

Research on the Sustainability of The Scale Operation of Family Farms in China

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Abstract

Family farm operation refers to an agricultural production and operation model in which family members are the main labor force and engage in relevant agricultural production activities, and their income is the main source of income for the family. Compared with the one-family model in traditional agriculture, it is larger in scale and has a higher degree of commercialization, socialization and specialization, which has an important impact on China's agricultural development, and it effectively improves the efficiency of land transfer and the scale of land. It effectively improves the efficiency of land transfer and the scale of land operation. However, in the context of urbanization, family farms have also highlighted a series of problems. Through the analysis of the current situation of family farming operation, this paper compares the differences in the regionalization of family farming operation in China, so as to propose the development strategy of family farm scale operation according to local conditions and provide theoretical reference for its sustainable development.

Keywords

Family farm, Regional differences, Sustainable development.

1. INTRODUCTION

China is a large agricultural country, and agricultural family business has a long history, which has appeared at the end of primitive society and has been changed along with the continuous development of social productivity. Family farm, as a business model derived from the family joint production contract responsibility system, was first proposed as the main body of agricultural business scale in the report of the Third Plenary Session of the Seventeenth Central Committee in 2008, and has been developed and expanded in the following ten years, and has been developed in China's In the market economy, it has shown strong adaptability and operational advantages.

1.1. Family farm operation is an inevitable choice for the implementation of rural revitalization strategy

At the early stage of reform and opening up, the family contract responsibility system improved farmers' enthusiasm for production and increased grain production, but the "equalization of land" led to the scattering of land, and the low income led to the exodus of rural labor and the abandonment of land, which threatened China's food security. Family farms, as one of the main subjects of agricultural microeconomic organizations, are a model that operates agricultural products as a commodity to obtain a source of income, compared with the traditional agricultural self-sufficiency, which pursues the maximization of benefits and shifts agriculture from a security function to a profit function, and by the end of September 2021, the total number of family farms nationwide exceeded 3.8 million, with an average operation scale of 134.3 mu, and the degree of specialization, scale and specialization of agricultural products

production is increasing, which is absorbing surplus rural labor while narrowing the gap between urban and rural areas and helping revitalize the countryside.

1.2. Family farm operation is an important carrier of agricultural modernization process

The role of family farm operation in agricultural modernization lies in its promotion of the main links of agricultural modernization, such as agricultural scale, intensification, commercialization, specialization, industrialization, socialization of agricultural services, urbanization, informatization, mechanization, and technology. In the most basic issue of land rights and interests distribution, family farms maintain the principle of collective ownership of land, which can guarantee the relative balance of land rights and interests distribution, so that the interests of other villagers and village collectives will not be harmed, at the same time, family farms have economies of scale, within the scope of moderate management, can improve production efficiency by increasing the scale of operation, to promote agricultural efficiency and farmers with intensive and commercialized production, and the ability to resist risks. Therefore, the development of family farms is in line with the national agricultural conditions and is the optimal form of operation for the development of moderate scale agricultural operations in China to achieve the goal of agricultural modernization .

1.3. Family farm operation is a booster to promote the transformation of farmers in the new era

The operation mode of family farms promotes the reasonable transfer of land, and as the operation scale of land operators expands, the land requires higher quality of laborers, thus promoting the transformation of traditional farmers to new farmers. There are large differences in the development of each region in China, so regional synergy and agricultural economic development vary from region to region, thus making it difficult for the government to accurately introduce relevant talents. The development of family farms realizes moderate scale operation and promotes the promotion of new technologies in modern agriculture, which makes farmers gain income on the one hand and cultivates a group of new professional farmers on the other hand , while on the road of rural revitalization, agricultural management talents themselves are scarce and the demand for talents is very urgent, and the development of family farm operation relies on the reliable guarantee provided by excellent talents, which This promotes the transformation of traditional farmers to new farmers.

2. THE CURRENT SITUATION AND DIFFERENCES IN THE DEVELOPMENT OF FAMILY FARMS IN DIFFERENT REGIONS

2.1. The current situation of family farm development in different regions

China's natural terrain and climate types are complex and rich, and family farm operations show different operating states in different regions. Local family farm regions with significant differences include the Northeast Plain, the North China Plain, and the Southeast Hills, etc. The following are a few representative family farm development status and comparison of their differences to explore the development potential of family farms in China.

2.1.1. Northeast Plain - Jilin Province as an example

Jilin Province is a large agricultural province in China, located in the Northeast Plain, and its land resources are more suitable for the growth of corn, rice and other crops. The unique geographical advantage makes Jilin province not only develop rapidly with food and cash crops as the main planting items, but also make livestock and forestry development faster. On the one hand, Jilin Province is a source of national supply and demand for agricultural products through the family farming model, which is closely linked to the market and has developed the order production model as well as modern internet sales to increase the commodity rate of

agricultural products. In addition, the urbanization rate in Jilin Province is higher than the national average, but the land use rights in rural areas are always in the form of transfer, promoting the development of local land scale, so the phenomenon of land abandonment is not prominent. At the same time, the state has long attached great importance to the development of agriculture in Jilin Province, and has actively introduced relevant encouraging policies to continuously improve the local agricultural infrastructure and enhance the level of agricultural mechanization .

2.1.2. North China Plain-Henan Province as an example

Compared with the southern and northeastern regions, the land resources of the North China Plain are characterized by flat topography and small amount of people, scattered land and tight arable land resources, and the level of urbanization and industrialization in the region is not high. The agricultural resource endowment of Henan Province is typical in North China Plain, and it is typical to take Henan Province as an example to study the scale of land operation of grain-growing family farms in North China Plain. In recent years, the total number of certified family farms in Henan Province has been increasing, the scale of family farm development has been expanding, and the trend of rising economic returns is obvious. This is mainly due to the fact that local family farms, according to the characteristics of the local natural environment, have explored diversified business methods according to local conditions, broadened agricultural financing channels, carried out a new integrated model of production, processing and marketing, cultivated new economic agents such as large farmers and family farms, guided agricultural cooperatives The development of standardization, and the cultivation and growth of leading enterprises in the agricultural industry. On the other hand, the business model is adjusted, and plantation farms, farming farms and combined farming farms are developed according to local conditions .

2.1.3. Hilly areas-Chongqing Jiangjin District as an example

Hilly mountainous areas account for 2/3 of China's total area and are important production bases for food and special agricultural products in China, but compared with plain areas, hilly areas tend to have a staggered topography and scattered land. Whether it is the movement of earth, the planning of field type, or the supporting of agricultural tools, the cost of labor, material and time is very high, which limits the adjustment of agricultural production structure and the improvement of land output rate . As a typical example of southwest hilly mountainous area, Jiangjin District in Chongqing City, which has 99% of its arable land distributed in hilly mountainous areas, has strengthened the cultivation of family farms in recent years with the promotion of agricultural modernization and rural revitalization, showing exemplary results. On the one hand, it establishes a modern new type of modern agricultural management system of body type and compound type, and makes family farms develop jointly with farmers, cooperatives and leading enterprises by cultivating and developing agricultural industrialized consortia, forming complete industrial chains and mutual communities of interest , such as: through "family farms + cooperatives", "family farms + cooperatives + enterprises "The family farm + cooperative + enterprise" and other modes of operation can solve the problems of capital, production and product sales within the main body, and drive the surrounding farmers to enrichment and income. On the other hand, multi-model development strategy, in Ciyun, Longhua, Shimen and other towns to create a modern agricultural park, in order to promote the integration of industries in the district, industrial chain extension. And Jiangjin District is closer to the main city of Chongqing, in this regard, combined with the advantages of local resource endowment, and deeply explored the multiple functions and values of agriculture and rural areas to develop rural tourism. At the same time, Jiangjin District has continuously inclined its talents, policies and capital investment to rural areas, encouraging villages to actively cultivate

agricultural specialists and explore development models as a way to develop two new types of rural subjects, family farms and farmers' professional cooperatives .

2.2. Differences in the development of family farming industrial operation in different regions

The northeast region is often vast and sparsely populated, and family farms are suitable for large-scale mechanized production, which fully adopts the form of land use rights transfer to utilize the idle land resources, which is the obvious inferiority of northern China and hilly mountainous regions in developing family farms; while the north China plain region, which is similar to the situation in Henan Province, relies on its own economic advantages in tapping the local characteristics and carrying out a new The development of family farms in hilly areas, although their geographical terrain conditions are complex, Chongqing Jiangjin has made a model development approach, establishing a body-type, composite modern new agricultural management system according to the topographical characteristics of different regions, and taking the initiative to cultivate and absorb new agricultural talents, breaking the barriers of regional natural conditions. The above three regions reflect the development patterns of different regions according to local conditions, which are of reference for the development of family farms in other regions.

2.3. Problems of family farm development in each region

The development of family farms in each region is generally positive, but when investigating and studying them, a series of problems have been found, which are expected to be transformed into the development potential of family farms in the future.

In terms of the current development of family farms in Jilin Province: First, the overall rate of land transfer is slow, partly because farmers are influenced by the national policy of agricultural benefits, more attention to the land in their hands, reluctant to transfer the land, on the other hand, the flow of land to the urban capital side, prompting an increase in land transfer costs. Secondly, the weak repayment ability of the start-up family farms has led to the lack of trust of financial institutions in lending to family farms, making it difficult to finance family farms with credit. Third, the social service system is not perfect, most of the family farms in Northeast China are large, and their requirements in social services are high, the current social service system can not meet the needs of family farms at this stage in the management of agricultural products and legal advice ; on the other hand, the asymmetry between the access to information and the market of family farms has caused losses to the business interests of farmers.

The problems shown by family farms in Henan Province are: first, financing and loans are constrained; currently, there are few financial institutions in rural Henan Province that carry out financing and credit, and they can only coordinate loans from rural credit societies. However, due to complicated procedures, low quotas and short terms, they cannot provide important support in the scale operation of family farms and cannot meet their financial needs, so the credit services in rural areas are not very helpful to family farms, which to a certain extent affects the development of family farms. Secondly, there is a lack of management talents, and the rural areas are seriously aging, with little young and strong labor force and old planting experience, failing to keep up with the pace of agricultural modernization. Thirdly, land transfer is difficult, the fundamental reason is the lack of overall planning and market adjustment mechanism, which leads to slow and inefficient land transfer. On the other hand, farmers lack the motivation to transfer out their family contracted land for a long time, fourthly, the infrastructure is not perfect, and the investment in infrastructure construction in rural areas of Henan Province has long relied on the state treasury and the infrastructure construction department, and the local government has poor capacity for supporting investment and direct foreign investment, and the government support is not in place, resulting in the slow

construction of rural infrastructure and poor construction quality, which affects the development of family farms.

Take Chongqing Jiangjin as an example hilly areas show the following problems: First, although the new family farm business subjects are growing fast, but the quality of family farm development is easy to be ignored. Second, the quality of cultivation is biased toward the operation of larger family farms, small family farms rely more on their own operations, the ability to self-resist natural, market and technical risks are weak, and the lack of technical guidance, funding, product sales and other unified management. Third, the family farm industrial operation according to the geographical characteristics of the obvious trend of distribution, resulting in the lack of integration between industries, many family farms operating scale is limited by capital, technology, sales channels, coupled with their own positioning is not clear enough, follow the trend of planting, resulting in a surplus of agricultural products stalled, and then the phenomenon of land withdrawal.

3. FROM THE OVERALL PERSPECTIVE OF THE DEVELOPMENT OF CHINA'S FAMILY FARM SCALE BUSINESS PROBLEMS

To sum up the development of family farms in the three regions, we can summarize the general problems of the family farm business model in China at present:

3.1. Land transfer is not smooth

On the one hand, it is reflected in the poor flow caused by unclear land property rights. On the other hand, the lease period of land transfer is often short, which has a great impact on the long-term development of family farms; some farmers have a serious sense of small farmers, reluctant to contract farmland, forest land to family farms, so that family farms do not form a large scale, which is not conducive to the use of mechanized equipment, resulting in small-scale production, scale benefits are not obvious, the development of the entire family farm is greatly restricted.

3.2. Difficult credit for family farms

Family farms are affected by both the natural environment and the market environment, and the main risk-bearers are farmers with low repayment ability, so they can't avoid the difficult dilemma of loan. The development of family farms needs to invest in large-scale machinery and equipment, as well as to strengthen infrastructure construction costs, labor costs, pesticides and fertilizers, but the agricultural business has a long production cycle, and the characteristics of long-term investment, which will lead to a lack of farmers' liquidity, so that the process of farm operation will be a lack of funds, equipment replacement is not timely and other significant problems.

3.3. Policy support needs to be strengthened

The relevant departments in China have not yet formulated perfect rules and regulations and corresponding policy support for the actual situation and future development of family farms, and cannot ensure that farmers enjoy the corresponding tax benefits and agricultural insurance, thus discouraging farmers' enthusiasm, and in the event of natural disasters, the lack of insurance protection for family farms will cause great economic losses. Due to the high risk of investment, farmers are afraid to invest in the input, which also restricts the development of family farms.

3.4. The cultural quality of the main farm households is low

Due to the low education level of farmers, they are less able to accept new technologies and knowledge, and thus many advanced management models and new technologies cannot be

applied in practice, resulting in sloppy management and low technological content of family farms, which seriously restrict the development of family farms .

4. SUSTAINABLE DEVELOPMENT STRATEGIES

4.1. Standardize and improve the land transfer system

The government must exercise the right to manage land contracts, pay attention to and improve the rural social security system, and do its best to solve farmers' social security problems. The government should build a platform for land transfer, provide stable sources of land to family farms, and conduct legal propaganda for farmers to enhance their legal concepts and make them consciously abide by the contract. Through the efforts of many parties, the interests of both sides of land transfer should be maintained and protected, and the problem of land transfer of family farms should be solved in place, so as to promote the development of family farms .

4.2. Broaden financing channels

Actively guide and promote various commercial banks to handle loan business for farmers to solve the capital problem, and speed up the standardized development of various rural financial institutions such as urban commercial banks and small loan companies, on the other hand, adopt various forms of guarantee to ensure the timely availability of funds, such as: land counter-guarantee, one household multiple guarantee and other forms, and also a variety of farmers can be included in the scope of consideration of mutual guarantee, broaden the guarantee The scope to promote the development of various types of family farms. At the same time, it is also necessary to attract more financial institutions to participate, increase financial investment in family farms, improve various financial service systems, and conduct a strict ranking system for family farms that complete taxes on time and have high commercial credit, and give different degrees of interest rate preferences and subsidies according to the order of ranking .

4.3. Increase policy investment

The government should improve the socialized agricultural service system to provide protection for family farms. First of all, it should help family farms to carry out procurement of production materials, product exhibition and sale, and farm-to-super docking, etc. It should cooperate with agricultural research institutes to provide various advanced technical services for family farms free of charge, promote the popularization of technology, and enhance the level of science and technology. To strengthen communication and cooperation with the financial, financial, insurance and other departments to promote the implementation of the central government on the family farm related support projects, mortgage guarantees, credit support and other policies to further improve the family farm policy protection, improve the ability of farmers to bear the risk. At the same time, it is also necessary to increase the construction of farm infrastructure around the country to effectively ensure the supply of mechanization technology; increase the development of new products and new machinery, develop small and medium-sized, lightweight operating machinery suitable for the local area, and do a good job of testing and demonstrating new products and new machinery and promoting their application .

4.4. Cultivate new types of farmers

The government can rely on the new professional farmer cultivation project and agricultural research institutes to carry out special training for family farms, such as the cultivation of special crops, the application of information technology, and the certification process of agricultural products, so as to help family farm owners broaden their horizons, expand their ideas, and improve their management level. On the other hand, we should actively create a

market atmosphere to attract professional and technical personnel, and encourage stronger rural economic agents to actively participate in rural-related infrastructure and industrial development projects, so as to provide a broader market platform for economic agents and, on the other hand, to enable the ground-introduced talents to learn new technologies and receive reasonable remuneration.

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