

Theoretical Logic and Innovation Mechanism of Farmers' Cooperatives Supporting for Rural Revitalization in Guangxi

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Abstract

The essential attribute of farmers' cooperatives determines that they have characteristics of beneficial poverty, this makes them to be ideal carriers of Rural Revitalization Strategy. However, in the process of Rural Revitalization, cooperatives fall into the predicament of weak effect on increasing farmers' income, which can be attributed to two main reasons. First, the improper use of government resources and the unfair distribution of interests caused by the disorder of internal organization of cooperatives. Then the limited accuracy and efficiency of government and other departments lead to the mismatch of some resources supply. In this paper, starting from the theoretical logic of cooperative participation in rural revitalization, we explore a practical path of farmers' cooperatives support for rural revitalization. We prove that strengthening and perfecting the interest connection mechanism between cooperatives and members, reforming and innovating the incentive mechanism, connecting the interests of ordinary members and core members, and exerting the influence of cooperatives to promote the revitalization of rural areas.

Keywords

Farmers' Cooperatives; Rural Vitalization; Interest Connection; Innovation Mechanism.

1. Introduction

The 19th National Congress of the Communist Party of China (CPC) put forward the rural revitalization strategy officially, and the Central Committee and State Council issued the Opinions of the Central Committee of the Communist Party of China and the State Council on the Implementation of Rural Revitalization Strategy on January 2, 2018, which further requires the scientific and orderly promotion of rural industrial, talent, cultural, ecological and organizational revitalization. Under the situation of decentralized operation of small farmers, how to effectively promote the revitalization of rural industries, talents, culture, ecology and organization at multiple levels, such as the central government, various local governments and village collectives, is the main problem faced by the government at this stage. Farmers' cooperatives are organizations established by farmers voluntarily and jointly for the purpose of mutual assistance among members, which have natural benefits for are beneficial to the poor, can give full play to the advantages of economy of scale and resource gathering, and can strengthen the organization of small farmers and ensure the main position and development rights of farmers in the rural revitalization strategy. Yuan Junlin found through empirical research that participation in cooperatives can improve the household income level of farmers effectively[16]; Li Qinghai believed that cooperatives can have a significant positive effect on farmers' income increased by improving their production efficiency, number of transactions, and bargaining power[17]; Wang Gongli believed that after years of exploration and development, cooperatives have the functions of docking with enterprises, organizing large farmers, linking with markets, and driving scattered the role of cooperatives, which have been

explored and developed for many years, is to connect with enterprises, organize large farmers, link up with markets, and drive small farmers[18]. However, cooperatives also including organizational heterogeneity[11] and differences in members' resource endowment[12]. Through the analysis of cotton farmers' data in Xinjiang, Li Qinghai found that cooperatives have a more significant effect on increasing the income of farmers with high income or close involvement with cooperatives[17]; Guo Lu et al. found through empirical evidence that cooperative organizational heterogeneity and heterogeneity of cooperative members' endowment affect the effect played by cooperatives. The worse the effect played by cooperatives, the smaller the level of increase in income and reduction in household poverty vulnerability by members joining cooperatives [20]. Therefore, it is necessary to innovate cooperative mechanisms. How to innovate the cooperative mechanism, solve the problems in the development of cooperatives, help the comprehensive development of rural revitalization, and bring the practical results of win-win cooperation for both sides are the focus purposes of current researches. At present, there are relatively few studies on the theoretical logic of cooperatives helping rural revitalization in China. In this paper, we try to construct a theoretical logic between cooperative development and rural revitalization, and solve the problems of cooperatives by analyzing the current situation of cooperatives in Guangxi. At the same time, we study the working mechanism of cooperatives contributing to the comprehensive revitalization of the countryside and explore the innovation mechanism of cooperatives.

2. Theoretical Logic of Guangxi Farmers' Cooperatives for Rural Revitalization

2.1. Alignment of Rural Cooperative Development with Rural Revitalization Goals

Since the 1990s, farmers are a disadvantaged group with a large number and lagging development compared with urban residents, and the development of rural industrial integration is still at a lagging stage, which may have a negative impression on farmers' income[19]. Solving the problem of inadequate rural development is the necessary way to achieve common prosperity for all people, and Zhang Yong, deputy director of the National Development and Reform Commission, pointed out that the rural revitalization strategy is precisely in 2018, the State Council of the CPC Central Committee issued the Strategic Plan for Rural Revitalization (2018-2022), which points out that the implementation of the rural revitalization strategy is a major decision made by the 19th National Congress and is the general grasp for doing a good job of the "three rural areas" in the new era (Source: https://www.ndrc.gov.cn/fzggw/wld/zy/lddt/201905/t20190515_1167091_ext.html). " In the five-year from 2018 to 2022, it is necessary to realize the overall well-being of rural areas and pave the way for the modernization of agriculture and rural areas. A cooperative is a collection of farmers, and its management principle is to seek common profit for all members. Firstly, the development of cooperatives is closely related to the development of each member, and cooperatives can promote the process of industrial development while developing themselves with the goals of improving the technical efficiency of members' production [17], bargaining power [17], extending the agricultural chain, and creating branded agricultural products. Secondly, while pursuing technological progress, adopting new technologies or promoting green production, and regulating members' production behavior, cooperatives can promote members' communication and sharing of technologies, deepen the relationship between members, promote ecological environment improvement, and build a good countryside while safeguarding the ecological environment; unlike enterprises, cooperatives do not have profit as their sole purpose, and the fundamental purpose of their establishment and existence is to serve members, promote members' interests and jointly develop their business. Therefore,

when a cooperative aims at its economic interests, the prosperity of its members is also part of its goal. From this, it can be seen that cooperatives and rural revitalization strategies have the same goal, that is, to increase farmers' income, improve farmers' net width, narrow the gap between urban and rural areas, and promote farmers' affluence, agricultural prosperity, and wonderful rural development. Meanwhile, the functions of cooperatives to help rural revitalization are constantly being tapped by the government and institutions. For example, the Party Secretary of Guangxi Zhuang Autonomous Region's Supply and Marketing Cooperative Group proposed to build 700 village supply and marketing cooperatives in 2021, to give full play to the role of cooperatives in the "three rural areas", and solve the low level of organization of small farmers and help the comprehensive revitalization of the countryside(Source: <http://www.gxzf.gov.cn/ztxwfb/xwfbh0602/index.shtml>).

2.2. Synergistic Promotion of Rural Cooperative Development and Rural Revitalization Practices

2.2.1. Talent Revitalization

First of all, people are the key to prosperity, and the key to rural revitalization lies in people. cooperatives gather various talents who are responsible, capable and accountable, and are the endogenous driving force to promote rural revitalization. the 2018 central government No. 1 document further emphasizes the implementation of rural revitalization strategy, with human capital development as the first priority, to crack the bottleneck constraints of talents. As a special kind of regionalized joint mutual aid organization, those who form or lead its development are generally elite farmer groups within the village[1], which can play the advantage of talent gathering and absorb talents on the one hand; on the other hand, they can effectively guide local farmers in planting and operation, and cultivate a group of talents who know how to plant, have culture and can share. From the perspective of absorbing talents, compared with individual villagers, the cooperative society gathers more talent resources and capital, and better builds a practical organizational platform for the revitalization of rural talents. From the perspective of cultivating talents, cooperative operators and core talents, as subjects with capital, resources and social capital in rural areas, are capable of driving up scattered small farmers. Cooperatives can guide some farmers in planting methods and strengthen crop quality by unifying planting standards and standardizing planting processes; they can also hold a general meeting of members or hire experts from time to time to hold seminars to exchange work experience and experiences with each other and strengthen farmers. The cooperative can also hold a general meeting of the members or hire experts to hold a forum at regular intervals to exchange work experience and experience, and strengthen the farmers' planting, management and risk control ability.

2.2.2. Industrial Revitalization

In order to revitalize the countryside, it is indispensable for the industry in the village to flourish, and cooperatives unite the scattered farmers in the village, unify standards and joint production, so as to give full play to the advantages of economy of scale to promote industrial integration and development. In August 2019, Guangxi Zhuang Autonomous Region issued the "Guangxi Rural Revitalization Strategic Plan (2018 - 2022)", which proposed that Guangxi should implement the project of strong and excellent characteristic agriculture, adjust and optimize the structure of agricultural industry, and promote the development of agricultural industry gathering. Although China has achieved greater success in agricultural development, the primary industry mainly in agriculture has always accounted for a lower proportion of China's GDP compared with the secondary and tertiary industries, and agriculture is still the weak part of China, and there are still problems in its development such as a short industrial chain and being bound by traditional development ideas, etc. In order to solve the existing problems and develop agriculture, Many scholars propose that agricultural agglomeration is to

solve problems and develop agriculture. They have proposed agricultural agglomeration as an important organizational innovation, aiming at optimizing the allocation of agricultural resources, exploring the resources with development potential and giving full play to the comparative advantages of agricultural products deeply. Meng et al. took the apple industry as the research object and showed that apple industry agglomeration has a significant impact on the economic growth of the apple industry and can promote the economic growth of the apple industry in the agglomeration [21]. Agro-industrial agglomeration is a network-like whole composed of cooperatives and other agricultural support institutions together as basic units, and there is a correlation between its development and the development of cooperatives. As a bridge between farmers and markets, cooperatives can unite small farmers effectively, dock to large markets, promote the development of agricultural industry aggregation, and build a modern characteristic agricultural industry system. In addition, members rich in capital, members rich in resources and ordinary farmers in cooperatives will be linked with cooperatives in the form of shareholding, fully mobilize resources, capital and labor, and coordinate the planning of production factors such as land, capital and resource factors, thus promoting the development of rural specialty industries in Guangxi. Through the joint efforts of all the cooperatives, new possibilities of agricultural production are explored, innovations are constantly made, and the development and integration of one, two and three industries are promoted.

2.2.3. Cultural Revitalization

The development of culture and other soft power is also very obvious for the revitalization of villages. Cooperatives are the gathering place of the whole village, a platform for individual villagers to share their experiences and life, and an excellent channel to spread culture. Since the reform and opening up, the loss of personnel and elites has invariably damaged the villagers' confidence in the local culture. Coupled with the feudal and ignorant thoughts and stubbornly unchanging consciousness of some villagers who remain in the village, the bad customs have not been well resolved. Some village evil forces straddle between farmers and the government, disturbing the relationship between them on the one hand and crowding public resources on the other, all of which bring no small difficulties to the road of enhancing cultural identity and villagers' cohesion [1]. In contrast, by being in the same cooperative, members will standardize their production techniques and equipment because of the cooperative's standards, and with consistent goals, emotional and interest ties among them, they will work together, share their experiences and technologies, and work together to promote the common prosperity of the whole cooperative. At the same time, cooperatives can carry out economic activities by reshaping the rural economic community and thus achieve the goal of reshaping the rural cultural community[1]. Specifically, cooperatives can foster a sense of collaboration among members and promote a cooperative culture when trading transactions; play a leading role by cultivating a group of leading talents with a sense of service, or raise the ideological and moral threshold for membership, screen out members with excellent morals, promote rural culture, and broaden the channels for villagers' ideological and moral construction and rural cultural revitalization.

2.2.4. Organizational Revitalization

Organizational standardization is one of the important ways to improve the speed of rural revitalization. Individual villagers are not good at organizing, but villagers gathered by standardized cooperatives centered on cooperatives will be more convenient. In August 2019, the planning issued by Guangxi Zhuang Autonomous Region proposed to vigorously cultivate both service, public welfare as well as mutual assistance rural social organizations, improve the rural grassroots service system, consolidate grassroots power, and strengthen the rural grassroots organizations responsibility and obligation of construction. At the twenty-eighth

meeting of the Standing Committee of the 13th National People's Congress on April 29, 2021, the Law of the People's Republic of China on Promoting Rural Revitalization was adopted, which emphasizes that deepening the comprehensive reform of supply and marketing cooperatives and strengthening the function of cooperatives in serving farmers should be the content that people's governments at all levels should pay attention to, and the role of cooperatives as comprehensive cooperative economic organizations serving farmers should be brought into play. With cooperatives as a carrier, the interface between ordinary small farmers and modern agricultural development can be effectively strengthened, and organizational revitalization can also be strongly promoted[22]. Cooperatives are spontaneously organized by farmers, and villagers have a natural sense of trust and intimacy from the emotional point of view, which can better obey the management and organization. Secondly, there are certain rules and regulations within cooperatives, which will be more organized, disciplined, and well-managed compared to villagers' individualization. Finally, a cooperative constitution to regulate the standards of grassroots services can integrate and optimize public services and effectively form a perfect rural people-friendly service system. Therefore, the government can give the cooperatives certain powers to coordinate and plan each villager's duties, and also supervise the villagers well, so as to increase the villagers' enthusiasm to participate in village-wide affairs and broaden the channels of public services.

2.2.5. Ecological Revitalization

Green and healthy ecology is even more important. General Secretary Xi Jinping stressed that "green water and green hills are golden mountains", and ecology is an intangible asset for rural revitalization, and cooperatives will take into account ecological health while promoting the development of some industries. Therefore, a good ecological environment is also a crucial component of rural revitalization. A suitable ecological environment can nourish one side of the land and provide a material basis for rural revitalization. However, a suitable ecological environment not only requires villagers to take practical actions to protect it, but more importantly, to build a countryside where agriculture and nature coexist harmoniously. Cooperatives can effectively organize and regulate the behavior of scattered farmers to avoid the phenomenon of "tragedy of the commons", which is similar to malicious competition that leads to serious damage to public resources and the destruction of the environment for the sake of maximizing their own economic benefits. At the same time, the cooperative can actively divide the green and sustainable planting standards, realize the harmonious cycle of people, agricultural products and nature, and strictly supervise the behavioral activities of all members. Finally, Guangxi is a big tourism province, and the advantage of Guangxi region lies in green water and green mountains compared with other provinces. Therefore, cooperatives should focus on exploring innovation mechanisms to transform green mountains into golden mountains.

3. Analysis of the Current Situation of Cooperatives' Participation in Rural Revitalization in Guangxi

3.1. Status of Development of Farmers' Cooperatives in Guangxi

3.1.1. The Total Number of Cooperatives in Guangxi is Increasing Year by Year

Guangxi government actively carries out demonstration activities of farmers' professional cooperatives and encourages the development of cooperatives around the region by focusing on supporting farmers' cooperative demonstration societies. As a result, the total number of farmers' professional cooperatives in Guangxi region has grown year by year, and as of 2020, the total number of cooperatives in the region has reached 49,595, which is 5.5% higher than last year, and the majority of urban areas have a considerable growth compared to the total number of cooperatives last year. See Table 1 and Table 2 for details.

Table 1. Total number of cooperatives in Guangxi region in 2015-2020

Year	2015	2016	2017	2018	2019	2020
Total number of cooperatives	19103	31397	39985	42341	47028	49595
Ringgit growth rate	---	64%	26%	5.9%	11%	5.5%

Table 2. 2015-2020 Professional farmers' cooperatives in various regions

	2015	2016	2017	2019	2020
Region	2015	2016	2017	2019	2020
Total	19103	31722	39985	47028	49595
Nanning	2011	2824	2959	4020	4247
Liuzhou	1803	2422	3117	3720	3859
Guilin	2562	4087	4988	5272	5795
Wuzhou	1163	1544	1769	1919	2145
Beihai	419	659	801	871	976
Fangchenggang	525	757	852	1018	964
Qinzhou	975	1767	2505	2994	2654
Guigang	1316	2752	3496	4607	4961
Yulin	2186	2923	3318	4335	4772
Baise	1469	2444	3485	4133	4362
Hezhou	851	1323	1749	2010	1992
Chizhou	1458	3617	4501	5204	5280
Laibin	932	1969	3051	3505	3825
Chongzuo	1433	2634	3394	3420	3763

As can be seen from Table 2, from 2015 to 2020, the region with the fastest growth rate of cooperatives is Chizhou City, with an increase of 3,822 units. from 2019 to 2020, the region with the highest number of cooperative growth is Guilin City, with an increase of 523 units, while the region with the largest magnitude is Beihai City, with an increase of 12.1%; while Fangchenggang City, Qinzhou City, and Hezhou City, compared to 19 years The number of cooperatives decreased instead, with Qinzhou City decreasing by 340 units, a decrease of up to 11.4%; in 2020, the region with the highest total number of cooperatives among all Guangxi regions was Guilin City, which had 5795 units.

3.1.2. A Complete Range of Cooperatives in Guangxi

During these 67 years, Guangxi farmers' cooperatives have developed rapidly, and the year-by-year statistics from Guangxi Bureau of Statistics show that there are a total of 49,595 cooperatives in Guangxi in 2020, and the business scope includes a variety of industries such as agriculture, plantation, aquaculture, tourism and manufacturing, which are very complete, as shown in Table 3.

Table 3. Professional farmers' cooperatives grouped by various industry sectors in 2020

Industry Sectors	2020	Weight(%)	2019	Weight(%)	Increase	Unit: pcs
Total	49595	100.0	47028	100.0	2567	Growth(%) 5.5
Agriculture, forestry, animal	44513	89.8	41378	88.0	3135	7.6

husbandry and fishery						
Mining	1	0.0	0	0.0	1	---
Manufacturing	522	1.1	418	0.9	104	24.9
Electricity, heat, gas water production and supply	3	0.0	1	0.0	2	200.0
Construction	0	0.0	0	0.0	0	---
Wholesale, retail trade	2156	4.3	1963	4.2	193	9.8
Transportation, storage and postal industry	29	0.1	25	0.1	4	16.0
Accommodation and catering	25	0.1	23	0.0	2	8.7
Information transmission, software, information technology services	31	0.1	30	0.1	1	3.3
Finance	1	0.0	0	0.0	1	---
Real Estate	4	0.0	3	0.0	1	33.3
Leasing, business services	742	1.5	1794	3.8	-1052	-58.6
Scientific research and technical services	1394	2.8	1289	2.7	105	8.1
Water, environment and public facilities management	52	0.1	32	0.1	20	62.5
Residential services, repairs and other services	13	0.0	14	0.0	-1	-7.1
Education	24	0.0	20	0.0	4	20.0
Health and Social Work	1	0.0	1	0.0	0	0.0
Culture, Sports and Entertainment	36	0.1	35	0.1	1	2.9
Public administration, social security and social organizations	48	0.1	2	0.0	46	2300.0

3.1.3. Guangxi Area Cooperatives Cover a Wide Area with Multiple Subjects

In recent years, Guangxi government has been guiding with various policies to encourage the development of diversified new agricultural business subjects. The increase in the number of multiple new agricultural business subjects not only enriches the form of interest linkage mechanism between farmers and cooperatives in each region, but also strengthens the scale of cooperatives, which is conducive to improving the negotiation position of farmers and reducing transaction costs; the diversification of subjects also expands the scope of operation and services of cooperatives, from the production link, cooperatives cover many services needed before, during and after production. From the viewpoint of production, cooperatives cover many services needed before, during and after production, from purchasing production materials, planting, processing, selling, transporting and storing to everything; from the viewpoint of industry types, cooperatives in Guangxi area include production industry, breeding industry, manufacturing industry, transportation, catering, finance and education, covering primary, secondary and tertiary industries.

3.1.4. Guangxi Cooperatives Actively Develop Special Agricultural Market Marketing Network

Guangxi cooperatives take the initiative to adapt to the new situation and speed up the process of diversified development. The development of cooperatives is deeply affected by the differences of policies, landscape, market, farmers and other characteristics in different places, so the organization form and industry type of an excellent cooperative cannot be directly copied

to other cooperatives. Therefore, Guangxi cooperatives focus on "one industry in one town" and "one product in one village", and all cooperatives choose suitable industries to promote the development of cooperatives according to local characteristics and local conditions. For example, the unique geographical location of the village of Inverted Wind Tan, the village fields are mostly made by the impact of river water, coupled with the village's spring water is very abundant, the villagers choose to use the spring water to cultivate sweet potatoes. However, due to the large amount of sweet potato production and limited consumption time, it is easy to cause waste. Guilin Lingchuan County Longda Planting Professional Cooperative takes advantage of this sweet potato characteristic to extend the consumption period of sweet potatoes by baking them into dried sweet potatoes through cellar ovens. 2018, Lingchuan County Longda Planting Professional Cooperative has been named as a national farmers' cooperative demonstration society, which has played a leading role in promoting rural revitalization in the region (Source:<http://nynct.gxzf.gov.cn/xwdt/gxlb/gl/t11789183.shtml>).

3.1.5. The Role of Cooperatives in Guangxi Area to Support Relatively Poor Farmers is Obvious

From 1953, when the first mutual aid organization was born, to today's nearly 50,000 cooperative organizations, Guangxi farmers' cooperatives have experienced the process from a blank to beautiful flowers. From the beginning of the small groups to today's many cooperatives were named the national farmers' cooperative model society, the changes that have occurred is not only the difference in quantity and quality leap, but also the existence of a change in thinking. Cooperatives have been gradually transformed from small groups to an important channel for the implementation of the state and the government to revitalize the countryside and support villagers. Cooperatives can quickly integrate resources and ensure the interests of farmers to the greatest extent, and their unique organizational form can quickly achieve the purpose of supporting farmers' prosperity. However, in the past, there are still cooperatives in some areas that raise the threshold for farmers to enter cooperatives and more strictly restrict the membership conditions in order to maintain their competitiveness as well as to obtain income [6]. In contrast, in 2017, the People's Government of Guangxi Zhuang Autonomous Region issued the constitution of villagers' cooperatives in Guangxi Zhuang Autonomous Region, which did not establish conditions for membership, and most of the cooperatives in the region did not stipulate the conditions for membership. Cooperatives within Du'an County will even take the initiative to absorb farmers with low income levels and poor resource endowments into the cooperatives, and distribute earnings in multiple ways and ways to promote the prosperity of farmers with low income levels.

3.2. Mechanism of the Role of Cooperatives in Rural Revitalization

3.2.1. Cultivate Core Talents and Promote the Revitalization of Guangxi Rural Talents

The purpose of rural revitalization lies in "people", and the endogenous power is also inseparable from "people". It is crucial to cultivate a competent agricultural and rural workforce that understands agriculture, loves the countryside and farmers[10]. The Guangxi Zhuang Autonomous Region Party Committee Organization Department and other management organizations obviously realize the importance of talents to rural revitalization. In March 2021, the Guangxi Party Committee Organization Department, the autonomous region's Department of Agriculture and Rural Affairs and other six departments jointly issued "Several Measures to Promote Rural Talents Revitalization", using various initiatives and ways to attract talents from all over the world to Guangxi to show their talents. On this basis, Guangxi is committed to building a strong team of high-quality talents, actively inviting national academicians, scientists and other talents to inspect and guide countryside in Guangxi, actively encouraging local talents to give more advice and suggestions for rural revitalization, while the government also increases the incentive of rural talents policy and implements the subsidy mechanism to

comprehensively promote the flow of talents of all places and types to the countryside. Not only the government is actively cultivating talents for Guangxi, but also local cooperatives are playing a huge role in it. Huang Lizhu graduated from Southwest Agricultural University, and after understanding the situation of Yongning District in Nanning City, his hometown, he resolutely quit his superior job to pursue his agricultural dream with full of agricultural feelings. He set up the Vodan Cooperative in 2015, and since then he has not only paid attention to the cultivation of his own skills, but also paid much attention to the cultivation of talents. Huang Lizhu has set up a science and technology training center and hired 12 experts to create a technical production and training team. Moreover, with a bachelor's degree, he makes full use of his resource advantages, often cooperates with scientific research institutes or universities, and has hired experts, such as professors or research experts from the Institute of Citrus Research of the Chinese Academy of Agricultural Sciences, Guangxi University and Guangxi Citrus Research Institute, to train community members, conduct lectures, and provide on-site guidance for a total of 58 sessions, with more than 5,300 people trained, which has played an important role (Source:http://www.moa.gov.cn/ztl/scw/cyrhnc/201701/t20170123_5462596.htm).

3.2.2. Promote the Integration of Industrial Development and Lead the Revitalization of Rural Industries in Guangxi

General Secretary Xi Jinping stressed that the revitalization of the countryside is based on the revitalization of industry, and the construction of a modern rural industrial system and the prosperity of industry are inseparable from the development of modern agriculture and the integration and development of rural one, two and three industries. For example, Cui hometown in Guangxi Xing'an County has made full use of the advantages of special agricultural industry according to local conditions, and effectively strengthened the "bottle of wine" industry and "bag of rice" project. Firstly, Cui hometown set up a brand-new agricultural machinery professional cooperative in Xing'an County, and purchased 1.5 million yuan of equipment to explore a new production model combining machinery and manual labor, realizing the process of mechanization and efficiency of rice cultivation, planting, harvesting, drying and processing, creating a new industrial development model and effectively ensuring rice production in the hometown. Secondly, Xing'an, where Cui's hometown is located, is nationally known as the hometown of ginkgo, Cui's hometown in order to give full play to this advantage, vigorously build ginkgo wine project. At present, Cui hometown consumes 1,000 tons of ginkgo nuts annually and produces 100 tons of original ginkgo wine with an output value of 40 million yuan (Source:<http://glhd.gxnews.com.cn/staticmores/535/48535-7.shtml>). Through this bottle of wine, the local ginkgo industry is successfully turned into a treasure and the industrial revitalization of the countryside is promoted. Hepu County Annong agricultural development company was founded in 2001, always adhering to the concept of "serving the three rural areas for the benefit of the people", and has developed a set of industrial model that combines production and marketing and is suitable for the development of the company after continuous exploration successfully. The company's two cooperatives, namely, Qiancunle Agricultural Service and Niu Dali Comprehensive Development, have industrial bases such as Niu Dali Chicken Breeding Base, Niu Dali Planting Base, 10,000 tons of vegetable distribution and transportation base and black rice planting base. Through the cooperative, the company has integrated the agricultural resources of Hepu County, driven the villagers of Hepu County to change the traditional backward planting mode, develop green agriculture, provided effective help for local farmers to increase income and production, get rid of poverty and get rich, realized the whole industrial chain to realize the one-stop service of production and marketing, and strongly stimulated the development of the local rural economy.

3.2.3. Standardize Grass-Roots Organizations and Promote the Revitalization of Rural Organizations in Guangxi

As an organization, farmers' cooperative itself regulates the behavior of grassroots organizations and is part of the revitalization of rural organizations. Guangxi Hengxian Dadi Planting Cooperative insists on the four-word policy of "selection, cultivation, promotion and protection" in managing the development of cooperatives, focusing on selecting large planters, young people with planting skills and returning migrant workers for support, cultivating a group of rich young leaders, promoting the party building with group building model, and maintaining cooperative development initiatives. Through initiatives such as pioneering demonstration, training and guidance, project support, and village and community mutual assistance, it was successfully awarded the title of Advanced Grassroots Party Organization in Nanning City in 2008 and Advanced Grassroots Party Branch in Hengxian County in 2009. Its innovative model of grass-roots management has attracted a number of farmers' cooperatives to learn from it, and has contributed its share in promoting the revitalization of rural organizations in Guangxi region.

3.2.4. Enhance Cultural Confidence and Promote Cultural Revitalization in Rural Guangxi

Rural cultural revitalization has a wide range of connotations. Villagers share their experience and technology in growing agricultural products with each other, hold cultural festivals to spread the fine traditional culture of the countryside, promote local special products and customs, revitalize rural rules and family customs, enhance the cohesion among villagers and strengthen the cultural soft power of the countryside. Lai Jinwu, the chairman of Bingyang Impression Gu Spice Agricultural Farmers' Cooperative, is actively involved in the cause of poverty alleviation in the industry and attaches importance to the work of poverty alleviation and prevention of return to poverty for the relatively poor farmers in the cooperative. At the same time, he attaches great importance to the progress of rural cultural undertakings, and took the initiative to sponsor the three-star rural tourism area of Shuili Village in Guliao Town (Source: http://www.moa.gov.cn/ztl/scw/cyrhnc/201701/t20170123_5462596.htm). "Guliao Fragrant Rice Cup" bicycle fun orienteering tournament is one of them, which is conducive to the cause of promoting culture, establishing an excellent corporate culture, enriching the cultural life of the rural masses, and making outstanding contributions to enhancing cultural self-confidence in rural areas. Embroidery ball is the love token of Guangxi Zhuang people, which carries auspicious symbols and is one of the three cultural symbols of Guangxi, and also a symbol of harmony and success in the traditional Chinese wedding culture. Jingxi, the hometown of Chinese embroidery balls, has adopted the operation mode of "company + cooperative + farmers" and timely transformed to develop a series of anti-epidemic embroidery balls and incense bags, promoting the development of embroidery ball making industry to high-end, providing more employment opportunities for embroiderers in rural areas along the border of Jingxi, and making Jingxi enhance its cultural self-confidence and promote the revitalization of rural culture.

3.2.5. Protecting Ecological Environment and Promoting Ecological Revitalization of Guangxi Countryside

The ecological environment is also a key part of rural revitalization. A suitable ecological environment can nurture one side of the land and provide a material basis for rural revitalization. For example, cooperatives can vigorously develop tourism or planting that is beneficial to the ecological environment, which not only promotes rural ecological revitalization, but also advances the tourism industry. Located in the southeastern part of Xing'an County, Cui Township has beautiful scenery. The staggered rivers in the township murmur between the trees on both banks, and Cui Township with its unique scenery focuses

on developing tourism under the promotion of measures related to rural revitalization, trying to create a unique and beautiful ecological tourism agricultural belt. The cooperatives in the village developed tourism and sightseeing along the Xing Yang Highway, relying on different industrial characteristics. And then, Cui hometown took Gao Ze polder as the pilot of eco-tourism development, repairing Gao Ze polder and promoting it at the same time. The good ecological environment in the village and more than 900 ginkgo trees around the village created an ancient flavor for Gao Ze Wei, attracting many tourists to visit. This measure has helped the sales of local special agricultural products, promoted the progress of the local economy, and also developed the local ecological environment and promoted the ecological revitalization of the village of Cui hometown(Source: <http://www.gxxczx.com/fzdt/201805/866.html>).

3.3. Problems of Guangxi Cooperatives' Participation in Rural Revitalization

3.3.1. Heterogeneity of Members Within the Cooperative

The heterogeneity of members exists in most cooperatives, this is a phenomenon that arises from the formation of cooperatives and becomes more and more serious as they grow[6]. The Cooperative Law allows villagers to join cooperatives as long as they want to do so, regardless of their resources and other factors. To begin with, in the context of poverty eradication, such regulations are helpful to support poor households to escape from poverty, at the same time, they also intensify the heterogeneous phenomenon of cooperative members, whose age, education level, working ability, and position in the industrial chain vary among members, and such differences will cause different degrees of cognition and acceptance of new things among members, which in turn will affect different incomes of members. Secondly, there are differences in resource endowment among members, including some members bring their own capital to the cooperative, have many natural resources, social resources and human resources. Although the resources will form a certain complementary, more will bring the problem of benefit distribution mechanism, if the members in a cooperative are rich in both capital and resources, then the benefit distribution of the cooperative will be if the members of a cooperative are rich in capital and resources, there will be a dispute over whether the benefits of the cooperative should be distributed according to the transaction amount or the investment amount, which will easily lead to the disintegration of the cooperative. Finally, there are also differences in the level of technology, production preferences, risk preferences, production scale, and interest demands among members of the cooperative[6]. All these heterogeneities can lead to uneven quality levels of members and make it difficult for cooperatives to take collective action.

3.3.2. Unclear Property Rights Within the Society

Cooperative property rights are the mechanism of interaction between the decision-making and residual profit distribution rights controlled by the leaders and the residual claims, ownership and control rights that can be reflected by the members[3]. The members of the cooperative take shares of capital, land, labor and other factors of production, and the more of each capital the members have, the more control they have over the cooperative[3]. This gives rise to three problems, one is that if there are both members rich in capital and other members rich in means of production within the cooperative, both of which are bound to tend to seek benefits for themselves in terms of property rights structure, then it is difficult for the cooperative to determine whether the distribution of returns is allocated by the amount of transactions or investment, resulting in unclear internal property rights. Second, if the cooperative is dominated by investors, then they may allocate as little as possible to ordinary farmers' profits when they distribute cooperative profits by shares, because their fundamental interests are not in line with those of ordinary farmers[5]. As the dominant investors, they will not be close to the ordinary farmers in their daily management and will not look at the problems from the perspective of ordinary farmers, and they will not protect the interests of farmers to

the greatest extent, which makes the interests of farmers damaged and is not conducive to promoting the process of rural revitalization. Third, if cooperatives are united by ordinary small farmers, cooperatives may be slightly inferior to the other two types of cooperatives in terms of production resources, decision-making efficiency, and negotiation position in the docking market, which affects the development of cooperatives.

3.3.3. Poor Quality Level of Cooperatives and Disorganized Internal Organization

From 2015 to 2020, the total number of cooperatives in Guangxi has increased substantially every year, but the increase in the total number of cooperatives has not achieved the best effect on the development of rural economy, according to the in-depth research report of Chinese farmers' cooperatives. On the one hand, the number of "shell" cooperatives is increasing, and in the process of rapid development of cooperatives in Guangxi, there are many "shell" cooperatives with cooperative brand. The main reason for this is that the threshold for the creation of cooperatives is low, and five or more members with rural residence or urban employment can organize a cooperative. In order to take advantage of the increasing support of the state for cooperatives, some malicious elements hang up the sign of cooperatives and wait for the government to issue subsidies. Secondly, due to the increasing number of cooperatives, there will be competition among cooperatives, and if the internal linkage mechanism of members is not strong enough, once the cooperatives are not strong enough, they will be divided and form "empty shell" cooperatives. On the other hand, some cooperatives are loosely organized and disorganized, and they are unable to develop sustainably, not to mention their role in promoting rural revitalization. Many cooperatives often have a few core members in charge of internal power, and the specific core members exercise decision-making and supervisory power. Recently, a cooperative member in Guangxi Lingyun County took the initiative to go to the county discipline inspection committee to explain their corruption (Source: <http://www.gxjjw.gov.cn/static/pages/20210602/gxjjw60b752e3-158676.shtml>), however, this behavior is not an isolated case, the internal division of labor in many cooperatives is not clear, and the strength of cooperative managers and ordinary members differ greatly, there is "hidden information" and "hidden action" within the cooperative. The supervisory bodies established in cooperatives with "hidden information" and "hidden actions" are often formal[8], and there is often a situation where the operators have sole control of the power, which makes the internal organization of many cooperatives chaotic, and the supervisors and various personnel are unable to play their own roles, not to mention promoting the implementation of rural revitalization policies.

3.3.4. Narrow Financing Channels and Poor Ability to Resist Risks

Although cooperatives are a cooperative group of people from all parties, they still look very small in the face of some major natural disasters or economic crises. On the one hand, it is because most cooperatives lack the support of capital and have high financing costs and narrow channels. Once there is a risk, cooperatives lack capital support and have difficulty in running capital, making it difficult for projects to progress smoothly. Therefore, it is difficult for cooperatives to resist risks, and any kind of crisis may aggravate the operating costs of cooperatives and make it difficult for them to develop in a sustainable and healthy way. In addition, government departments will give some support funds to cooperatives to help their development, but there is also the problem of insufficient resource targeting methods and the ability to support relatively poor institutions, which needs to improve the accuracy and efficiency of their targeting[15]. On the other hand, under the market mechanism, because the price elasticity of demand for agricultural products is less than 1, when there is a good harvest, it will instead lead to a decrease in the price of agricultural products and a decrease in farmers' returns, requiring the government to set relevant support prices or subsidies to maintain or gain returns, and the national mechanism in this regard is not perfect and needs further

improvement. In addition, farmers' own insurance awareness is weak, due to their own cognitive limitations, most farmers still hold a skeptical attitude towards insurance and have little trust in it; furthermore, the system related to agricultural insurance in China also needs to be improved, all these make farmers' participation in insurance is not high, and when encountering natural disasters, it is difficult to transfer asset losses through insurance. Therefore, the government and other relevant departments should focus on cultivating farmers' awareness of insurance, and can appropriately improve the treatment of insurance to encourage farmers to actively participate in insurance, while improving insurance and setting support prices and other related systems as soon as possible to strengthen farmers' ability to withstand risks.

4. Innovation Mechanism of Guangxi Farmers' Cooperatives to Help Rural Revitalization

4.1. Innovative the Mechanism of Interest Connection

In order to revitalize the countryside, the flourishing of rural industries is indispensable, and the development of cooperatives is a significant manner for the countryside to promote the flourishing of industries. Cooperatives play a powerful role in developing rural economy, safeguarding farmers' interests and avoiding agricultural risks, and having a suitable and effective interest connection mechanism is essential to the growth of cooperatives. The first is to link cooperatives and their internal members to make the relationship between them stronger; the second is to link cooperatives and markets in order to achieve the optimal allocation of agricultural resources, which is called the interest connection. At present, some cooperatives set up a certain transaction amount or share capital as the threshold for membership at the beginning of their establishment, and there is a phenomenon of excluding relatively poor farmers. In the development process of such cooperatives, they also do not lower the standard to accept relatively poor farmers, but may raise the standard, prompting farmers to engage in trading behavior with cooperatives to disguise the squeeze of farmers' interests[4]. Second, when cooperatives are created, they require capital investment, which may originate from external enterprises injecting capital in the capacity of non-members. In this case, these external investors do not look at the problems from the perspective of the members and put themselves in their place, which can easily lead to the erosion of internal management power[3]. Therefore, the government should strengthen the interest connection mechanism between cooperatives and relatively poor farmers and precisely match resources and capital investment as much as possible to prevent external capital from eroding the internal management power of cooperatives. On the one hand, the government should match resources to cooperatives that support relatively poor households precisely, and on the other hand, the government can encourage cooperatives to lower the threshold and absorb members widely, while strengthening the supervision mechanism to prevent the existence of cooperatives that squeeze the interests of members disguisedly.

4.2. Innovative Incentive Mechanism

From the perspective of the formation process of cooperatives, most of the cooperatives have more or less heterogeneous members. Although this heterogeneity can form complementary resources to a certain extent, it will bring more problems, such as: it is not convenient for cooperatives to implement collective activities, or not to set up membership criteria will make some members in the community to take advantage of the phenomenon, and discourage other members to participate in things. Moreover, because of the difference between core members and ordinary members, if the cooperative is controlled democratically according to the traditional cooperative model, the chairman of the board of directors will not develop the

cooperative wholeheartedly because of the democratic decision on the distribution of surplus income. This will increase the motivation of the chairman, but at the same time, the participation of ordinary members in the cooperative will be reduced, which will affect the development of the cooperative [7]. Therefore, innovative incentive mechanisms in cooperatives are necessary to promote the development of cooperatives and revitalize villages. The primary factor that motivates members to work hard within cooperatives is economic benefits, and only by ensuring that sufficient economic benefits are given to cooperative managers and various types of members can they be promoted to do their jobs and remain loyal to the cooperative. Therefore, the incentive mechanism should be reasonably designed according to the interests of different members, without copying the existing national model cooperative interest mechanism, so as to stimulate all members of the society to participate in affairs.

5. Conclusion

Considering the lack of rural elites and innovation mechanisms for of agricultural development, cooperatives guarantee the main position of scattered small farmers in rural revitalization by virtue of their ability to effectively bring together and organize people, bring into play the advantages of economies of scale, promote the development of agricultural industry gathering and help improve the position of small farmers in the trading market, all of which make cooperatives an indispensable carrier in rural revitalization strategy. Meanwhile, on the basis of the Party and government attaching great importance to the rural revitalization strategy, various policies have been implemented throughout Guangxi to attract and cultivate a constant influx of various talents into cooperatives, and create promulgate many preferential and subsidized policies for cooperatives, which provide a good external environment and endogenous power for the development of cooperatives. Therefore, we argue that there is a certain connection between cooperatives and rural revitalization, which can promote the development of both sides mutually and the harmonious affluence of agriculture, rural areas and farmers jointly. However, when cooperatives in Guangxi help rural revitalization, there are still some problems that need further management and supervision by the government and various institutions. Firstly, it is important to improve the mechanism of accurately screening and supporting cooperatives for relatively poor farmers, so as to prevent farmers who have got out of poverty from returning to poverty again. Second, setting up a supervisory organization to investigate "shell" cooperatives and supervise the use and management of resources by each cooperative to prevent abuse and embezzlement of resources. Third, improving the incentive mechanism for outstanding cooperatives, a third-party review of local cooperatives should be conducted, and appropriate rewards and commendations should be given to cooperatives with leading returns or those that promote local rural revitalization strategies, so as to enhance their reputation.

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