

Research on Countermeasures to Promote the High-Quality Development of Family Farms——Taking 29 family farms in Guizhou Province as an Example

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Abstract: The family farm in China is an agricultural economic organization developed in the practice of the grassroots masses and has a history of more than 40 years now. As one of the important ways to modernize agriculture in rural areas, it has the value of improving agricultural production efficiency, enhancing the level of farmers' organization, increasing farmers' income and promoting the revitalization of rural industries. Using the methodology of sociological fieldwork, this paper investigates 29 family farms in 13 counties in Guizhou Province, conducts structured interviews with family farm owners and summarizes the types and characteristics of family farms in Guizhou Province as well as the main development challenges they currently face. The paper concludes with 19 measures to promote the high-quality development of family farms at three levels: macro, meso and micro, and proposes internal and external relationships that family farms should pay attention to in the process of development.

Keywords: Family Farm; Development Challenges; Recommendations for Countermeasures

1. Presentation of the problem

The family farm is an agricultural business entity that developed independently in rural China at the end of the 20th century. It is a new type of agricultural economic organization of moderate scale that specialized in the production of agricultural families, mainly engaged in planting and breeding activities. Historically, family farms in China have a distinctly practical nature and are an economic organization developed through grassroots practice, which is significantly different from the large American-style family farm. Since 2008, the Chinese government's agricultural policy has focused extensively on and supported the development of family farms, with the total number of family farms in China reaching 3.9 million by the end of 2021 (Qiu Haifeng, 2022).

Chinese family farms have the basic characteristics of "taking the family members as the main labor, feasible scale, and profit maximization as the production goal" (Wang Chunlai, 2014, p43) and "market-oriented operation and enterprise management" (Gao Qiang & Liu Tongshan & Kong Xiangzhi, 2013, p49) and other basic characteristics. "Some local governments believe that the one-family business model is not suitable for the requirements of modern agricultural development and that only big enterprises and big capital can develop modern agriculture", which is a misconception that must be pointed out. Obviously, unlike the "labour-saving" model of agricultural modernization, China's "labour and capital-intensive", "small and precise" model, which has been developed over the past 30 years, is based on land-saving and moderate scale farming. The key is to save land, and the right way to develop Chinese agriculture is to have small-scale, "small and precise" real family farms (Philip C. C. Huang, 2014, p176). China's "development of moderate scale family farms at this stage is in line with the objective law of transformation from traditional agriculture to modern agriculture" (Wang Chunlai, 2014, p44). Its positive significance is reflected in "improving agricultural production efficiency, helping farmers acquire modern awareness, and ensuring social stability in rural areas" (Fu Aimin & Wang Guoan, 2007, p. 15), increasing the capital equipment level of China's agriculture, and improving the conditions for the implementation of the agricultural traceability system (Dang Guoyin, 2013), which is conducive to improving farmers' organizational

level (Zhu Qizhen, 2013, p159).

Regarding studies on the efficiency of family farms, scholars generally agree that family farms are more productive (Zeng Yurong & Xu Wenxing, 2015; Kong Lingcheng & Zheng Shaofeng, 2016). However, "higher land rent and farm machinery costs" (Jiang Lili, 2017), "excessive farm size and lower bargaining power" (Zhang Yue & Liu Wenyong, 2016), and "family farms operate product types too many" (Zhou, Wei, 2017) and other factors negatively affect farm efficiency. In contrast, participation in farm machinery cooperation (Larsén, 2010), farmers' education level (Khai & Yabe, 2011), government agricultural subsidies (Mei Yuntian, 2017), agricultural insurance (Jiang Lili, 2017), and a sound rural financial system (Liu Tongshan & Xu Xuegao, 2019; Chen Jinlan & Hu Jilian, 2019) have significant positive effect.

Research on the size of family farms has generally focused on the 'right size' of family farms. Adequate size refers to the optimal fit between the size of the farm and the capacity of the farmer. The "moderate size" is not fixed, but varies according to the capacity of the farmer. Generally speaking, the larger the capacity of the farmer, the larger the scale of operation. Zhu and Hu delineate a range of family farm sizes, arguing that the lower limit of family farm size is "to meet the livelihood needs of family members" and the upper limit is the maximum area that family members can operate under existing technological conditions (Zhu Qizhen, Hu Penghui, Xu Hanze, 2014, p11). According to Qian, "the relationship between family farm land area and family farm efficiency shows an "inverted U-shaped" relationship, with too small or too large a land operation scale being detrimental to family farm (Qian Zhonghao & Li Youyi, 2020, p.168). This means that when the family farm reaches the optimal and moderate size, the income obtained can be maximized. In the current study, there is still no reference standard for optimal and moderate size.

The above studies reflect the focus of academic research on family farms. Scholars engaged in theoretical research are more interested in the generation mechanism, connotation and characteristics, values and development models of family farms, which clarifying the connotation and characteristics of family farms in China and their development in response to social changes. Scholars engaged in practical research are more interested in the scale of family farms, production efficiency, factors affecting farm efficiency, etc. These applied research results list the significant correlation factors affecting the returns of family farms. However, they often seem to be empty in the section of "Suggestions for promoting family farm development", and the proposed measures are not relevant. This paper uses a sociological field survey to investigate 29 family farms in 13 counties in Guizhou Province, Southwest China, and interview family farm owners to summarize the types and characteristics of family farms in Guizhou Province, as well as the main development challenges they face, and to propose countermeasures for the quality development of family farms and the internal and external relationships that family farms should take into account in the development process.

2. Main types and common features of family farms in Guizhou Province

By the end of 2021, there were 32,000 family farms in Guizhou province, operating more than 3 million mu of land, of which 44.29% were engaged in farming, 44.37% in animal husbandry, 7.5% in combined farming, 1.3% in fishery and 2.14% in other categories.[1] Small and micro family farms of RMB 500,000 and below accounted for more than 60% of the total number of family farms in the province. The aged 31-50 represent 62% of all family farm owners in the province. Family farm owners mainly consist of returned migrant workers, ex-servicemen, retired cadres, returned university students, sophisticated farmers, nonlocal investors and so on. In recent years, Guizhou Province has been actively guiding and supporting the development of various types of family farms, and has come out with a family farm development path with "obvious comparative advantages, distinctive ecological features and outstanding driving value" according to local conditions. The development direction of integration of production and education for plantation farms, systematization development for breeding farms and modernization for all types of farms has been explored. They have accumulated valuable experiences such as developing comparative advantages according to local conditions, reasonably controlling the scale of farms to match their capacity, extending the production cycle in a poor order, and making good use of the green brand of ecological Guizhou.

2.1 Types of family farms

As one of the mainstays of rural industrial development, family farms are a good response to the problems that rural land abandonment caused by the massive transfer of rural labour to cities and towns. Unlike household contract system, family farms are

larger, more costly and more risky, and therefore require more operational, financial, technical and market capabilities from their owners. Scholars generally classify family farms into three categories according to their business mode: planting farms, breeding farms, and combined (Qian Zhonghao & Li Youyi, 2020). Interviews with 29 family farms in 13 counties in Guizhou Province revealed that the capacity of the farmer and the size of the farm were the key factors affecting the development of family farms. Therefore, this paper classifies the types of family farms in Guizhou province into three categories based on the farmer's identity: returning entrepreneurial, self-development, and nonlocal investment, and sorts out the eight types of farmer identities operating the 29 family farms.

2.1.1 The type of returning entrepreneurial

It is the return of talented people of local household to start family farms. Farm owners are mainly ex-servicemen, retired cadres, migrant workers and university students, whom work and study experience in factories, troops, units, colleges and universities is the reason why they have stronger management ability and more reasonable market judgment. From the perspective of motivation, "loving and building their hometown" is their common characteristic. From the perspective of business model, their farms employ a small number of farmers in addition to family labor.

2.1.2 The type of autonomous development

This type mainly consists of two categories: local township entrepreneurs and experienced farmers. Firstly, township entrepreneurs have accumulated a certain amount of capital and are moving into agriculture due to factors such as changes in market conditions or industrial restructuring. Their farms are generally large in scale, with an average of over 500 mu of wasteland and arable land being transferred. Local farmers are employed as the main labor on the farms, employing an average of about one person per 10 mu of land, with a large amount of seasonal labour. Secondly, through long-term production accumulation, local farmers have mastered planting and breeding techniques and become sophisticated farmers whom encouraged by the government to start their own family farms. The types have no hired labour and operate on land that is mostly reserved for themselves own hills, with less land being transferred. The size of their farms is moderate, with an average of less than 50 mu for planting farms and an average of 30 fat pigs (or beef cattle), 100 piglets and 10,000 broiler chickens per year for breeding farms.

2.1.3 The type of nonlocal investment

The type of family farms is mainly set up in rural areas of Guizhou Province by nonlocal investment and Specialized growers. The investors are generally optimistic about the ecological advantages of Guizhou Province and focus on "green" and "pollution-free" agricultural products. They often have stable market channels and stronger capital, more haired workers. The area of their transferred land and barren hills is generally in the range of 500-1,000 mu, and the pressure of seasonal employment is high. During the busy agricultural season, in order to ensure production efficiency (fruit down rate, tea down rate), some farms recruit workers in Chengdu and Chongqing. These farms are part-time in nature, often with fishing and sightseeing tours on the plantations.

Table 1: Type and structure of the 29 family farms

Farm business		Farm sources		Farmer role							
Industry Type	Number	Category	Number	Returning migrant workers	Returning students	ex-servicemen	retired cadres	local entrepreneurs	sophisticated farmers	Nonlocal business men	Nonlocal Specialized growers
Planting type	20	returning entrepreneurial	15	7	3	4	1	6	6		
Breeding type	7	autonomous development	12								

Combin ed	2	ent	2	1	1
		nonlocal investmen t			

In terms of the types of products, 29 family farms operate 31 types of agricultural and sideline products, including 7 types of "geographical indication products". The 9 family farms engaged in farming operate 13 types of meat and egg products and 2 types of forage and feed; the 22 family farms engaged in planting operate 11 types of fruits (with several individual products), 2 major types of vegetables (with several individual products), 3 types of dried tea, and 1 type each of tea green, rice and oilseed rape. This shows a high level of product differentiation and distribution among family farms in Guizhou Province, and a low level of product homogeneity[2] among family farms.

Table 2: Product mix of the 29 family farms

Vegetables/Grain s/Spices/Tea/Fodde r	Number of operated farms	Fruit	Number of operated farms	Livestock	Number of operated farms
Seasonal vegetables (more than 20 kinds)	3	Peach (Multi-category)	8	Pigs	3
Organic Vegetables	1	Plums (Multi-category)	4	Chicken	2
Pepper	1	Grapes (Multi-category)	3	Goats	2
Rice	1	Yang Mei	3	Sheep	1
Oilseed rape	1	Orange (Multi-category)	2	Piglet	1
Bamboo grass	1	Prickly pear	1	Cattle	1
White Tea	2	Cherry	1	Cockfight ing	1
Green Tea	2	Yuzu	1	Eggs	1
Chicken feed	1	Kiwifruit	1	Duck	1
Green silage	1	Apple	1	Rabbit	1
		Strawberry	1		

2.2 Common features of family farms

The research found that family farms in Guizhou province have four common characteristics: "outstanding comparative advantages, distinctive ecological characteristics, strong ability to drive farmers, and intensive labor force".

2.2.1 The obvious comparative advantage of family farms

Family farms around Guizhou Province combine their own advantages and regional conditions to develop an industrial development path with obvious comparative advantages according to local conditions. For example, the Guanyinfeng Yaoshan-Chicken Farm and the Xiaohuangniu Breeding Farm based on their own breeding experience and technical advantages, with the famous local geographical indication products as the industrial content, which not only make families rich, but also bringing wealth to surrounding farmers.

Guanyinfeng Farm adopts the cooperation model of "family farm + farmers", linking 600 farmers in the county to raise chickens to achieve income, while employing 18 farmers to work on the farm (average monthly salary of 3,000 yuan). 2021, the net profit of the farm to achieve RMB 600,000. Yang Yufeng farm uses the local barren hills to plant 500 mu of royal bamboo grass, developing an ecological cycle agriculture, raising 30 cows and boosting 10 surrounding farmers to raise cattle. The annual output of the farm is

5,000 tons of green silage and 15 beef cattle, with a total output value of RMB 600,000.

2.2.2 The distinctive ecological character of the family farm

Due to the geographical cut, Guizhou Province has high mountains and deep valleys, forming an agricultural landscape of eight mountains, one water, one field. In Guizhou Province, large-scale planting is less efficient than others and large-scale farming is less located than others, so it is difficult for family farms to win market advantages by producing homogeneous products. Therefore, to do better and stronger ecological brands, the development of ecological agricultural and livestock products has become a key internal factor for family farms in Guizhou Province to stand firm in the market, and has also become a common feature of family farms in Guizhou Province. 4 farms located in Sanhe Community in Longli county rely on climatic advantages to develop ecological vegetables to win the market outside the province. The ecological rabbits raised by Longtongwen Farm in Yao Lu Village, Sandu County, are exported to Chengdu. Dujiang Township has developed high-quality free-range black hairy pigs and fragrant pigs based on ecological advantages, which have steadily occupied the markets of neighboring counties since 2019. MiaoTian Farm in Huishui County has explored enzyme fertilization and developed 160 mu of organic rice and 40 mu of organic vegetables, with products in short supply.

2.2.3 Family farms have a strong ability to drive the development of neighboring farmers

The research found that family farms in Guizhou province have a strong ability to drive small farmers to farm and work. Statistically, the average annual labor expense among the 29 family farms (excluding family labor) was 370,600 yuan, with an average of 8.1 workers employed by each family farm. Among them, 17 planting family farms employed an average of 1,182 seasonal workers. The 3 breeding farms with the production mode of "family farm + farmers" have brought 710 farmers to increase their income from breeding.

Table 3: Job offers from farms

Farm	Provide jobs(excluding family labor)	Temporary workers per year	Bringing farmers around
Guanyingfeng farm	18	500	600
Baima Vegetable Farm	30	1500	20
Liqun Fruit and Vegetable Farm	20	6500	30
Luopincao tea farm	0	3000	5
Yurong planting farm	6	540	0
Kaixing farm	10	0	0
Chenxueming breeding farm	2	0	100
Longpan fruit farm	20	900	0
...			

2.2.4 Family farms are generally labour-capital intensive

Family farms in Guizhou province are generally labour-capital intensive industries. In terms of labour, planting farms require a lot of labor input and face greater seasonal labor pressure.²² plantation farms spend between 40% and 60% of their total input each year, reflecting the labour-intensive nature. In terms of capital inputs, planting farms have a high demand for infrastructure including industrial roads, flood drains, shelters, water, electricity and communications. breeding farms have special needs including sewage treatment facilities and manure collection tanks. The degree of infrastructure improvement determines the production costs, production efficiency and marketing behavior of farms. From the 29 family farms visited by the research team, the external transport location of the farms is generally good, but the internal infrastructure such as industrial roads, picking paths, water and electricity, internet, rain shelters, manure collection, flood drains and other infrastructure shortcomings are obvious. Family farms have a large proportion of

the infrastructure investment needed to build their production, showing greater financial pressure. Take the orchard shelter as an example, it can reduce the impact of rain on the fruit to improve the quality of fruit and products, but the cost per mu is about RMB13,000, the life of the facility is about 3-5 years, every 100 mu will need to invest 1.3 million yuan.

3. Main problems currently faced by family farms in Guizhou Province

3.1 The weak infrastructure of mechanization and high labor cost of farm production

Agricultural mechanization and farm equipment is an important basis for transforming rural agricultural production methods and improving rural labor productivity. 2021, the mechanization rate of plowing, planting and harvesting of major crops in Guizhou Province is only 44%, which is lower than the national average level of 71.25%. Among the 29 family farms randomly visited by the subject group, only 5 farms purchased farm machinery equipment. On the one hand, agricultural infrastructure and machinery and equipment have strong asset specificity and production seasonality, with a large window of use. On the other hand, Guizhou Province is located in the eastern part of the Yunnan-Guizhou Plateau, with rugged terrain, making the construction of rural mechanization infrastructure difficult and lagging behind in development. At the same time, the shortage of young and strong rural labor and the low level of development of the agricultural machinery service. The above factors together contribute to the high production costs of family farms. Especially family farms that grow food, Its average annual income is 95,000 yuan, which is 44,400 yuan lower than the average annual income of family farms in Guizhou 2021.

3.2 Breeding farms have a short sales radius and are easy to involution

Some unreasonable institutional regulations about livestock products need to be revised. Specifically, the quarantine baseline for the circulation of poultry products out of the province is too high (requiring an annual output of more than 10 million birds per county), which does not meet the grassroots reality. Breeding farms across Guizhou Province adopt an ecological farming strategy, with high product quality but generally small scale. In Libo County, for example, the county's annual poultry production of 1.3 million birds, these high-quality livestock and poultry products can only be circulated in the provincial market, resulting in adverse competition in the provincial livestock and poultry market, which seriously affects the income of farms and farmers. Because the products could not be circulated out of province, farms losses of plenty of orders from the internet live platform.

Table 4: Market prices of Yaoshan-chicken in 2022

Annual Output (Guanyinfeng Farm)	Wholesale price(locally)	Wholesale price(Guiyang)	Wholesale price(Beijing)
48,000kg	50 RMB/kg	60 RMB/kg	80 RMB/kg

According to the table above, if Yaoshan chicken (a geographical indication agricultural product of Libo County) can be shipped to Out-of-Province provinces for sale, Guanyinfeng Farm's sales can be increased by 45%, and accordingly, the income of farmers who work with the farm will be higher.

3.3 Imprecise support measures for family farms

The agricultural policies cover a wide range of support projects, but the research farm owners generally reflect that they did not receive the support policy. To be specific, first, some places have not systematic agricultural policy to support family farms. Second, some places will subsidize grain cultivation to land contractors rather than land operators. Third, some places will award funds to demonstration farms than the most need to support the start-up family farms. Fourth, banks have doubts about the qualification of family farms as market entities, and it is difficult for family farmers to obtain loans.

4. Countermeasure suggestions to promote the high-quality development of family farms

4.1 Nineteen measures to promote quality development of family farms

4.1.1 Macro level: preparation of development plans to orderly promoting high-quality development

Provincial and municipal governments should develop high-quality development planning for family farms, research to solve the common problems of family farms in funding, talent, productivity, productive construction land, land transfer, markets, etc., to guide the counties and townships to make good use of the universal policy.

One is to insist on both incentive and support, not only to reward model family farms, but also to recognize the work achievements of grassroots governments, focusing on spiritual commendations. For the performance of grassroots governments in incubating and developing new agricultural business entities, incentives will be given in the form of work achievements incorporated into assessment plus points and commendation briefings. Explore linking provincial commendations with financial policies and farm credit to establish evaluation system.

The second is to solve the problem of productive agricultural construction land, encourage the use of collective construction land, abandoned village land, idle factory buildings and other non-arable land resources for the construction of productive facilities as far as possible, and explore the mode of leasing drying halls and cold storage to solve the problem of sun storage for large households.

Third, to explore the dynamic adjustment of land rent, land shareholding guaranteed dividends and other methods of benefit distribution, stabilize the relationship between land transfer and protect the legitimate rights and interests of both family farms and farmers.

Fourth, improve the rural industrial development of business entities, encourage the complementary symbiosis of family farms + cooperatives, family farms + enterprises, give full play to their respective advantages, and cooperate deeply in production efficiency, market access, and agricultural services. Encourage specialized and socialized productive services.

Fifth, strengthen supervision and services to maintain the quality industrial image of family farms in the province. Mainly green supervision and green rewards for production links to ensure product safety and land safety, leading social enterprises, agricultural business entities and farmers to jointly maintain the industrial image of Guizhou Province's agricultural products of high quality and ecology.

Sixth, continue to work on agricultural mechanization infrastructure and agricultural machinery development, check the gaps, fill in the gaps and narrow the imbalance and inadequacy of production facilities between regions. Encourage scientific research and innovation by enterprises, equipment research institutes and others to research and manufacture machine farming equipment suitable for the characteristics of Guizhou province.

Seventh, exploring the mechanism of decreasing agricultural insurance costs at the provincial level, encourage and guide insurance enterprises to flexibly reduce premiums for model farms, credit farms and family farms with excellent technology and better risk control year by year, so as to reduce the burden of their insurance costs.

Eighth, The Provincial Government should reasonable adjustment to the quarantine provisions of poultry products. Specifically, downward adjustment of the baseline for quarantine certificates out of the province to ensure that the province's ecological quality poultry products can be circulated outside to reduce the adverse competition caused by the backlog of products in the province.

4.1.2 Meso level: Integrating county-wide resources to support the development of family farms in a precise manner

First, build a precise policy support system. On the one hand, more project support is given to start-up farms to alleviate the farm's investment in infrastructure. Specifically, use the Environmental Department's founding for sewage projects to build septic for breeding farms. On the other hand, insurance subsidies are given to family farms with mature development to reduce operational risks.

Second, credit mechanisms should be used to manage family farms. To be Specific, credit is linked to financial services to broaden the financing channels of family farms. credit linked to safety production to ensure the safety of agricultural production and the ecological safety of rural water, air and soil.

Thirdly, the capacity of farmers should be improved through training. On the one hand, highly targeted and hands-on training services should be provided, and there should be more case studies than theoretical classes. On the other hand, technical training courses should be conducted in the field.

Fourth, to explore various forms of technical services. Specifically, the establishment of incentive mechanisms to encourage various professionals to serve as tutors for family farms. Purchase technology services according to the local key industries. The government should make great efforts to cultivate rural agronomists and sophisticated farmers.

Fifth, maintain a good agricultural image. Create agricultural industries and brands according to the county's comparative advantages, traditional and the preferences of the masses. At the same time, the government should perform a good supervisory function, prohibit behaviors that only focus on efficiency without regard to the environment, and maintain the image of local ecological and high-quality agricultural industry. For example, the layout of the breeding farm should take full account of the environmental carrying capacity.

Sixth, the county government should build a cooperative and leasing mechanism for agricultural facilities and equipment (including farm machinery, cold storage, drying plants, etc.). Specifically, incentivize professional farmers' cooperatives to provide mechanized sowing, harvesting, storage, drying, processing and other services to improve the production efficiency of family farms.

4.1.3 Micro level: Autonomy of family farms to improve business capacity

First, farm owners should determine the industrial content of their farms according to their own advantages. Specifically, in making the industrial choice is to fully consider the location conditions, local agricultural traditions, experience and technology accumulation situation, comparative advantage and other factors.

Second, farm owners should accurately evaluate their own capital, technology, management and marketing capabilities, determine the size of their farms according to their capabilities, and ensure a moderate farm size.

Third, the farm owners should explore a production model that links the interests of farmers, for example, to take the form of "Return rent" or "Borrow chickens to lay eggs" to organize farmers to join, to provide farmers with technical and other services, which benefit is that acquired mass support.

Fourth, farm owners should raise their awareness of conservation, fully understand the inseparable relationship between environmental protection and agricultural development, reduce the use of pesticides and fertilizers, take the initiative to recycle solid waste, reduce sewage leakage, etc., contribute to sustainable development.

Fifth, farm owners should focus on innovation. Specifically, planting farms can develop labor education products for students and experiential products for parent-child, using the tertiary industry to subsidize the primary industry and expand income sources. Breeding farms can adopt the "farm +farmer" cooperation model to improve production capacity. The significance is that family farms can improve production and reduce production risks with the help of farmers, and farmers can increase their income with the help of family farms' technology and orders. When there are enough linked farmers, the production efficiency of family farms will be greatly improved.

4.2 Family farms should pay attention to coordinated internal and external relations

4.2.1 External relations

In terms of the external environment, the main influences on the production efficiency and market effectiveness of family farms are farmers' professional cooperatives, local large companies and other family farms.

First, the relationship between farm and farmers' professional cooperatives. In terms of cooperative relationship, farmers' professional cooperatives have advantages in labor, storage, transportation, and processing. Especially, agricultural machinery cooperatives can provide highly efficient mechanized seeding, pesticide spraying, harvesting and other services for family farms. Take

pesticide spraying as an example, agricultural machinery professional cooperatives use drones for operation, it only takes 20 minutes to complete 1 mu of land, if spraying pesticides by human, it takes 4-6 hours to complete 1 mu of land for an adult laborer. In the case of rice sowing, for example, the workload that takes 8 adult laborers 8 hours to complete can be completed in only 4 hours using a small rice planting machine. In terms of competitive relationships, farmers' cooperatives are larger, have greater government support, and have stronger bargaining power. Family farms should consider whether to produce the same products as professional cooperatives.

Second, the relationship between family farms and large local agricultural companies. Local agricultural companies have the advantages of capital, policy, technology, bargaining power, supply chain and so on. Family farms should reach a good cooperative relationship with local leading agricultural companies, use their market channels and brands, and seek their technical support to achieve complementary advantages.

Third, family farms should avoid vicious competition among themselves and establish a win-win partnership. Family farms competing each other in terms of market sales, seasonal labor, and government support fund. Family farms should actively establish a communication platform and commit to win-win cooperation. For example, in terms of product selection, farms can work together to create high-quality single products to create a scale effect and enhance market awareness or adopt a differentiation strategy to avoid the pressure from homogenization. In addition, farms should rally for more policies to upgrade local agricultural infrastructure.

4.2.2 internal relations

On one hand, farms should deal with the relationship between their own capacity and scale. If the scale is too large will directly lead to more input costs and greater risk. If the scale is small, the efficiency advantage cannot be fully exploited. On the other hands, family farms need to establish good relationships with farmers who rent land or hired, both for long-term business stability and to reduce inputs in management and supervision.

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