand, but due to the lack of understanding of the processing link, the product can not be effectively positioned and promoted in the sales link.

#### **4.2. Mismatch Between Persimmon Production and Processing and Modern Technology**

Persimmon production process lacks modern technology and management means, which brings certain restrictions to the production efficiency and quality. First, in terms of technology, many persimmon growers still rely on traditional planting and management methods and lack the application of modern agricultural techniques. For example, the lack of advanced equipment and tools file to automate|files to automate|failed to automate cultivation. In addition, the control of persimmon diseases and insect pests often rely on the use of traditional pesticides, and the lack of green and sustainable control methods. Secondly, in terms of management, persimmon producers face challenges in production planning, supply chain management and marketing. The lack of modern management means leads to the insufficient scientific and reasonable production plan, and it is difficult for producers to predict the market demand and

reasonable arrangement of output. At the same time, due to the information asymmetry, the information communication between producers and sellers is not smooth, which affects the market promotion and sales of products.

#### **4.3. Insufficient Ability of Persimmon Processing and Product Innovation**

At present, there is a problem of insufficient innovation ability in the persimmon processing link, which leads to serious product homogenization, and it is difficult to meet the market demand. This has brought some challenges to the continuous development of the persimmon processing industry. First of all, the persimmon processing link lacks the innovation consciousness and the innovation ability. Many persimmon processing enterprises are too conservative in the product development and production process, relying on the traditional processing methods, and lack the development and innovation of new products. Persimmon processing products are mainly persimmon, which leads to the phenomenon of product homogenization, similar products emerge endlessly, the competitiveness declines. Secondly, persimmon production is more seasonal, generally mature in autumn, at this time the persimmon yield is the highest, the best quality. However, by the fresh persimmon is not easy to store and transport, can only be kept fresh for a certain period of time, generally can only be sold in the mature season and the nearby time. Processing enterprises will enter full production in the persimmon mature season, but in the non-mature season, unable to continue production, resulting in seasonal production. Third, due to the lack of market research and understanding of consumer demand, persimmon processing enterprises cannot accurately grasp the market trend and consumer preferences, lack of product positioning and differentiation strategy, and cannot meet the personalized needs of different consumers for persimmon products.

#### **4.4. Difficulties in the Promotion and Management of Farmland Tourism**

The combination of farmland tourism and persimmon industry is a new development mode, but the promotion and management is difficult. This combination aims at provide visitors with a unique farmland tour experience through the combination of the farmland landscape and the persimmon industry. First of all, the difficulty of promotion is one of the main problems in the combination of farmland tourism and persimmon industry. Although this development model has potential and attraction, it needs to overcome the shackles of traditional ideas. The combination of farmland tourism and persimmon industry needs to convey its unique value and charm to tourists, and create tourism products and services that attract tourists. Secondly, the management challenge is another difficult problem for the combination of farmland tourism and persimmon industry. This combination needs to coordinate the relationship between farmland landscape protection and persimmon industry production and management. Reasonable planning of farmland tourist routes, tourist reception facilities and persimmon planting areas, to ensure that tourists can visit safely and comfortably, and do not affect the normal production and operation of the persimmon industry.

#### **4.5. Lack of Financial Support from the Whole-Production Chain**

At present, the development of Fuping persimmon industry

lacks the financial support of financial institutions for the whole industry chain. This has led to a series of difficulties in scale expansion, technological innovation and market expansion. First, the lack of financial support has limited the scale expansion of the Fuping persimmon industry. As persimmon planting and processing needs a large amount of investment and long-term financial support, financial institutions' financial support for all links of the industrial chain is not sufficient, which makes it difficult for many farmers and enterprises to obtain enough funds for large-scale planting, which limits the development potential of the industry. Secondly, the lack of financial support also restricts the technological innovation of Fuping persimmon industry. The persimmon industry needs to continuously introduce advanced planting technology, processing equipment and brand promotion, which all requires huge economic investment. The lack of financial support from financial institutions for the industry leads to farmers and enterprises facing difficulties in technological innovation, unable to further develop and upgrade, which affects the competitiveness and innovation ability of the industry. In addition, due to the lack of financial support from financial institutions for the Fuping persimmon industry, farmers and enterprises are faced with some difficulties in market development, brand building and marketing promotion. This leads to limited product sales channels and lack of market competitiveness, which limits the sustainable development of the industry.

## **5. Three-Industry Integration Countermeasures**

### **5.1. Establish A Close Cooperation Mechanism**

The establishment of a close cooperation mechanism between planting, processing and sales is helpful to improve the overall efficiency and competitiveness of the industry. Only through good cooperation and cooperation can we realize resource sharing, complementary advantages and promote the healthy development of persimmon industry. First of all, vigorously promote industrial alliances or cooperatives, and share resources, information and market channels through cooperation to improve the benefits of coordinated development of the industry. Secondly, the extension of the industrial chain should be promoted to encourage farmers to participate in the processing and sales of persimmon. Farmers and processing enterprises should communicate and communicate to understand each other's needs and requirements, and effectively coordinate in the process of planting and processing. Third, processing enterprises and sellers should also strengthen cooperation, through market research and product positioning, the processing link of the products to the market, to meet consumer needs.

### **5.2. Introduce Modern Technology and Management means**

Only through continuous innovation and improvement can the persimmon industry remain competitive in the global market. By introducing the means of modern technology and management, the efficiency and quality of persimmon production can be improved, adapt to the change of market demand, and realize the sustainable development of persimmon industry. First, the automatic equipment and tools in the planting process is updated and improved, and modern

agricultural technologies, such as remote monitoring, precision fertilization and intelligent irrigation, are introduced to improve the efficiency and quality of persimmon planting and management. Secondly, promote green prevention and control technology, reduce the use of pesticides, and ensure the food safety and environmental sustainability of persimmon. At the same time, a modern supply chain management system should be established to strengthen the connection and information sharing between producers and sellers and improve the market competitiveness of products. Third, strengthen the training and guidance of agricultural technicians, provide technical support and services, and help farmers to apply modern agricultural technology.

### **5.3. Strengthen Innovation Ability and Implement Product Differentiation Strategies**

Only by continuous innovation, can we stand out in the fierce market competition. Persimmon processing link needs to strengthen the innovation ability and promote the differentiated development of products, so as to better meet the market demand and improve the competitiveness and sustainable development ability of persimmon processing industry. First of all, persimmon processing enterprises are encouraged to increase investment in research and development and carry out persimmon product innovation. Promote the cooperation between persimmon processing industry and related enterprises and research institutes, share technologies and resources, and improve product research and development and innovation capabilities. Secondly, persimmon processing enterprises can deal with the problem of suspending persimmon production by improving the preservation technology of persimmon, carrying out other seasonal products production, strengthening cooperation and market research. At the same time, the support of the government and relevant institutions is also crucial, which will help enterprises overcome the difficulties caused by the production suspension and promote the stable development of the persimmon industry. Third, in the development process, strengthen market research, understand consumer preferences, and develop innovative persimmon products in line with the market demand. At the same time, strengthen brand construction and cultural inheritance, shape the brand image of Fuping persimmon industry, and improve consumer awareness and loyalty.

### **5.4. Strengthen the Promotion and Management of Farmland Tourism**

The combination of farmland tourism and persimmon industry is a very potential development model, but it is faced with difficulties in promotion and management. By strengthening publicity and promotion and establishing scientific management, the benign interaction between farmland tourism and persimmon industry can be realized to ensure the coordinated development of farmland tourism and persimmon industry, and promote the integration of the three industries. Firstly, the planning and design of farmland tourism is strengthened to improve the facilities and service level of tourist attractions; secondly, strengthen the publicity and promotion work to enhance the popularity of farmland tourism; Thirdly, effective management mechanism should be established to ensure the coordinated operation of farmland tourism and persimmon industry.

## 5.5. Strengthen Financial Support

The lack of financial support limits the development of the whole industry chain of Fuping persimmon industry. By strengthening the support of financial institutions and the policy guidance of the government, the problems of capital shortage, technological innovation and market expansion can be solved, and the healthy development of Fuping persimmon industry can be promoted. The government, enterprises, farmers, financial institutions and other parties actively participate in promoting the integrated development of the three industries of the Fuping persimmon industry. Financial institutions can help farmers and enterprises to obtain financial support and promote the development of all links of the industrial chain by setting up special agricultural financial products, providing loans and credit guarantees. At the same time, financial institutions can also participate in the planning and construction of the persimmon industry, provide professional financial consulting and risk assessment services, and provide support for the healthy development of the industry. The government can also formulate relevant financial policies to encourage financial institutions to increase their financial support for the Fuping persimmon industry.

There are some challenges and problems in the integration of the three industries of Fuping persimmon industry. By taking appropriate measures, we are confident of promoting the integrated development of the three industries of Fuping persimmon industry, so as to promote economic prosperity and rural revitalization. However, for the industrial development, there is still a need to constantly explore and innovate to adapt to the changing market environment and

consumer demand.

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