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Research on the Innovative Path of Empowering Rural Revitalization with Characteristic Industries in Danzhai County, Guizhou

Bowen Li, Yu Xian

School of Economics, Minzu University of China, Beijing 100018, China

Abstract: Taking Danzhai County, Qiandongnan Miao and Dong Autonomous Prefecture, Guizhou Province as an example, this paper uses entropy method to explore the development of medicine and fruit characteristic industry and help rural revitalization in Danzhai County, and on this basis, discusses the innovative path of medicine and fruit characteristic industry to empower rural revitalization. Overall, at present, danzhai medicine fruit characteristic industry in the industry chain, marketing channels and talent reserve training problems, danzhai can increase policy support, strengthen the industrial chain coordination, broaden the marketing channels, strengthen brand construction, customer service, strengthen talent introduction form rural revitalization of new growth point, assigned to rural revitalization of construction.

Keywords: Entropy Value Method; Characteristic Industry; Rural Revitalization; Innovation Path.

1. Introduction

This paper focuses on Danzhai County, Qiandongnan Miao and Dong Autonomous Prefecture, Guizhou Province, In the context of rural revitalization and carbon neutrality, Based on the underforest economy of Guizhou Province, With the fruit forest interplanting of Chinese medicinal materials as the core, Discuss how to maximize the carbon sink economic value of local rich forests, grasslands, lakes, wetlands and other resources, How to promote the cultivation of traditional Chinese medicinal materials and fruits, Expand the planting area of rural cash crops in ethnic minority areas of China, At the same time, expand the industrial chain to carry out ecological deep processing of crops, Create a profit model integrating the ecological agricultural products brand, And how to help the rural revitalization in ethnic minority areas through scientific innovation, technological innovation and ecological improvement, Thus to short raise long, promote farmers to increase their income, Greatly improve the economic status quo of farmers and promote the economic construction and development of rural areas in ethnic minority areas, To achieve the dual goals of rural vitalization and carbon neutrality, The major historical mission of achieving common prosperity for all ethnic groups. This paper aims to use the advantages of the original medicine of science and technology resources, excellent cultural resources and important ecological resources, to help farmers establish a new era of rural economic development model, and will integrate the key elements of the above mode, in-depth analysis of the model in promoting the rapid development of ethnic areas while the potential problems and factors restricting the sustainable development of the future, on the basis of the optimization path is discussed and analyzed.

2. Literature Review

Industrial revitalization is the top priority of rural revitalization, which is a scientific summary and summary of the practice of rural revitalization in China. In recent years, many scholars have conducted research on rural characteristic industries, which provides a solid theoretical foundation for exploring the innovative path of characteristic industries to empower rural revitalization, accelerating the construction of a modern rural industrial system, consolidating and expanding the achievements of poverty alleviation, promoting integrated urban-rural development and comprehensive rural revitalization. At present, the academic circle has mainly done the following three related studies on the promotion of rural revitalization and development by characteristic industries in ethnic minority areas.

(1) Centering on the path optimization of characteristic industries in ethnic areas, Li Jiesong and Li Jianjiang (2021) carried out theoretical research from the high-quality development of characteristic industries, and pointed out that under the background of rural revitalization, the high-quality development of characteristic industries in ethnic areas should follow the path dependence and stimulate the endogenous power, increase revenue and reduce expenditure, solve the capital difficulties through multiple channels; improve the governance system and ensure the maximum benefit [1].

(2) The research on the development status and characteristics of characteristic industries in Guizhou province shows that the local Chinese herbal medicine industry is of considerable scale with distinctive characteristics. Wu Mingkai (2018) pointed out that Guizhou Provincial Party Committee and provincial government made use of the advantages of resources, climate and soil to take Chinese medicinal materials with special advantages as the focus of poverty alleviation in the province's agricultural industry and the leading industry of poverty alleviation and rural revitalization [2]. He Dingxiang, Deng Zhong, Zheng Jianli, etc. (2006) focused on Guizhou Xinbang Chinese medicine, exploring its influence on promoting the economic development of the mountainous areas of Guizhou, driving the increase of farmers' income and standardizing the production of Chinese medicine, scale up the base, scientific management, standardized quality and product branding construction [3]. Zhang Zhili (2022) from the development of pharmaceutical industry and drive the development of rural revitalization of feasibility, verify the traditional Chinese

medicine industry can be in rural revitalization and economic level to create a good development space, and can merge with other industries, thus the development of local rural revitalization plays a positive role [4].

(3) The academic community also has rich research on rural revitalization by using the entropy right method. Li Changliang (2022) constructed 20 indicators of different levels based on the data from 2011 to 2020, used the entropy weight method to measure and analyzed the Gini coefficient, and concluded that there are obvious regional differences in rural revitalization [5]; Yu Qian (2022) Based on the rural revitalization policy, the entropy method is used to calculate the weight of each indicator, the panel data of 31 provinces from 2013 to 2019 is selected to construct the development level measure of rural revitalization development, and the fixed effect model is used to explore the impact of financial allocation on rural revitalization indicators [6]; Gao (2022) constructed a PLES spatial classification system based on combined classification, studied the spatial pattern in 2015 and 2019, and the relationship between production space (PS), living space (LS) and ecological space (ES), and proposed the new scheme of dominant function zoning [7],for danzhai medicine fruit characteristic industry further development path provides regional planning. Habtom (2019) through the questionnaire survey, summarizes the effective experience of danzhai successful poverty: "by regional comprehensive control and development", "village-by-village poverty alleviation", "participatory poverty alleviation", "a plan, year by year", points out the clear government vision and determination, public participation, through medical financing has important contribution to rural poverty alleviation in China [8], for the benefit analysis of characteristic industry provides a scientific perspective.

Comprehensive literature at home and abroad, academic research is relatively macro, only systematically talk about the problems of local characteristic industry development, countermeasures, from the statistical significance ignored the medicine fruit characteristic industry development achievements of farmers increase production, social welfare and the specific effect of ecological environment protection, quantitative analysis of literature. In addition, the academic community pays less attention to the goal of promoting economic growth to achieve rural revitalization, the characteristic industries in ethnic areas to empower the rural revitalization, and less research into the correlation of the essence of "characteristic industries"; the neutron system of the evaluation system of rural revitalization is low, and most of the empirical data remain at the provincial level.

This paper in Guizhou miao and dong autonomous prefecture, for example, in the analysis of danzhai county medicine characteristic industry development status, based on the analysis of the effect of the characteristic industry of the local farmers, using entropy method to danzhai county medicine characteristic industry development situation, analyze the problems existing in the current development, characteristic industry can assign rural revitalization of countermeasures and Suggestions are put forward.

3. Research Methodology

3.1. Variable Selection

3.1.1. Variable Selection and Index Construction

According to the classical consumption theory and related literature, appropriate variables were selected and indicators were constructed. The data were obtained from the local statistical Yearbook of Guizhou Province from 2013 to 2021 and the database of China Economic Network.

3.1.2. Eco-Livable

Emphasizing the sustainability and environmental friendliness of rural development: an ecologically livable countryside means that the ecological environment of the region is relatively good, which helps to improve the quality of life and happiness of residents.

3.1.2.1 Input Strength of Chemical Substances

Measure the quantity and intensity of chemicals used in the agricultural production process in rural areas, and focus on the problems of environmental pollution and ecological destruction in agricultural production. By reducing the use of chemical substances and optimizing agricultural production methods, the adverse impact on the ecological environment can be reduced and sustainable development can be achieved.

3.1.2.2 Recycling and Utilization Rate of Rural Household Garbage

Reflecting the level of waste management and resource utilization in rural areas, high recycling rate means that rural areas can effectively treat and use household waste, reduce the negative impact on the environment, and promote the sustainable utilization of resources.

3.1.3. Rich in Life

To measure the income level and consumption ability of the residents in a region: a rich village means that the residents in the region have a higher income level and consumption power, and can enjoy better education, medical care, culture and other services.

3.1.3.1 Income Ratio of Urban and Rural Residents

It reflects the size of the urban-rural income gap, and pays attention to the imbalance between urban and rural development. By comparing the income differences between urban and rural residents, we can evaluate whether the balance and fair income distribution are achieved in the process of rural revitalization, and whether the gap between urban and rural development is narrowed.

3.1.3.2 Per Capita Consumption of Rural Residents

It reflects the consumption level and quality of life of rural residents, and emphasizes the improvement of their consumption demand and purchasing power. High per capita consumption means that rural residents can enjoy more goods and services and improve their quality of life.

3.1.3.3 Rural Engel Coefficient

It reflects the consumption structure and living standard of rural residents. This index is selected to understand the food expenditure of rural residents, so as to evaluate the impact of rural revitalization on the economic situation and consumption level of rural residents. The lower Engel coefficient may mean the effectiveness of rural revitalization policies, as rural residents can use more income control to choose other consumption, improve the quality of life and diversify consumption.

3.1.3.4 Per Capita Disposable Income of Rural Residents

It means the amount of income that rural residents can use for discretionary income after deducting the necessary living expenses. The selection of this index emphasizes the economic autonomy and welfare level of rural residents. High per capita disposable income means that rural residents have more economic freedom and options, which can better meet the various needs of individuals and families.

3.1.4. Local Customs and Civilization

An indicator to measure the level of rural social and cultural development in a region: a rural area with local civilization means that the residents in this area have a higher level of education, extensive information access and rich cultural and educational resources, which is conducive to improving the quality and spiritual outlook of rural residents.

3.1.4.1 Average Years of Education for the Rural Population

To measure the education level and education level of rural residents. By improving the years of education of rural residents, their comprehensive quality can be improved, the increase of employment opportunities can be promoted, and the skill structure of rural labor force can be improved, so as to promote the sustainable development of rural revitalization.

3.1.4.2 Proportion of Culture and Education Expenditure in the Total Expenditure

It indicates the proportion of cultural and educational expenditure in the total expenditure of rural residents, and measures the investment and importance of rural residents to cultural and educational undertakings. The proportion of high culture and education expenditure in the total expenditure means that rural residents invest relatively high in culture and education, and more financial resources are used for cultural activities and the acquisition of educational resources. This reflects the needs of rural residents to improve their own cultural literacy and educational level, as well as the importance attached to the cultivation of talents and knowledge inheritance.

3.1.4.3 Internet Household Entry Rate

It reflects the popularity of rural residents to access the Internet and emphasizes the role of information and communication technology in rural development. The high Internet entry rate means that rural residents can more easily access information, participate in network economy and social activities, promotes the communication and communication of rural residents, and improves their information literacy and innovation ability.

This paper constructs the rural revitalization index system of three aspects: ecological livability, rich life and rural civilization, in which each index contains the corresponding second-level index. According to the data source, the raw data were collated as described below.

Table 1. Raw data situation

Level 1 indicators	Level 2 indicators	Indicator nature	An Thuan	Bijie	Danzhai	Guiyang	Liupanshui	Qiannan	Qianxinan	Zunyi
Ecological livable	Chemical substance input strength	minimization	63840	184992	12260	66454.9	56146	90509	65422	154161
	Recycling and utilization rate of rural household garbage	maximization	96	91.4	98.3821	98	93.89	89.95	99.89	92.7
The affluence of the life	Income ratio between urban and rural residents	minimization	2.968520558	3.149170205	3.27	2.213608599	2.992665037	2.851901604	3.162647171	2.606118688
	Per capita consumption of rural residents	maximization	9888	9866	8744.3	14357	9861	12103	9844	12712
	The Engel coefficient of rural residents	minimization	0.301324601	0.268024812	0.396166387	0.241415337	0.327	0.242749731	0.247	0.24189742
	Per capita disposable income of rural residents	maximization	10896	10364	13556.7	17274.96	11043	11911	10532	13565
The degree of rural ethos and civilization	The average number of years of education for the rural population	maximization	8.26	7.71	5.06	10.76	8.38	8.55	8.37	8.81
	Internet entry rate	maximization	0.916950768	0.9154296	0.918444669	0.919736842	0.910449927	0.931871838	0.947321429	0.918832321
	The proportion of the expenditure on culture and education in the total expenditure	maximization	0.114535454	0.13102948	0126255	0.084000836	0.114	0.114764934	0.138	0.13404657

3.2. Calculation Method

1) Assuming that the data has n rows of records and m variables, the data can be represented by an n*m matrix A (n rows and m columns, i.e., the number of n rows of records and m characteristic columns)

$$X = \begin{pmatrix} x_{11} & \cdots & x_{1n} \\ \vdots & \ddots & \vdots \\ x_{m1} & \cdots & x_{mn} \end{pmatrix}$$

2) Normalization of data

xij denotes the element in row i and column j of matrix A

$$x_{ij} = \frac{x_{ij} - min(x_j))}{max(x_j) - min(x_j)))};$$

3) Calculate the weight of the ith record under the jth indicator

$$P_{ij} = \frac{x_{ij}}{\sum_1^n x_{ij}} (j = 1, 2, ..., m);$$

4) Calculate the entropy value of the jth indicator

$$e_j = -k * \sum_1^n P_{ij} * log(P_{ij}), k = 1/ln(n);$$

5) Calculate the coefficient of variation of the jth indicator

$$g_j = 1 - e_j$$

6) Calculate the weight of the jth indicator

$$W_j = \frac{g_j}{\sum_1^m g_j};$$

4. Research Results and Analysis

This paper constructs a rural revitalization index system in three aspects of ecological livability, affluent living and rural style civilization, where each index contains corresponding secondary indexes. According to the data sources, the specific calculation steps are shown below.

4.1. Normalization Process

Table 2. Normalization Process of C value

C=								
0.2986	0.6087	0.7146	0.2038	0.3871	0.0770	0.5614	0.1763	0.5655
1.0000	0.1459	0.8856	0.1999	0.1720	0	0.4649	0.1351	0.8709
0	0.8483	1.0000	0	1.0000	0.4620	0	0.2168	0.7825
0.3138	0.8099	0	1.0000	0	1.000o	1.0000	0.2519	0
0.2541	0.3964	0.7375	0.1990	0.5530	0.0982	0.5825	0	0.5555
0.4530	0	0.6042	0.5984	0.0086	0.2238	0.6123	0.5810	0.5697
0.3078	1.0000	0.8984	0.1959	0.0361	0.0243	0.5807	1.0000	1.0000
0.8215	0.2767	0.3716	0.7069	o.0031	0.4632	0.6579	0.2273	0.9268

4.2. Calculation of Specific Gravity p_{ij}

Table 3. Calculation of Specific Gravity p_{ij}

P=								
0.0866	0.1490	0.1371	o.0657	0.1792	0.0328	0.1259	0.0681	0.1073
0.2900	0.0357	0.1699	0.0644	0.0796	0	0.1042	0.0522	0.1652
0	0.2076	0.1919	0	0.4630	0.1967	0	0.0838	0.1485
0.0910	0.1982	0.0000	0.3222	0.0000	0.4258	0.2242	0.0973	0.0000
0.0737	0.0970	0.1415	0.0641	0.2560	0.0418	0.1306	0.0000	0.1054
0.1314	0	0.1159	0.1928	0.004	0.0953	0.1373	0.2245	0.1081
0.0892	0.2448	0.1724	0.0631	0.0167	0.0104	0.1302	0.3863	0.1897
0.2382	0.0677	0.0713	0.2278	0.0014	0.1972	0.1475	0.0878	0.1758

Calculate the entropy value of each index

e= 0.86810.86700 . 91770. 82960. 63230. 73080. 92240. 81170.9227

Calculate the coefficient of variation of each index

d= 0.13190.13300 . 08230. 17040. 36770. 26920. 07760. 18830.0773

Calculate the weights

w= 0.883 0. 08910. 05520. 11400. 24460. 17960. 05180. 12570.0517

Final weights obtained

Danzhai County has achieved remarkable results in rural revitalization, which is confirmed by the results of the entropy method. According to the assessment using the entropy method, Danzhai County has shown a high level of performance in primary indicators such as ecological livability, prosperous living, and civilized rural customs, as well as their secondary indicators.

In terms of ecological livability, Danzhai County has made significant progress in reducing chemical input intensity and improving the recycling rate of rural solid waste. This indicates that the county has implemented effective measures in environmental protection and resource utilization, promoting the construction and preservation of an ecologically livable environment. Danzhai County has implemented rational land use planning for its distinctive pharmaceutical and fruit industries, actively promoting land development, consolidation, and reclamation, increasing the area of effective arable land while ensuring its quantity and quality. They have also optimized the structure of cultivated land, orchards, forests, and grasslands, increased local green areas and coverage while minimized land idle and wastage. The cultivation of specialty fruits and medicinal crops directly increases rural greening, enhances urban greening levels, and addresses various issues such as agricultural ecological degradation and resource scarcity. It serves as a significant approach to building a resource-efficient and environmentally friendly society in rural areas, creating conditions for harmonious coexistence between humans and nature.

Table 4. Final weighting table

Indicators	Weights
Chemical substance input intensity	0.0883
Rural household waste recycling rate	0.0891
Per capita disposable income of rural residents	0.0552
Per capita consumption of rural residents	0.114
Engel coefficient of rural residents	0.2446
Income ratio between urban and rural residents	0.1796
Average years of schooling for rural population	0.0518
Internet access rate	0.1257
Culture and education spending as a share of total spending	0.0517

Final score obtained

Table 5. Final score

County and City	Score
Danzhai	0.1962
Guiyang	0.1626
Zunyi	0.1204
Qianxinan	0.1173
Liupanshui	0.1128
Anshun	0.1064
Qiannan	0.0989
Bijie	0.0854

Furthermore, Danzhai County's distinctive pharmaceutical and fruit industry fully utilizes the local historical features and ecological resources. It integrates scientific crop rotation with rural revitalization, emphasizing technological support and accelerating the transformation and upgrading of agricultural product processing. The goal is to fully explore the multifunctionality of agriculture, extend the agricultural industry chain, and develop a significant amount of leisure and tourism industries centered around the distinctive pharmaceutical and fruit industry, achieving consecutive integration and development in agriculture. Through such development, the distinctive pharmaceutical and fruit industry in Danzhai County has created a development pattern of being a "demonstration zone for urban characteristic medicinal and health agriculture and rural tourism" and a "radiation station for distinctive pharmaceutical and fruit products." It is understood that the subsequent development of the distinctive pharmaceutical and fruit industry in Danzhai County will further implement activities to upgrade leisure agriculture. By relying on the cultivation of pharmaceutical and fruit crops, it will vigorously promote the development of leisure agriculture. For example, by leveraging vegetable

bases to establish customized gardens combining "fruits + medicinal herbs" and developing leisure agriculture related to customized experiences of characteristic products, they aim to create comprehensive demonstration sites for health-oriented agricultural tourism with themes of "observation, picking, and production." This will lead to an increase in income from leisure agriculture.

In terms of prosperous living, Danzhai County has shown satisfactory performance in indicators such as the income ratio between urban and rural residents, per capita consumption of rural residents, Engel's coefficient of rural residents, and per capita disposable income of rural residents. This demonstrates significant achievements in improving residents' economic conditions and raising their living standards. After the introduction of the distinctive pharmaceutical and fruit industry in Danzhai County, it not only promotes the development of the broccoli planting industry but also guides the local e-commerce sector onto the right track. Leveraging the inherent advantages of a large-scale pharmaceutical and fruit crop rotation planting base and the production model of "cooperatives + expert teams + production bases + sales networks," the industry increases the income of farmers engaged in fruit and medicinal herb cultivation. Furthermore, the industry provides job opportunities for farmers, who participate in the processing and sales stages. This not only offers more employment opportunities for local farmers but also ensures sufficient income during agricultural downtime. The local government, considering the practical situation, adheres to the overall requirements of "precision policy implementation, public participation, incentives and subsidies, enterprise-driven, technological support, and insurance coverage." They focus on the development of "one village, one product" and "one township, one characteristic" industries, while improving the interest linkage mechanism between new agricultural operating entities and impoverished households. The government has formulated encouraging policies and established incentive standards for fruit and medicinal crop rotation planting projects. The project not only provides income-generating opportunities for farmers but also addresses local employment challenges. Moreover, each village adopts a project-centered development model, where the established bases include scientific education, large-scale vegetable production, sightseeing tourism, leisure vacations, and practical expansion. Villagers participate by investing their land in the project and engaging in its construction through employment. This model provides employment for surplus rural labor and allows villagers to directly receive land dividends. Villagers become shareholders in the project and receive annual dividends, realizing the value appreciation of collective economy.

In terms of civilized rural customs, Danzhai County has made positive efforts in indicators such as the average years of education among rural residents, household internet penetration rate, and the proportion of cultural and educational expenditures in total expenditures. This reflects the county's emphasis on cultural and educational development, injecting a civilized force into rural revitalization. Relevant departments in the area invite agricultural experts to conduct various training programs, empowering and equipping the main entities involved in the distinctive pharmaceutical and fruit industry. The project makes full use of modern information technology to establish an interactive platform for nurturing local talents in rural areas. It strengthens the exchange and interaction of training information, resources, content, and models. By fostering interest in learning and developing intrinsic motivation, it stimulates the lifelong learning desire of farmers, enabling them to connect their current learning forms with their own experiences and tapping into their inherent learning needs. Various training methods are employed, including in-depth lectures on theoretical knowledge, practical skill training, online assistance for addressing difficulties, on-site observation of internships and practical training, online live broadcasts of foundational content, and guidance for employment and entrepreneurship. These flexible and diverse forms of cultivation truly enhance farmers' scientific knowledge and labor skills. Emphasis is placed on the practicality and effectiveness of the learning content, ensuring that the acquired knowledge is applicable and well-utilized. This promotes the improvement of agricultural productivity, modern agricultural development, increased agricultural income, and ultimately contributes to a virtuous cycle where farmers' income levels and investment in education and training mutually reinforce each other.

The distinctive pharmaceutical and fruit industry in Danzhai County has organized professional technical teams to conduct research and demonstration of key technologies for various crops suitable for cultivation in the county. It provides production standardization technology for the experimental demonstration base of Guizhou's characteristic industries, further enriches the variety of characteristic industry products, defines the quality grades of fruits and medicinal materials, and helps the distinctive pharmaceutical and fruit industry in Danzhai County stabilize its unique path. In the future, leveraging the platform of the demonstration base, the local area will address talent and technological gaps, reaching a new level in product upgrading and marketing. Additionally, the industry has also promoted the development of supporting infrastructure projects for related industries. For example, the County Agriculture and Rural Bureau and the "D Ball Village" Taijiang Rural Revitalization Service Center have conducted in-depth investigations into the planning, design, preliminary procedures, and construction of infrastructure projects, providing important assistance for the smooth implementation and effectiveness of agricultural infrastructure construction.

In summary, the pharmaceutical and fruit intercropping model in Danzhai County has achieved great success. The local area has adopted an adaptive and autonomous approach, focusing on short-term benefits while considering long-term sustainability, achieving the goal of "using gardens to support fields." It adheres to the concept of healthy and sustainable development, utilizing the principle of vertical spatial distribution through three-dimensional and composite populations. It actively explores new models for intercropping agriculture, effectively improving land utilization and productivity per unit area. This model is a good approach for developing characteristic agriculture and increasing people's income, as well as a necessary requirement for transforming characteristic agriculture from a two-dimensional to a three-dimensional form and promoting high-yield and efficient cultivation. The intercropping of fruit trees and medicinal herbs makes full use of local environmental resources and applies the principles of natural bionics and ecological economics. By complementing tall fruit trees with low-growing medicinal herbs, it forms a planting ecosystem community with multiple biological

populations, hierarchical structures, functions, and benefits, thereby increasing light energy and land utilization and improving farmers' economic benefits. The intercropping of fruit trees and medicinal herbs has generated income, broadening people's sources of additional income and effectively linking poverty alleviation efforts with rural revitalization, ensuring the simultaneous development of the fruit and medicinal industries and increasing income for farmers.

5. Discussion and Suggestions

In recent years, the Chinese government has proposed a rural revitalization strategy to encourage local communities to explore local resources and develop special industries to promote rural economic development. Denzhai County, as a county in Guizhou Province's Qiandongnan Prefecture, with its unique geographical environment and cultural background, has actively explored the development of medicinal fruit specialty industries and has achieved some results in this field. However, in the process of practice, some problems are still encountered, which require us to think carefully and propose corresponding solutions.

5.1. Increase Policy Support

At present, China's rural labor force has moved out in large numbers, and the production of Chinese herbal medicine is difficult to recover on a large scale in the short term. Considering this situation, for the medicine and fruit industry with great development potential in Danzhai County, Guizhou Province, the government can encourage enterprises, cooperatives and other industrial entities to participate in the development of the special industry, such as providing financial subsidies and tax concessions.

In 2012, the General Office of the State Council issued "Opinions on Accelerating the Development of Forest Economy", actively encouraging all regions to develop forest economy with forest planting, forest farming, related products collection and processing and forest landscape utilization as the main contents according to local conditions. The combination of Chinese medicine manufacturing industry and forest economy provides valuable new ideas for innovative agricultural development model. Local authorities can meet the idle rural land policy and the policy of returning farmland to forest, provide more policy support based on the characteristics of local growers, cooperative companies and other industrial subjects, strengthen the construction of good seed breeding bases and standardized planting and breeding bases, promote the planting and breeding technology of Chinese herbal medicine, cultivate business subjects, promote the linkage of agricultural enterprises, guide shareholding cooperation, combine the resources of ethnic areas, social enterprise resources and talent resources In order to combine the resources of ethnic areas, social enterprises and human resources, and to create a special industrial development project for rural revitalization with guaranteed profitability and deeper resource development.

5.2. Strengthen Industry Chain Coordination

Various links in the medicine and fruit industry chain need to coordinate with each other, and it is suggested that the relevant agencies should establish a communication mechanism through information technology and big data to improve the response speed of the industry on the basis of ensuring the stability of the current industry chain. As far as the current market is concerned, the market prospect of Chinese herbs, fruits and ecological processed products is very good and has a good reputation in the market; while the planting model combining fruit and wood planting with medicinal herbs has a strong competitiveness and a very broad development prospect, the local market should still make some improvements in all aspects of the complete industrial chain. In terms of planting, the local area can establish a digital comprehensive information system, and use the information traceability system developed by Internet intelligent control and big data analysis technology to systematically manage the quality of planting, processing and storage, and monitor the whole production operation in real time, so as to build a more transparent communication mode for the lower end of the industry chain; in terms of product delivery, the relevant departments should take the Chinese herbal medicine industry chain as the core, and through technology integration In terms of product delivery, the relevant departments should take the Chinese herbal medicine industry chain as the core and build a spatial layout of "one belt, two gardens and three centers" through scientific and technological integration, collection of main bodies and industrial clustering, and coordinate the layout of production, processing, logistics, R&D, demonstration and service functions in the park to extend the industry chain and enhance the value chain; and vigorously promote the application of information technology to establish an efficient communication and collaboration mechanism among various links in the industry chain and improve the efficiency and responsiveness of the industry chain. The application of information technology will be vigorously promoted to establish an efficient communication and coordination mechanism among all links in the industrial chain, improve the efficiency and response speed of the industrial chain, and achieve the purpose of coordination and efficiency of the industrial chain.

5.3. Broaden Marketing Channels

Establish diversified sales channels, such as online e-commerce, offline physical stores, exhibitions and sales fairs, to meet the needs of different consumers.

With the advent of the information age and the popularity of big data, e-commerce sales are bound to become the mainstream of future sales models. Therefore, we suggest popularizing e-commerce sales in the local area. The state and government actively support and help local farmers or companies and enterprises to establish online stores and assist in promotion so that merchants will not worry about product stagnation and market stagnation due to the epidemic, and customers can have better access to medicinal fruit products compared to before.

The industry as a whole should make use of the publicity methods it possesses today to tailor a set of product publicity programs to expand the pre-influence of its products. At the same time, the advertising theme should be clearly defined, and various means of advertising should be planned to further expand the market influence and visibility of the enterprise. With the strategy of "Internet + government + company + team cooperatives (farmers) + orders", use the Internet platform to carry out online (e-commerce platform) and offline (physical stores) sales model.

The industry should make individual efforts within the industry to promote product marketing. In terms of cooperation with professional e-commerce platforms, we

suggest building online sales channels by relying on group purchasing platforms such as live-streaming with goods and micro store preferences to realize dual sales online and offline, greatly expanding sales channels and helping rural revitalization with agricultural e-commerce. In terms of cooperation with the digital platform of rural industry, most of the products are acquired by the supply and marketing agencies due to the small production, single product and high logistics constraints, Therefore, local farmers should increase the cooperation with the digital platform of rural industries such as "Nongjing Cloud" platform, "Qiancai.com" and "Guinong.com", continue to build digital agricultural sales platform, promote the sales process of local agricultural products, and promote the further development of the industry. In the construction of enterprise e-commerce platform, we suggest that the county enterprises according to the actual industrial status to create local live e-commerce team and belong to the local live e-commerce talent, in this link enterprises should pay more attention to the company's image, improve product quality to ensure store reputation, the government should also do a good job to push the hand most used, do their best to assist the development of enterprises and pull the local economy.

5.4. Strengthen Brand Building

To cope with the brand building problem of the medicinal fruit characteristic industry in Danzhai County, it can be analyzed from two aspects: expanding the circle of existing brands and creating future brands. To cope with the problem of expanding the circle of existing brands, the state and the government should promote the visualization of consumer demand in the medicinal fruit industry, encourage the construction of medicinal fruit brands in Guizhou Province, financial institutions to fully invest and finance, merchants to pay attention to consumer demand and respond positively, accelerate product innovation, constantly create new products that consumers are willing to accept and enjoy, and strive to build brands. At the same time, the service quality system should be continuously improved to create a first-class service level against the international first-class brands. After the successful construction of the brand, merchants should optimize the brand design, increase publicity efforts, create a characteristic brand, and form a well-known trademark of Guizhou Province's medicine and fruit industry.

In terms of building future brands, we suggest strengthening the construction of the local medicinal fruit industry from three aspects: channels, products and enterprises respectively. The branding of the channel can be used in the form of sub-assembly, labeling, branded packaging and other forms of clear branding of medicinal fruits on the ground, as its industry performance for branded chain stores on the ground, then it can realize branded chain store operations through high-quality preferential selection, and branded integrated service provision as the guide to build a new cognition for consumers to buy Chinese herbs and fruits. The branding of products should be based on product characteristics. Currently, all fruits and herbs in China emphasize the branding of categories and origins more than the branding of the products themselves, therefore, it is possible to gradually expand the company's business scope during the stable development period, enrich the category and origin labels, trigger the "broken window effect" of innovation, and then eventually form the Guizhou characteristic medicine and fruit brand. Finally, the branding of enterprises can make good use of the leading enterprises, play the leading role, and then stimulate the vitality of small and medium-sized enterprises; after expanding the brand influence of each volume of enterprises, a supply chain management system should be formed for the direct supply of processed products at the origin, solving the control of the whole industry chain from planting, picking, logistics to the terminal sale, and truly achieving fruit selection, origin traceability and other powerful protection.

5.5. Good Customer Service

Through the promotion of consumer experience, good reception, consultation and after-sales service, to enhance consumer awareness and trust in the specialty industry of medicine and fruit, which is conducive to increasing the sales channels and sales volume of the specialty industry of medicine and fruit. Good after-sales service will also help customers to repurchase and promote among their friends and relatives to a very large extent, thus forming a "snowball" effect of industrial benefits. Therefore, we recommend manufacturers to establish a strong customer service department, hire and train their own service personnel, and assign them to each branch, and provide various customer services, such as: customer reception and customer visits, credit services, consulting services, quality "three packages" services and technical training services. Adequate consultation is also necessary, merchants try to avoid shirking responsibility, based on good market research to clarify the consumer portrait, but also the introduction of ODR consultation mode, in the small number of transactions through video, e-mail information exchange, fully ensure the symmetry of information. Merchants should have a good attitude in the face of customer requests for returns, seriously summarize mistakes and timely reflect on production quality, and transform the current inefficient and costly after-sales model to a multi-level and convenient dispute resolution mechanism to enhance customer satisfaction and loyalty.

5.6. Strengthen the Introduction of Talents

Local institutions can improve the professional quality of talents and attract them to the special industry by offering professional courses and generous remuneration, thus improving the overall technical level and competitiveness of the special industry of medicine and fruits. Specifically, the relevant institutions can rely on the agricultural laboratories of universities and agricultural experts for professional guidance, and introduce senior agronomists, engineers, herbalists and professionals engaged in the production and research of precious herbs from all over the country to conduct professional courses in local schools or institutions for cultivating good seeds, raising forests, controlling diseases and insects, harvesting and processing, grading and authenticity identification, etc. of medicinal fruit sets. In order to improve the development and competitiveness of the medicinal fruit specialty industry in Danzhai County, Guizhou Province, and achieve rural revitalization.

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