

Exploring the Path of Finance to Promote the Development of Special Agriculture

-- The Example of Shiren Town, Baishan City, Jilin Province

Wenyang Wang, Xinyue Zhang*

Jiang Xi University of Finance and Economics, Nanchang, Jiangxi, 330000, China

** Corresponding author email: 1162515336@qq.com

Abstract: Taking the policy of rural revitalization and the strategy of "one valley, one city" in Baishan City, Jilin Province as the entry point, combining the development concept of green finance, exploring the deep integration path of rural revitalization and green finance, exploring the new mode of financial support for agriculture and farming, proposing an innovative green financial system solution integrating agricultural industry development planning, financing of special industries, agricultural risk management, "green bank" model, and "insurance + futures" capital trading mechanism from the perspective of the financial supply side, promoting the intensive and large-scale development of rural special industries, and providing a feasible and sustainable solution for green financial services to help rural revitalization.

Keywords: Green Finance, Rural revitalization, Characteristic Industry Development.

1. Policy Background

The People's Bank of China's work conference in 2021 is dedicated to the deployment of "green finance" at the key work level. The Central Bank proposed to improve the policy framework and incentive mechanism of green finance, improve policy design and planning, guide financial resources to green development areas, enhance the financial system's ability to manage risks related to climate change, improve the green financial system in rural areas, and increase the supply of green finance in rural areas through financial innovation. Financial services" is listed as important content. In order to solve the bottleneck of investment and financing in rural revitalization - the 'neck' problem of insufficient supply of financial services, key measures and opinions such as financial policy support, credit solution, market-oriented risk sharing, and compensation are proposed, highlighting the central government's efforts to solve the problem of insufficient supply of financial services and strive to provide financial services in a way suitable for rural areas. It highlights the central government's efforts to solve the problem of inadequate financial supply and to help revitalize the countryside with financial services that suit the characteristics and needs of the countryside.

Since the 21st century, the "two mountains theory" ("green water and green mountains are golden mountains") has become a basic concept that must be paid attention to in economic construction. Economic development and ecological construction are not contrary to each other but can complement and promote each other. The construction of a green ecological diversified development model can better help economic growth and rural revitalization. In order to build a green industrial system, increase structural adjustment and industrial transformation, accelerate the formation of multi-industry, diversified development, and multi-point support of green industrial pattern, Baishan City, Jilin Province, adhere to the ecological city, industrial strength, characteristics of the city, adhere to the "green water and

green mountains is the silver mountain" concept, explore the financial support of the carbon peak carbon neutral Baishan Program, high level to promote the green transformation of production and lifestyle, comprehensive construction of China's green organic valley, Changbaishan forest food and medicine city "a valley and a city".

2. Status of Development of Local Specialty Industries

2.1. Current Status of Farming Development

2.1.1. Farmers' own cattle fattening industry

Each household in rural Baishan has as few as one or two cows as many as 40 to 50 cows. The main expenses of farmers raising their own beef cattle are, on the one hand, the labor cost of stocking from May to August each year, i.e., farmers will hand their own cattle over to a person to stock in the nearby mountains in the summer, and the labor cost of stocking each cow is more than 1,000 yuan; on the other hand, the fixed expenses of vaccination at the end of each year, i.e., the expenses of vaccinating the cattle in winter each year. The main income of farmers raising their own beef cattle is the annual income from the sale of calves, the price of which ranges from several thousand to 20,000 yuan depending on the quality of the calves. The large cattle are basically not sold.

2.1.2. Government-Supported Projects

The district and town governments provided special funds for poverty alleviation in 2018, 800,000 yuan, which was invested by the higher government to local beef cattle farms, which increased about 70 cattle, and the processes of breeding, breeding, selling, slaughtering, preserving and transporting were fully responsible by the farms, and the villages did not need to dispatch labor, contribute separately, or participate in the production and sales process, and the farms were required to return 80,000 yuan every year regardless of profit. The farm is required to return 80,000 RMB every year regardless of whether it is profitable or not. The above is led by the government and the two parties have signed an agreement in

2018 for a period of 3 years (2018-2021), and it is expected that the agreement will continue to be extended this year.

2.2. Current Status of Plantation Development

2.2.1. Western Ginseng Cultivation Base

The main expenses of American ginseng are: the purchase of ginseng seeds, labor costs, shed construction costs, insurance costs, and so on. After the ginseng matures, the average revenue per mu can reach 20,000 yuan, and the mu yield of ginseng with 8 to 10 years of growth will reach 10,000 kg, and the revenue per mu will reach 3 million yuan. At present, the ginseng industry as a whole is still in the rising stage of development, but because the environment of the production area is typical of mountainous areas, the existing large area of leveled land has been used up, so further expansion is not yet considered.

2.2.2. Colorado Blue Fir Cultivation Site

Colorado blue fir has now formed several populations of blue fir such as 2-year-old, 4-year-old, and 6-year-old, and the main source of funds for planting is individuals' own funds. In this process, the village party committee transferred the uncultivated land at a price of 400 to 500 yuan per mu for planting Colorado blue fir. After the successful planting, some of the blue fir seedlings were sold to households with established cards, which solved the problem of rural land abandonment on the one hand; and supported poorer farmers to improve their income and livelihood on the other. In the process of urbanization in China, the development from urban greening to urban coloring is the trend, and Colorado blue fir leaves are mainly sky blue, accompanied by a slight turpentine fragrance, with good planting prospects. In the early stage of planting blue fir, the price of a 10cm high blue fir sapling is about 10 yuan, but the price of mature trees is high, and the market price of a 2m high blue fir is 800 yuan, and the net profit of each tree is about 300 yuan. If we plant corn and soybeans for one season a year, the net income is only 200 to 300 yuan a year, excluding the cost of tilling, plowing, sowing, fertilizing, harvesting, and other work. Although the growth cycle of the above-mentioned special agricultural industry is several years, the market price is high, the income effect is good, and the development prospect is good. However, at the same time, the technical threshold for Colorado blue fir cultivation is high, and the spending input is large. As a result of the cold wave in Jilin Province in 2018, a batch of blue fir was affected and all of them were frozen and died, with a direct loss of more than 200,000 yuan.

2.2.3. Sea buckthorn plantation

Sea buckthorn tree is a more special tree species, in the planting process the tree species is divided into male and female trees, and the planting ratio and planting spacing of male and female trees have the best ratio, sea buckthorn tree planting; produces deep processing has a high technical threshold. And at present, it is still planted according to farmers' empiricism. Rich agricultural expertise will greatly reduce the cost of trial and error. In addition, the production of sea buckthorn fruit powder, sea buckthorn wine, sea buckthorn oil, and other products requires high processing technology, and the establishment of production lines, equipment setup, and training of related production personnel in rural areas are not realistic at present, and can only be produced by means of substitute processing. Sea buckthorn saplings are grown for the first 4 years after planting, then they are fruitful from 6 to 27 years and decay after 27 years. During the fruiting period, sea buckthorn fruits are ripe but

not optimally harvested in late August and are best harvested in mid to late December when the temperature reaches below -20 degrees Celsius. During the declining period, sea buckthorn trees can be cut down directly, and their wood has some economic value. At present, the initial investment in planting sea buckthorn trees is more than 200,000 RMB, all of which is invested by individuals. The main costs of planting include: manual tending fee (on average, one to two people must work 10 to 15 days per month per 100 mu to weed, cut, and beat fruits, with a daily wage of \$120/person), manual planting fee (\$200/mu), purchase of sea buckthorn seedlings (\$5/plant for common and \$8/plant for high quality), and land contract fee (\$500/mu/year). At present, the main source of annual income is the sales of sea buckthorn tea, sea buckthorn fruit powder, and raw sea buckthorn fruit, which is about 300,000 Yuan per year. In the future, the development of the sea buckthorn industry will take extending the product chain, enriching the types of agricultural and sideline products, expanding the sales channels and establishing high-quality local brands as the main goal, and vigorously develop the deep processing agricultural and sideline products such as sea buckthorn fruit powder, sea buckthorn oil, and sea buckthorn wine, and gradually broaden the industrial development situation by using the methods of substitute processing and self-built production lines.

3. Problem Analysis

3.1. Local Product Sales Channels Need to Be Expanded

The main sales market of local products is only concentrated in the surrounding villages and towns, the market is small, most of the products are digested within the county, and the proportion of export sales is low, and there is a lack of a perfect product promotion and circulation system, so it is difficult for the characteristic agricultural products to "go out". On the other hand, the participants are generally not highly educated and do not have a good grasp of macro policies and economic situations, which leads to unclear product positioning and difficulty in highlighting their unique quality and functional advantages, thus leading to high quality and low sales and difficulty in achieving the expected level of return. On the whole, it shows the characteristics of being too far away from the main market, narrow market scope, and low consumption level of the main market. This results in most villages having great room for overall revenue improvement despite their excellent agricultural products as well as high-quality tourism resources.

3.2. Insufficient Penetration of Financial Services in Townships

Due to the limitation of education level and transportation level, most farmers are conservative in their thinking, and it is difficult for financial services to penetrate the top, and the policies of local financial institutions are not friendly to farmers. Local large-scale industrial parks such as sea buckthorn plantations and blue fir plantations are invested in and built by individual farmers instead of bank loans, and the inconvenience of financial service also limits the development of local industries. At the same time, the financial awareness of most farmers is insufficient because financial services are not deep enough and inclusive insurance is not popular enough, and factors such as high premiums and insufficient awareness of risk prevention cause farmers

usually not to buy insurance for their planting land or livestock.

4. Exploration of Paths

4.1. Innovative Green Financial System

4.1.1. Create a "green bank" model, with a view to serving as a financial engine to promote the development of green agricultural transformation.

(i) Model orientation

The "Green Bank" is a model designed to serve the sustainable development of agriculture and the "One Valley, One City" strategy by integrating the benefits of resource conservation, environmental friendliness, stable income, intensive development, and industrialized operation based on the characteristics of the staggered length of the growth cycle of local agricultural products and the upward sloping term curve of the overall market interest rate. It is a green transformation development model designed to serve the sustainable development of agriculture and the "one valley" strategy.

(ii) Implementation plan

The "Green Bank" model increases the fixed income of individual farmers who do not want to take the risk of planting new crops through the rent of land transfer, attracts social capital investment through high-yield crops, expands the scale of production, creates a collective economic environment, increases the income of local farmers who dare to innovate in planting, and drives the development of rural revitalization. Specific implementation measures are as follows.

First, examine the local land planting conditions and communicate with farmers and cooperatives to realize land transfer and land contracting.

Second, according to the local land planting conditions, we will formulate the scale of planting and the structure of the area of different crops, and plan the income and growth cycle (such as the harvesting cycle of ginseng and American ginseng).

Third, a feasibility report will be formed and open to investors, who can subscribe and invest according to their shares. Investors can choose their own investment ratio according to the different yields and growth cycles of different kinds of plants, so as to adapt to the different risk preferences of different people.

Fourth, for the arable land that has not been subscribed or invested, it will be handed over to the cooperative for self-retaining and planting, which is the normal land contracting process. For land that is subscribed or invested, it will receive investment funds, give annual dividends to investors, and pay back the promised investment returns to investors after all crops within the portfolio have been produced.

4.1.2. Design "insurance + futures" fund trading mechanism, improve financing capacity; and set aside risk reserves.

The introduction of new agricultural products expedition and research and development technology requires a lot of capital. For example, sea buckthorn originally came from the desert, and the localization of its planting technology mainly relies on the practical experience of village cadres for two generations, which costs a lot of time and money for exploration and practice; another example is the blue fir planting base, where 200 blue firs were frozen to death several years ago due to the untimely arrangement of anti-

cold measures, suffering a loss of about 200,000 yuan. In the final analysis, the lack of experts and talents due to the financial strain makes the development of the local specialty planting industry difficult. At the same time, due to the lack of funds for deep processing technology and plant construction of special agricultural products, the industrial chain is not perfect. Take sea buckthorn as an example, it is planned deep processing into sea buckthorn oil, according to the estimation, sea buckthorn oil will reach the price of two thousand dollars a catty, but the plant fee of two hundred thousand dollars; and the machine fee of two hundred thousand dollars are difficult to afford. The insurance plus futures model has unique advantages such as a small initial capital requirement, a wide coverage area of users, high efficiency of capital utilization turnover, and is suitable for scale demand due to its special capital trading mechanism. By combining local development needs, it can revitalize rural ecological assets and better guide social funds to support the help and development of special agriculture with a comprehensive focus. Agricultural products need to be planted with a sense of risk prevention, and the agricultural insurance price of some special agricultural products is high, so sufficient risk reserves must be prepared for emergencies.

4.2. Promote Supply-side Reform in Agriculture and Rural Areas

The local government should actively promote the supply-side reform of agriculture and rural areas, take government guidance and market leadership as the core strategy, strengthen and enhance local special agriculture, create a modern integrated system of agricultural promotion, production, and marketing, and promote the "three-pronged" financing chain, supply chain and value chain reconstruction and upgrading. The introduction of talent, government transitional subsidies, and policies should play a role in guiding local farmers, and it is difficult to truly promote the supply-side reform of agriculture without revitalizing the market. Shining green financial services agricultural development business card.

4.3. Strengthen Brand Awareness and Create Industrial Brands.

With the growth of disposable income, China has entered the stage of consumption upgrade. Consumers' requirements for commodity quality and services are gradually increasing, and they favor branded agricultural products more, market competition is becoming increasingly fierce, and agricultural products are entering the era of quality consumption. County down range gradually close to the sales end, production and processing of large households and even farmers, can shorten the feedback time of production to consumption, better solve the huge consumer demand and product quality between the fault problem, county agricultural product branding has become the key to promote the sustainable development of strong brand agriculture. However, brand building is the weak link in China's agricultural products industry chain. At present, the Baishan planting industry has quality agricultural products, but the problem of no brand and no sales is more serious. Most of the special industries are only sold locally, and farmers earn less income. Plants with the ability to be exported, such as American ginseng and blue fir, have a long planting cycle and lack brand packaging, resulting in low sales prices, making it difficult to develop into local special brands. The local government should accelerate the

construction of a modern agricultural branding system, focus on shaping brand characteristics, use social media, e-commerce platforms, and high-quality customer cooperation to increase exposure, form a number of regional public brands, cultivate the value-added capacity of the industry, obtain industrial brand premiums, enhance market competitiveness and the industry's ability to develop sustainably, and at the same time establish whole-process standards for origin products and safeguard quality supply with technologies such as blockchain traceability. Promote standardization and scale with branding, drive industrial upgrading in rural areas, and promote agricultural efficiency, farmers' income and rural prosperity.

4.4. Scaling up And Gaining More Land Access

To implement the rural revitalization strategy, the relationship between farmers and land must be handled well. First of all, the scale and modernization of agricultural production will bring about a large demand for supporting construction land. After land transfer, agricultural product bases with integrated planting, storage, processing, and sales services need additional construction land for warehouses, packaging and processing workshops, and sales outlets. Secondly, the development of secondary and tertiary industries such as leisure agriculture, rural tourism, and rural e-commerce will also increase the demand for construction land. All in all, in the scientific preparation of rural land, use overall planning and adhere to the premise of planning, planning control, according to local conditions, realistic, a moderate increase in the scale of rural construction land and indicators to effectively protect the demand for land, give full play to the role of land security support and maximum effectiveness.

5. Conclusion

Green development is the only way to industrial revitalization, and green finance is an important guarantee to promote the transformation and upgrading of rural industries. By creating a "green bank" model to promote agricultural transformation and development, an "insurance + futures" trading mechanism to improve the efficiency of capital allocation, and proposing a multi-functional and innovative green financial system solution to promote the intensive and large-scale development of rural special industries, it provides new ideas for the financial industry to serve the "three rural areas". It provides new ideas for the financial industry to serve the "three rural areas", has strong sustainability and replicability, and has far-reaching significance for helping farmers and rural revitalization.

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