A Comparative Study on Innovation Driven Development Model of Pastoral Complex in the Zhujiang-Xijiang Economic Belt

-- Evidence from 7 Counties, 26 Villages and 5 Cities in Guangdong and Guangxi Provinces in China

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Abstract

This paper takes the pastoral complex in 7 counties, 26 villages and 5 cities in the Zhujiang-Xijiang Economic Belt as the case investigation object, and compares the development status of pastoral complex in 7 counties, 26 villages and 5 cities in Guangdong and Guangxi provinces in China, as well as their similarities and differences. By means of field investigation, this paper compares and studies the overall planning, development mode and operation mode of rural complexes in 7 counties, 26 villages and 5 cities in the Zhujiang-Xijiang Economic Belt, and finds out the driving force and engine that can drive the innovation and development of the region, so as to help explore the new mode of innovation driving regional economic growth and the new path of "urban-rural integration", and enrich the existing research content of pastoral complex.

Keywords

Pastoral Complex; Innovation Driven; Rural Vitalization; Zhujiang-Xijiang Economic Belt; Industrial Integration.

1. Introduction

The gradual development of Chinese ecological and environmental protection puts forward higher "qualitative" requirements for the development mode of primary and secondary industries. Under this environment, agriculture not only undertakes the function of ecological protection, but also undertakes the function of increasing farmers' income and agricultural development. Under such a macro background, pastoral complex came into being. "Document NO.1 of the Central Government in China" for 2017 first proposed the new concept of "pastoral complex". Since then, the construction of pastoral complex has risen to a national strategy. Subsequently, on June 5, 2017, the Ministry of finance of China issued the notice on carrying out the pilot work of rural complex construction (CAI BAN [2017] No. 29). Based on rural geography and aiming at achieving the coordinated development of rural economy and ecological environment, the pastoral complex emphasizes the comprehensive development of rural resources, integrates various development forms such as circular agriculture, creative agriculture and military experience, and forms a new business form integrating primary, secondary and tertiary industries. The organic combination of rural landscape and other resources with leisure tourism not only retains the characteristics of local agricultural culture and local customs, but also makes full use of natural landscape and natural resources. At the same time, it can also become a growth pole to promote the development of rural economy. Through comprehensive agricultural development, comprehensive rural reform, transfer payment and other channels, the pastoral complex will carry out pilot demonstration in many provinces across the country.

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In theory, at present, a large number of scholars around the world are actively committed to the research of industrial integration and constantly follow up the integration and development process of agriculture and secondary and tertiary industries. The majority of scholars have conducted a lot of research and case analysis on the concept, theoretical basis, operation mode and production effect of rural complex, and achieved some results. In view of the accelerated pace of China's urban-rural integration, the accelerated integration of primary, secondary and tertiary industries, and the current situation that agricultural and rural development is in a new stage of transformation, upgrading and comprehensive innovation, the construction of pastoral complex conforms to the trend of agricultural and rural development and reflects the internal and external objective requirements of agricultural and rural development. The Chinese government has issued relevant policies to encourage local governments to develop the pastoral complex model in rural areas. Through case comparison and various basic investigation methods, this paper focuses on the current situation and problems of the pilot rural complex in 7 counties, 26 villages and 5 cities of the Zhujiang-Xijiang Economic Belt, and looks for the innovation driving force of local industrial development. Comprehensively analyzing the influencing factors in the operation of rural complex and exploring the methods to solve the existing problems have important theoretical significance for agriculture and rural areas to get rid of the difficulties of transformation and development and promote the strategy of Rural Revitalization.

In practice, the pilot construction of rural complex in the Zhujiang-Xijiang Economic Belt has been supported by relevant policies of local government departments and has been developed to a certain extent. Due to the different construction emphases and location environment of pastoral complex, the development status of each region also presents different degrees of differences. By understanding the development background, mode and relevant innovative ideas and planning mechanism of the pastoral complex in 7 counties, 26 villages and 5 cities of the Zhujiang-Xijiang Economic Belt, analyzing the current development status, exploring its existing problems and discussing the corresponding countermeasures and suggestions, it can promote the sustainable and healthy development of the pastoral complex in the Zhujiang-Xijiang Economic Belt to a certain extent. At the same time, comparing the development status of pastoral complexes in various regions and finding out the innovative driving factors to promote rural economic growth can provide important experience for rural areas with development difficulties throughout the country, and have certain practical and practical significance for all localities to seize the opportunity to develop pastoral complexes according to local conditions and bring greater economic benefits.

2. Literature Review

China's research on pastoral complexes mostly focuses on after 2017. Over the past two years, with the strong support of China's policies and funds, rural complexes have gradually developed and taken shape. Chinese scholars have also conducted multi case comparative studies on representative rural complexes in various regions of the country from the following four aspects. First, the concept identification of rural complex: as for the essential attribute of rural complex, Pang Wei believes that the rural nature presented by rural complex is its commonness, locality is its individuality, and creativity is its means [1]. Lu Yang, a Chinese scholar, pointed out that pastoral complex is a new platform for the implementation of China's Rural Revitalization Strategy, which is based on the supply side structural reform of rural areas and the development of new industries, combined with the institutional reform of rural property rights, to truly realize the modernization and urbanization of Chinese villages [2]. Second, the development characteristics of pastoral complex: Chinese scholar Bai Chunming emphasizes that pastoral complex has the characteristics of "new economic organization mode"

of various business forms, highlighting the basic characteristics of "three simultaneous" of rural production, life and ecology based on ecology; Take industry as the core, emphasize the "integration of three industries", and take tourism as the engine to create a "Trinity" development model of agriculture, culture and tourism; With rural areas as the carrier, local culture as the soul, health as the belief and market-oriented, build an intelligent and intensive large agricultural industrial complex [3]. Third, the development model and planning path of pastoral complex: Chinese scholars Zhang Xueyong and others closely fit in with the "three rural" issues, and explore the "three living spaces" ecological development model suitable for the development of China's rural areas, "agriculture + park" industrial development model, "agricultural tourism + cultural tourism" tourism development model and the village development model of "from comfortable living to livable", And ensure the implementation of rural complex planning from two aspects of land integration and land use index development [4]. Fourth, there are still problems in the pastoral complex: according to the overall analysis of Chinese scholars Pang Wei and Bai Kai, the pastoral complex in various regions is in the stage of continuous exploration, so there are widespread phenomena such as the occupation of social capital on rural capital and the squeeze on Farmers' rights and interests, the lack of internal kinetic energy of the industry, the lack of supply of socialized services, the lack of development characteristics, homogenization and so on [5].

The term "pastoral complex" was first put forward by Chinese experts and scholars. As early as the 1950s and 1960s, the rural economic development of developed countries has begun to gradually transition from traditional agriculture to modern agriculture. A large number of scholars around the world have studied the important role played by the natural environment in leisure farms: clarkej, a scholar of United Kingdom, has shown that the pastoral complex is an ecological organic combination formed by integrating green development concepts such as low-carbon environmental protection and circular sustainability [6]; Brazilian scholar Gilmar Arruda found that the destinations of "vacation tourism" include beaches, villages, nature reserves, etc., which are derived from some forms of perception or natural expression of the ecological environment to attract tourists to these areas, that is, the relationship between tourism and nature [7]; Besides, a scholar of the United Kingdom, believes that combining the advantages of urban life with a beautiful rural environment is an ideal garden city, indicating that environmental protection plays an important role in the development of leisure agriculture [8]. As early as the 1990s, a large number of scholars put forward the specific idea of combining tourism, leisure and entertainment with farms: Chinese scholar Liu y believes that the combination of rural cultural industry and rural tourism industry can further consolidate the development trend of tourism industry and cultural industry itself and promote the integrated development of local industries [9]; Pulinam, dettoridg and other scholars from Italy mentioned that rural tourism is "all tourist activities carried out in rural areas" [10].

3. Materials and Methods

By consulting relevant documents and understanding the development of urban pastoral complexes in the Zhujiang-Xijiang Economic Belt, combined with the research direction of the subject, the project finally selects the "Renshan" pastoral complex in Yunfu City, Guangdong Province, "Yunan hongxigu" pastoral complex in Yunfu City, Guangdong Province, the "orange town in Sihui City" pastoral complex in Zhaoqing City, Guangdong Province The "Surabaya colorful" pastoral complex in Baise, Guangxi, the "Shanshui Nonggang" pastoral complex in Chongzuo, Guangxi, the "Shanshui sweet garden" pastoral complex in Chongzuo, Guangxi and the "beautiful south" pastoral complex in Nanning are the objects of case comparison and investigation. The selected cases are representative and typical. The case selection criteria are divided into two points: (1) the rural complex with high development level and remarkable

innovation driving effect in the Zhujiang-Xijiang Economic Belt. (2) The Zhujiang-Xijiang Economic Belt is an idyllic complex with incomplete development and unclear innovation driving effect. All the selected areas have the effect and restriction of innovation driving. The development model of pastoral complex is still in the experimental stage, with immature development and great development potential, which has high research value. Through the analysis and Research on the theory and field of each complex, in order to summarize the development mode of rural complex in each region and put forward constructive suggestions.

4. Theoretical Background and Framework

(1)Construction of analytical framework for innovation driven development of the Zhujiang-Xijiang Economic Belt pastoral complex

According to the research objectives of this paper, based on the evaluation of the operation effectiveness of the innovation driven mode of rural complexes around the country, we will further summarize and compare and analyze the root causes or key influencing factors behind the effectiveness. Theoretically analyze the potential influencing factors of the innovation and development of local complexes. Based on the successful experience of rural complexes in various places, this project analyzes the industrial operation system of multi subject linkage and the relationship between multi subjects, analyzes each complex through the collection of early literature and data, field investigation and interview, and analyzes the effectiveness and potential influencing factors of different location advantages, development and operation modes, Provide theoretical guidance and suggestions for the operation effect, key influencing factors and existing problems of the follow-up industrial poverty alleviation model.

(2) Analysis on potential influencing factors of innovation driven development of the Zhujiang-Xijiang Economic Belt pastoral complex

The first is the regional resource endowment. According to the theory of comparative advantage, the areas developing pastoral complexes are generally poor and the local resources are not fully developed. We can give full play to their resource endowment advantages, make full use of local natural resources and environmental advantages, and take tourism, agriculture and other industries as the leading industries to drive the local poverty alleviation and local economic development. "Beautiful south", "landscape sweet garden" and other complexes have brought into play the advantages of local environment and resources and achieved remarkable results. The second is the ability endowment of grass-roots organizations. According to the needs of theoretical analysis and practical research, the capacity endowment of grass-roots organizations in this project includes industrial planning ability, resource utilization ability, investment attraction ability, policy utilization ability, innovation ability of industrial development, etc. According to the analysis in the analysis framework of the innovation driven development of the Zhujiang-Xijiang Economic Belt pastoral complex, the development of core industries, supporting industries and derivative industries is mutually promoting. Whether a new bright spot can be found in the development and operation of the industry has a potentially important impact on the development effectiveness of the complex.

A benign pastoral complex consists of five parts: landscape attraction area, leisure gathering area, agricultural production area, residential development area and community supporting network. The primary, secondary and tertiary industries interact with each other. Through the mutual penetration and integration of various industries, we can effectively organically combine leisure and entertainment, health and vacation, culture and art, agricultural technology, agricultural and sideline products, agricultural activities and other activities, and expand the original industrial chain of R & amp; D, production, processing and sales of modern agriculture, Make the traditional agriculture with single function and processed agricultural

products become the carrier of modern leisure products, and give play to the multiplier effect of industrial value.

Since "Document NO.1 of the Central Government in China" for 2017 was first written, the Chinese ministries and commissions have issued a series of policies and measures to support the construction of the rural complex. In recent years, in order to promote rural revitalization, all localities have carried out the construction of pastoral complexes according to local conditions in combination with the national support policies and construction contents, creating a good policy environment for local governments to explore new models of rural economic and social development.

5. Rural Complex Innovation Driven Development Policy and Overall Results of the Zhujiang-Xijiang Economic Belt

(1) Policy driven development of the rural complex

In May 2021, the promulgation of the notice on Further Doing a good job in the pilot work of national rural complex construction is not only of great help to the pilot work of rural complex construction carried out everywhere, but also shows once again that rural complex, as a development model, is one of the important implementation paths for the implementation of Rural Revitalization Strategy in the new era. Focusing on the key tasks and financial support, the document defines the future development objectives of the pastoral complex. We should adhere to agriculture-oriented, market operation, increasing agricultural income, exploration and innovation.

(2) The achievements of innovation driven development of the Zhujiang-Xijiang Economic Belt rural complex

Pastoral complexes have achieved good results all over the country, and all localities have carried out innovative and modular construction according to the advantages of local resources. The construction of the Zhujiang-Xijiang Economic Belt rural complex is slower than the first batch of rural complexes in China. However, with the large-scale promotion of rural complex in the country, the rural complex of the Zhujiang-Xijiang Economic Belt is also gradually exploring its own local characteristic effect. At present, the development of "beautiful south" rural complex in Nanning is the most valuable reference. The construction experience of "beautiful south" has also played an exemplary leading role for the Zhujiang-Xijiang Economic Belt rural complex. Therefore, rural complexes in other places have also learned from "beautiful south". At present, most of the rural complexes of the Zhujiang-Xijiang Economic Belt are steadily constructed according to the planning objectives, and are also constantly exploring innovative development models in combination with the specific local development conditions.

(3) Division of innovation driven development mode of the Zhujiang-Xijiang Economic Belt pastoral complex and its reasons

Through field investigation and interview, case study and literature analysis combined with network data, according to the selected cases, the innovation driven development mode of pastoral complex can be divided into "modern agriculture + pastoral community", "rural e-commerce + science education", "resource advantage + agricultural experience", "ecological health + rural cultural tourism" and "leisure vacation + landscape agriculture". The specific reasons include three aspects:

First, the ultimate goal of the construction of rural complex is to build a modern rural community with prosperous industry, livable ecology and rich life. Only by reflecting innovation in the development process of rural complex can we promote the sustainable and high-quality development of rural complex. Therefore, rural complex should strengthen its innovative development, Innovative breakthroughs in its development model are essential.

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Second, combined with the field investigation and analysis, in the selected case of rural complex, each rural complex is developing well, continuously and stably. Each rural complex has its innovative model, which is worthy of reference. The rural complexes in the Zhujiang-Xijiang Economic Belt area have created an innovative development model according to the local construction planning and relying on their local outstanding advantages such as ecological environment, folk culture, tourism resources and agricultural base.

Third, facing the development of rural complex in the future, in the pilot work of rural complex construction, China once again shows that rural complex as a development model is one of the important implementation paths to implement the Rural Revitalization Strategy in the new era. The state's attention has effectively stimulated the investment willingness of the industry. Then the current development status and existing models of pastoral complexes provide some reference and Enlightenment for the further innovation driven development model of pastoral complexes in the future.

6. Comprehensive Comparison of Innovation Driven Development Models of the Zhujiang-Xijiang Economic Belt Pastoral Complex

(1) Comparison of implementation effects of five rural complex innovation driven development models

By observing and studying the implementation effect of five rural complex innovation driven development model case samples, it is found that the implementation effect of "beautiful south" rural complex in Nanning is good, which is reflected in the high completion of scenic spots, convenient transportation, strong ability to attract social capital, perfect rural community infrastructure construction, and the basic formation of major industries such as ecological agriculture and leisure agriculture, Modern agriculture has a good format, with high agricultural risk resistance and agricultural science and technology application ability.

Yunfu's "Yunan hongxigu" and "Renshan" pastoral complexes, through the successful application of Internet + agriculture, have increased people's income, improved villagers' living conditions, formed a number of demonstration stations and platforms, expanded the market, and formed the practice of red education Leisure vacation In the new era of multi industry integration integrating cultural experience and other functions, the Rural Revitalization complex has diversified development, driven employment, increased village collective income and made farmers rich.

The rural complex of "Sihui orange town" in Zhaoqing City makes full use of local advantageous resources and focuses on building Sihui sugar orange brand. The agricultural industry (Sihui sugar orange) is the leading industry in this area to drive the development of other related supporting industries. Relying on the advantages of geographical location and market, the agricultural experience area of characteristic agricultural experience project is constructed to fully meet the interests and needs of tourists.

Baise's "colorful Surabaya" pastoral complex has created a unique brand of "hometown of longevity" in the region, developed the health care industry, and developed rural cultural tourism in combination with regional characteristic culture. In promoting the construction of "colorful Surabaya" pastoral complex, relying on the beautiful natural landscape of mountains, waters, forests and fields in the project area, it has vigorously developed sports, leisure and ecological health care projects. Through the way of "ecology + industry + culture", promote the deep integration of primary, secondary and tertiary industries, and promote the whole chain quality and efficiency improvement of tea, silkworm, oil tea and other characteristic and advantageous industries.

Chongzuo's "landscape sweet garden" pastoral complex further improved the infrastructure construction, strengthened the functions of vocational farmers' education and training, innovation and entrepreneurship, agricultural technology exchange and promotion, integrated local sugarcane, rose, pasture and other industries, comprehensively promoted the deep integration of agricultural industry with tourism, education, culture and other industries, improved the system and mechanism of rural governance, and built a livable, industrious It is suitable for tourism and reflects the urban-rural integrated development model with the characteristics of the pastoral complex of "landscape sweet garden" in Jiangzhou District. The rural complex of "Shanshui Nonggang" has developed slowly on the whole, and the implementation effect has not been fully demonstrated. The project develops characteristic agricultural tourism according to local conditions, realizes leisure vacation + landscape agriculture, relies on the scenic national Nonggang nature reserve, builds a bird watching and nature education base, and often carries out relevant activities to drive the local atmosphere and revenue, The understanding of innovation driven development needs to be improved.

To sum up, the implementation effectiveness of the five rural complex innovation driven development model case samples should be ranked in order.

(2) Sustainability comparison of five rural complex innovation driven development models

The sustainability comparison of five case samples needs to be observed through its current implementation effect, future planning and development path selection, and will be mainly linked to the implementation effect. Through the comparison of the implementation effects of the above five case samples, it can be seen that the implementation effect of the "beautiful south" pastoral complex in Nanning is good, and the ability to resist risks is high. It has been on track in terms of future planning and development path, the relevant remaining projects have been gradually realized, the developed projects have been gradually improved, and the relationship with the market and society has been gradually close. The second is the implementation effect of Yunfu's "Yunan hongxigu" and "Renshan" pastoral complex. "Rural ecommerce + science and education" gives it new vitality. Its regional popularity is high, its market orientation is broad, and its sustainability is considerable in the future. The garden complex of "Sihui orange town" in Zhaoqing is committed to building a garden complex project with agricultural industry (Sihui Shatang orange) as the leading factor and other related supporting industries, such as vacation, health preservation, agriculture, sightseeing and catering, which highlights agricultural functions. The brand effect is good. Sihui Shatang orange is the key to build a brand, which is closely related to the market It is closely connected with the society and meets the interests and needs of tourists. The infrastructure construction of Baise's "colorful Surabaya" pastoral complex is relatively perfect. Through the way of "ecology + industry + culture", promote the deep integration of primary, secondary and tertiary industries, and promote the whole chain of characteristic and advantageous industries such as tea, silkworm and oil tea to improve quality and efficiency. The prospect is still broad. The rural complex project of "landscape sweet garden" in Chongzuo City has large industrial scale, high output value, large and wide income groups, high participation of villagers in construction, and the development of characteristic agricultural tourism according to local conditions; Relying on the national Nonggang nature reserve, the "Shanshui Nonggang" pastoral complex has brands such as discovery · Nonggang and stream · Nonggang. It has a beautiful natural environment, superior geographical location and rich natural resources. The formed bird watching base and education base are famous outside China, and the international bird watching Festival has been held here.

(3) Replicability comparison of five rural complex innovation driven development models

Through the observation of five rural complex innovation driven development model case samples, and the comparison of replicability, some samples can learn from and learn the development path of other sample cases, so as to increase and improve the effectiveness of innovation driven development. For example, the industrial development of "beautiful south" pastoral complex in Nanning has been relatively formed. We can learn from the "Yunan

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hongxigu" and "Renshan" pastoral complex in Yunfu to expand the market and strengthen the construction of e-commerce with the help of Internet platform; On the contrary, Yunfu's "Yunan hongxigu" and "Renshan" pastoral complexes can also learn from Nanning's "beautiful south" pastoral complexes, pay attention to strengthening agricultural risk resistance, infrastructure construction and agricultural science and technology application, and strengthen the search for multi-party cooperation. Another example is the "landscape sweet garden" and "landscape Nonggang" pastoral complex in Chongzuo city. For example, the "beautiful south" pastoral complex in Nanning city can be learned, strengthen infrastructure construction, speed up the development planning of relevant projects, strengthen the connection of various places, and form an organic whole. In addition, the replicability also includes the replicability guiding significance for the planning and development of other rural pastoral complexes, which need to have a certain universality. For example, the "beautiful south" pastoral complex of "modern agriculture + pastoral community" in Nanning is difficult to replicate for the majority of mountain villages and towns. The reason for the low replicability is that the investment is large and the universality to the natural environment is low, Mostly based on original industries + settled enterprises; The development model of "ecological health + rural cultural tourism" Baise "Surabaya colorful" pastoral complex, "leisure vacation + landscape agriculture" Chongzuo "landscape sweet garden" and "landscape Nonggang" pastoral complex is more universal and reproducible, which is more suitable for the development of pastoral complex in the majority of villages.

7. Comparative Analysis of Influencing Factors of Innovation Driven **Development of Rural Complex: Based on the Results of Case Study**

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project	Sample Distribution	Sample Size	The Percentage Of (%)
Area	Nanning City "Beautiful South" pastoral complex	39	20.10
	Yunfu City, "Yunan Hongxi Valley", "Renshan" pastoral complex	38	19.59
	Zhaoqing City, "Sihui City Orange Town"	37	19.07
	Baise City "Surabaya Colorful" pastoral complex	39	20.10
	Chongzuo City "Landscape Sweet Garden" pastoral complex	41	21.13
Total		194	100

Table 1. Sample distribution of the survey respondents (peasant households)

(1) Overview of respondents

Combined with the simple random sampling method, we randomly distributed 550 questionnaires (including online questionnaires) to local farmers and visitors according to different regions, and finally got 515 valid questionnaires. According to the chart, the objects of this survey are local farmers and tourists of the "beautiful south" pastoral complex in Nanning, the "yunanhong Valley" and "Renshan" pastoral complex in Yunfu, the "colorful Surabaya" pastoral complex in Baise, the "orange town" pastoral complex in Sihui City in Zhaoqing and the "landscape sweet garden" pastoral complex in Chongzuo, The number of samples (farmers) involved in the five study areas are 39, 38, 37, 39 and 41 respectively, accounting for 20.10%, 19.59%, 19.07%, 20.10% and 21.13% of the total. The number of samples (tourists) involved in the five study areas is 68, 66, 65, 62 and 60 respectively, accounting for 21.18%, 20.56%, 20.24%, 19.31% and 18.69% of the total respectively.

Project	Sample Distribution	Sample Size	The Percentage Of (%)
Area	Nanning City "Beautiful South" pastoral complex	68	21.18
	Yunfu City, "Yunan Hongxi Valley", "Renshan" pastoral complex	66	20.56
	Zhaoqing City, "Sihui City Orange Town"	65	20.24
	Baise City "Surabaya Colorful" pastoral complex	62	19.31
	Chongzuo City "Landscape Sweet Garden" pastoral complex	60	18.69
	amount to 321 100		100

Table 2. Sample distribution of the survey respondents (visitors)

Table 3. The sample distribution of the survey subjects

project	sample distribution	Sample Quantity (farmers)	Sample Number (visitors)	Total
Area	Nanning City "Beautiful South" pastoral complex	39	68	107
	Yunfu City, "Yunan Hongxi Valley", "Renshan" pastoral complex	38	66	104
	Zhaoqing City, "Sihui City Orange Town"	37	65	102
	Baise City "Surabaya Colorful" pastoral complex	39	62	101
	Chongzuo City "Landscape Sweet Garden" pastoral complex	41	60	101
Total		194	321	515

(2) Analysis of tourists' understanding of pastoral complex and its causes

According to the survey, tourists are not familiar with the models and concepts of innovation driven development of pastoral complexes, and they do not know much about them. They just have a general understanding of their general structure and basic connotation, and what they do. The reason is mostly caused by the specialization of nouns, and the publicity of relevant knowledge is not in place. It is mostly known by the publicity and introduction between friends. *(3) Tourists' willingness and choice of pastoral complex*

The survey shows that those who have more time to work and experience in the rural area can also choose to visit the rural area according to their economic strength; The main reasons for attracting them to play are mostly focused on sightseeing and life experience. They often choose rural complexes with leisure, tourism and health care industries for play.

(4) Analysis on Farmers' understanding of rural complex and its causes

According to the survey, farmers have a basic understanding of the pastoral complex, and individual farmers still have a deeper understanding of its structure, development mode and development significance. The reason for the uneven degree of understanding is that the relevant publicity is not in place, not grounded enough, not enough understanding of innovation driven knowledge, not guiding, etc.

(5) Farmers' willingness and choice of pastoral complex

According to the survey, farmers generally believe that the planning and development of rural complex is a good thing, which is reflected in the improvement of rural environment and living standards; Easily increase income and do not stick to agricultural work; Excavate local culture, improve atmosphere and enrich people's spiritual activities. At the same time, the organization and coordination capacity has also been strengthened to promote the transformation and upgrading of rural economy.

(6) Effect evaluation of innovation driven development of rural complex in Pearl River Xijiang economic belt

The overall effect of the innovation driven development of rural complexes in the Zhujiang-Xijiang Economic Belt is good. In the five case samples of innovation driven development modes of rural complexes, the income of farmers and villagers has been increased and the living environment has been improved. Taking farmers and villagers as the foundation and agriculture as the main body is its main development path; Diversified development makes the pastoral complex colorful, gradually promote the industrial integration, develop in combination with the interests and needs of tourists, enhance the sense of experience of tourists, and achieve remarkable results on the whole. However, there are still some small problems in the development process, such as individual villagers and farmers are unwilling to join the ranks and participate in the construction; Infrastructure construction is imperfect for some reasons, such as stagnant construction, poor natural environment, etc. Generally speaking, it has basically met the preliminary objectives and requirements of the construction and development of pastoral complex. It still needs to be driven by innovation to improve sustainability, continue to benefit farmers, people, increase income and improve the quality of life.

Based on the results of the case study, this paper makes a comparative analysis on the influencing factors of the innovation driven development of the pastoral complex. The development characteristics according to local conditions and making full use of their own resources are basically covered in the five case samples, which has high commonality. It shows that this is the basic key factor affecting the innovation driven development of the pastoral complex, which verifies the correctness of this road, Can achieve results. For example, the rural complex of "Yunan hongxigu" in Yunfu city carries out research and practical education based on the local red revolutionary culture; Nanning "beautiful south" pastoral complex makes full use of its own resources, natural resources and cultural resources to create a "golden signboard" of the project; The pastoral complex of "orange town in Sihui City" in Zhaoqing City makes use of local high-quality resources for development according to local conditions, and develops characteristic tourism projects in combination with interest and demand.

Moreover, for example, the sample "rural electricity business + education" type "Yunfu Yunan Red Valley" and "benevolence" rural complex, promote the Rural Revitalization and development with the help of the Internet platform, develop the characteristic electricity supplier, and the successful application of Internet plus agriculture has realized the docking and matching of the production households and city's expense households, effectively solved the problem of "hard sell" and "hard buy" of agricultural products. Achieved considerable economic and social benefits; The villagers' participation in the construction of "landscape sweet garden" and "landscape Nonggang" pastoral complex in Chongzuo city is high; Nanning's "beautiful south" pastoral complex pays attention to infrastructure construction, the application of agricultural science and technology, and the strengthening of agricultural risk resistance. It is different from other individual sample cases and has particularity, which is worth learning and reference.

An ideal pastoral complex can play its real "comprehensive" function only by integrating elements such as industry, land, ecology and resources to form a composite development model. However, it is difficult to avoid the phenomenon of homogenization. Therefore, based on its own regional advantages and characteristics, we should create innovative characteristic brands, learn to innovate and explore and drive each other with the help of the successful experience of regions with good development trend. The resources of each region of the pastoral complex should be complementary in order to form a relatively complete industrial chain, strengthen the integration of science and technology, innovate financing methods, promote the

construction of rural infrastructure and public services, and realize the sustainable development of the pastoral complex.

8. Strengthening the Development Path of the Operation Effect of the Innovation Driven Development Model of the Rural Complex in the Zhujiang-Xijiang Economic Belt

(1) Create a comprehensive tourism format of Creative Agriculture

To strengthen the effectiveness of the innovation driven development model of the rural complex in the Zhujiang-Xijiang Economic Belt, we need to innovate the agricultural development model in the area. We should find a development model suitable for the local conditions. On the basis of learning from the original, we should strengthen model innovation and path innovation, avoid the formation of a single business form, and highlight the characteristics of local culture and living customs, Avoid homogenization in the fierce competition in tourism. We should take "agricultural integration" as the main direction, boost the burst of cultural creativity, and appropriately improve the differences of specific places, so as to enhance the attraction to tourists and the competitiveness of local formats in the market.

(2) Promote the introduction and construction of innovative professionals

We need to vigorously promote the introduction and construction of innovative professionals, improve innovation ability, and enhance innovation awareness and understanding. Limited by the economic income level of some regions, it is difficult to attract professional development talents, insufficient rural infrastructure and cultural construction, and weak local basic education, which limits the sustainability of innovation driven development of rural complex in the Zhujiang-Xijiang Economic Belt to a certain extent. The introduction of high-quality and high-level professional development talents will help to provide correct guidance for the innovation driven development of rural complexes, improve the management and organization level, lead the local people to embark on the correct development path, promote the introduction and development of related industries of rural complexes, and continue to enhance the people's understanding of the innovation driven development of rural complexes, Improve farmers' construction motivation and participation enthusiasm.

(3) Firmly based on industry and integrating industrial ecology

The construction and development of pastoral complex should be firmly based on industry. The important content of pastoral complex is supported by agriculture. The processing of agricultural products should not stay in the picking link, but strengthen the processing, logistics and transportation of agricultural products. In the processing of agricultural products, the links of agent processing, manufacturing, transportation and sales are integrated in order to realize the value-added of agricultural products and resist agricultural risks. Taking the "beautiful south" pastoral complex in Nanning as an example, the park develops characteristic aquatic products along the river, extends the processing industrial chain, and gradually forms a scale. There are also planting industries such as high-quality rice, vegetables, fruits and flowers, which effectively absorb social capital, greatly improve the local economic level and increase the income of the people. Based on local industries, the innovation driven development model of rural complex in the Zhujiang-Xijiang Economic Belt should also expand local characteristic industries, extend the industrial chain and effectively integrate the industrial ecology.

Data Availability

The data used to support the findings of this study are included within the article.

Conflicts of Interest

The authors declare that there are no conflicts of interest.

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References

- [1] Pang Wei, Bai Kai. The Connotation and Construction Mode of the Pastoral Complex, [J], Journal of Shaanxi Normal University (Natural Science Edition), 2018,26-33. (In Chinese).
- [2] Lu Yang. A brief analysis of the development and construction points of the pastoral complex, [J], Green and Environmental Protection Building Materials, 2020,81-82. (In Chinese).
- [3] Bai Chunming, Yin Yanyu, Chai Domei, Wang Jian, Zhang Tianzhu. Overview of China Pastoral Complex Development [J] Vegetable, 2018,7-12. (In Chinese).
- [4] Zhang Xueyong, Kuang Jie. Discussion on the development mode and planning path of rural complex
 -- Taking Hongshan rural complex in Chifeng City as an example [J] Planner, 2019,50-55. (In Chinese).
- [5] Pang Wei; Bai Kai, the Connotation and Construction Mode of the Pastoral Complex, [J], Journal of Shaanxi Normal University (Natural Science Edition), 2018,26-33. (In Chinese).
- [6] J. Clarke. Marketing Structures for Farm Tourism: Beyond the Individual Provider of Rural Tourism[J]. Journal of Sustainable Tourism,1999,7(1):26-47.
- [7] Gilmar Arruda. Tourism, nature and environmental history: leisure farms on the banks of the Capivara Dam. [J]. Antíteses,2013,6(12).
- [8] Liu Li Xin. Thinking Caused by Rereading Howard's Garden Cities of Tomorrow after a Century[J]. Advanced Materials Research, 2011: 374-377.
- [9] Liu Yanjuan. Cognitive Diagnosis of Cultural and Rural Tourism Convergence.[J]. Translational neuroscience,2019,10(1).
- [10] Pulina Manuela, Giovanna Dettori Domenica, Paba Antonello. Life cycle of agrotouristic firms in Sardinia[J]. Tourism Management,2005,27(5).