

Research Progress on Agricultural Land Stock Cooperative

Jinghuan Zhu, Shilong Wang *

Guangxi Science & Technology Normal University, Laibin, China

*Corresponding author: wangshilong@gxstnu.edu.cn

Abstract. As a special form of land circulation, land joint-stock cooperatives have become a trend of land development in the future, and have attracted widespread attention in the academic community. Many scholars have conducted in-depth research on the research of the land share cooperation system, the reasons for its emergence, its role and the influencing factors of participation willingness. On this basis, this paper combs the land share cooperatives in order to provide some reference value for the comprehensive research and future development direction of land share cooperatives.

Keywords: Farmers, land share cooperatives, Participation willingness.

1. Introduction

With the rapid advancement of China's urbanization, a large number of young and middle-aged labor in rural areas have begun to move to cities to work, which has aggravated the increasingly serious phenomenon of aging in rural areas. The phenomenon of expensive employment and even abandoned land has emerged in rural areas, making the special form of land transfer, land share cooperatives, cause widespread concern in the academic community. As a new type of agricultural operation subject under the system innovation, land share cooperatives have not appeared for a long time, but the academic community has conducted the following research and Discussion on this new type of cooperative economic organization and related issues.

2. Research on land share cooperation system

Scholars at home and abroad have studied the innovation of land system and its causes. Harris believed that the emergence of a new generation of cooperatives not only fundamentally inherited the traditional attributes of the original cooperatives, but also introduced the characteristics of the joint-stock system [1]. Barton proposed in discussing the challenges faced by cooperative organizations in the development process that cooperative system innovation and structure should be adjusted, and new systems should be introduced to achieve coordinated development [2]. With the development of the secondary and tertiary industries, farmers gradually migrate to cities, which will inevitably force the birth of the demand for rural land leasing [3]. However, due to farmers' concern and fear of risks, they are unwilling to transfer their land use rights, which will inevitably hinder the development of the rural land market [4]. Therefore, some scholars have further explored and studied the rural land system. Different from the past, this perspective is from the perspective of land property rights and land circulation. Dower believed that the premise of land transfer was the clarification of land ownership, and deeply analyzed the impact of land ownership confirmation on Farmers' willingness and behavior to participate in land transfer. However, some scholars believe that the premise for the vigorous development of the rural land trading market is to privatize the land, so that it can be better circulated and traded in the market. Emerick found in the study of Mexico that the reason why farmers choose to move to cities and towns mainly depends on the ownership of land licenses, which will greatly increase the probability of farmers moving out to a certain extent [5]. Therefore, the reform of the land property rights system has made the local land transaction market active, and even some farmers have been transferred to cities one after another, which not only greatly reduces the land transaction cost of farmers, but also promotes the large-scale production and operation of local agriculture. Guo Xiaoming also repeatedly emphasized that a clear definition of property rights will also greatly improve the development of productivity and agricultural modernization, which can not

only further optimize the allocation of land factors, but also prevent farmers from losing their interests [6]. Therefore, in order to ensure social stability in rural areas and greatly improve agricultural production efficiency, it is urgent to speed up the determination of the content of agricultural land property rights. Otherwise, if the property right of the land is not clear, it will lead to that most farmers are unwilling to invest too much in the land, and even if they are willing to invest, it will be short-lived and predatory [7].

In addition, the implementation of the land joint-stock cooperative system not only affirmed the importance of property rights and innovated the property rights system, but also introduced the company's operation mechanism into it, further liberating the rural productivity[8], promoting the large-scale and modern operation of agriculture to a certain extent, and greatly improving the production conditions of rural residents, It will also be conducive to the development of the industry and the construction of the brand. From the perspective of economics, Berry believes that the development of the land market should be intervened by the government to a certain extent to avoid turbulence caused by market failure [9]. In recent years, with the continuous increase of the population, the area of agricultural arable land has been decreasing day by day. The contradiction between the two causes many scholars to focus on food security. As the source of food security, land naturally attracts more scholars' attention, which further promotes the innovation of the land share cooperation system [10]. At the same time, the transfer of farmers' land use rights will significantly improve land use efficiency and resource allocation, thus further improving farmers' living standards and avoiding risks to a certain extent [11].

3. Reasons for the formation of land share cooperatives

From the perspective of internal causes, land joint-stock cooperatives are an innovation in the land circulation mode in practice against the background of China's comprehensive implementation of land circulation. Because the family contract responsibility system, which was originally extremely advantageous, can hardly continue to be competent for modern agricultural production, which greatly reduces the efficiency of land management and seriously restricts the development of agricultural modernization and the adjustment of agricultural industrial structure in China [12].

Therefore, it is necessary to concentrate land to form scale effect, so as to improve the effective utilization rate of land. It can be seen that the establishment of land joint-stock cooperatives has been greatly promoted by the relevant policies of the state on land circulation [13]. The land use right that farmers enjoy in the land joint-stock cooperative makes the land property rights clearer, and also saves a lot of intermediate transaction costs [14]. Xu Xuchu believes that the increase of non-agricultural employment opportunities is an important factor to promote the birth of land share cooperatives [15]. In other words, when the non-agricultural income of farmers is higher than the agricultural income, farmers may transfer their land use rights to others after weighing the benefits and comparing the profits, or directly choose to join the local land share cooperatives, so as to improve their comprehensive income level. Shi Jinshan also believes that it is precisely because of the improvement of the degree of farmers' part-time employment that farmers no longer regard land as the only source of livelihood, which makes farmers' dependence on land gradually decrease, and thus promotes the birth of land share cooperatives [16]. Through the above research, we can see why land share cooperatives often develop in coastal areas with more developed economic conditions, such as the famous Nanhai model. In a word, the birth of land joint-stock cooperatives is the result of the joint action of market demand and institutional innovation, and it is also a kind of induced institutional change.

4. The role of land share cooperatives

The land share cooperative has optimized and upgraded the original allocation of land resources, greatly improved the comprehensive income level of farmers while improving the efficiency of

agricultural production and operation [17], and further promoted the development of rural collective economy and the optimization of village infrastructure [18]. Therefore, joining the land share cooperative has become an effective way for farmers to increase their income, but some scholars believe that the land share cooperative does not necessarily improve the overall land use efficiency. Cheng Guoqiang affirmed the innovation and practical value of land joint-stock cooperatives, believing that their role is mainly reflected in the exploration of land concentration and business model innovation under the circumstances of large-scale transfer of rural labor force and unmanned farming in agricultural production [18]. On the one hand, the land joint-stock cooperative takes into account the benefits of all interest groups. While ensuring the land output rate, it promotes the modernization and scale development of China's agriculture, which is very beneficial to the future development of agriculture.

Sun Dongsheng further proposed that promoting the development of land share cooperatives can not only promote the integrated development of primary, secondary and tertiary industries, but also have important historical significance for China's food security and farmers' income growth [19]. Luo Biliang and He Yiming believe that the birth of land joint-stock cooperatives has created a good balance between the ownership of rural collective economic organizations and the legitimate rights and interests of farmers, and has protected the interests of both sides to a certain extent [20]. Ma Yulei further confirmed through investigation and research that land joint-stock cooperatives do contribute to the growth of farmers' income [21]. Of course, the geographical location, organizational and management capabilities of land joint-stock cooperatives and the development of local economic levels also affect the extent of income growth to varying degrees. From the perspective of institutional economics, the emergence of this innovative model of rural land joint-stock cooperatives is derived from the reform of the rural land property rights system. It not only promotes the integrated development of urban and rural areas, but also lays a good foundation for the scale development of modern agriculture [22]. From the perspective of social division of labor, land share cooperatives have made the social division of labor among various economic entities more clear and professional, which has greatly improved the production efficiency of agriculture.

5. Study on Influencing Factors of farmers' willingness to participate in land share cooperatives

Land joint-stock cooperative is an era product of rural land system reform and innovation in China. As a special form of land circulation mode [23], previous scholars' research on Farmers' willingness to participate mainly focused on the following aspects.

Individual characteristics of farmers: according to the theory of planned behavior, individual intentions are affected by individual characteristics. It has been found that farmers' personal characteristics further affect farmers' cooperative intentions by influencing their behavior attitudes and perceived behavior control [24]. The research results of Ding Tao show that the age, gender and education level of farmers' individual characteristics have a significant impact on Farmers' willingness to participate in the transfer of rural land management rights [25]. Among them, the lower the education level, the younger the age and the lower the labor skills of the head of the household, the stronger his willingness to transfer land [26]. In addition, whether farmers are willing to join the land joint-stock cooperative is closely related to their own health. After all, land management is a labor that consumes a lot of physical energy. Therefore, with the decline of farmers' health level, their willingness to participate in land circulation can be improved to a certain extent.

Family characteristics of farmers: according to the theory of planned behavior, individual behavior intentions will be indirectly affected by family characteristics, that is, individual family business characteristics may affect their perceived behavior control, subjective norms and behavior attitudes, thus further affecting their willingness to cooperate. Luo Mingzhong found that the total family income and farmers' willingness to participate in land share cooperation showed a significant impact, and the higher the total family income, the greater the possibility of joining the land share cooperative

[27]. Lin Lefen and Ma Yanyan showed that the proportion of family agricultural income and the willingness of farmers to participate in land share cooperatives showed a significant negative impact, indicating that the lower the proportion of family agricultural income, the more willing farmers are to join land share cooperatives [28]. However, the proportion of household non-agricultural labor force is just the opposite, because the more non-agricultural labor force in the family, the more opportunities to engage in the secondary and tertiary industries, and the non-agricultural income is higher than the pure agricultural income. Therefore, the higher the proportion of non-agricultural labor force in the family, the more willing farmers are to join the land share cooperative to increase their total income [29]. In terms of the main source of household income, the willingness of farmers whose income source is mainly agriculture to join the society is significantly lower than that of farmers whose income source is non-agricultural. This is because the farmers who rely on non-agricultural income as their main source of income have relatively low land planting benefits, and they work outside for a long time and have less affection for the land, so the higher their willingness to participate in the share.

In terms of farmers' cognition of cooperatives, some scholars pointed out that the more members understand the nature and functions of cooperatives, the more they can correctly understand the relationship between their obligations and benefits, which is more conducive to the formation of positive attitudes [29]. The effective implementation of land share cooperatives can't be separated from the active participation and general recognition of farmers. Among them, the rational growth of farmers' individual behavior and their understanding and acceptance of land share cooperatives are also imperceptibly affecting the social reform in rural areas. Wu Linfang and Cheng Jing used logistic model to analyze the survey data of farmers, and found that farmers' cognition and understanding of land share cooperatives had a significant impact on Farmers' willingness to participate [30], which was also reflected in their recognition of the current land transfer policy. At the same time, the degree of trust in the organization and the farmers' cognition of the dividend method can also affect the farmers' behavior of joining the land share cooperative to varying degrees [31].

In terms of the social security system, it specifically includes medical insurance, endowment insurance and non-agricultural employment opportunities. Gao Jianzhong found that the higher the overall evaluation of farmers on local medical insurance, the stronger their willingness and behavior to join the society [30]. However, social endowment insurance and farmers' willingness to join the society have not passed the significance test, but the impact direction is exactly the opposite to expectations. It can be seen that whether farmers choose to transfer their land is closely related to the local medical insurance level. Therefore, farmers' concerns after transferring their land may be caused by the inadequate local social security system. Yang Zongjin proposed that the development level of local non-agricultural industries can also have an impact on the willingness of farmers to participate in land share cooperatives, and the non-agricultural employment opportunities obtained by farmers are positively related to their willingness to participate in land share cooperatives [31].

6. Brief comments

Through combing the existing literature, it can be seen that foreign scholars mainly study from the perspective of rural land innovation and the issue of "why there is land system innovation". Although there are many relevant studies on land share cooperatives in China, the empirical research is slightly insufficient, and there is a lack of research on the developing farmers' cooperative economic organizations. In addition, in the literature studied from the perspective of farmers, the focus is more on the more developed coastal areas in the East and central China, and there is no discussion on central China. However, as a part of China's agricultural development strategy that can't be ignored, the particularity of central China should be paid more attention to, so as to provide reference value for the development of land share cooperatives according to local conditions.

Acknowledgements

Funding: This research was funded by the Key Laboratory for the Green and Efficient Production Technology of Sugarcane, Guangxi Science & Technology Normal University (GXKSKYPT2021006); Laibin Talent Project for the Comprehensive Utilisation of Sugar Resources (Laibin Talent Project [2019] No. 12)

References

- [1] Harris A, Stefanson B, Fulton M. New Generation Cooperatives and Cooperative Theory[J]. American Cooperation, 2010, 11:15--29.
- [2] Barton,D.G(2011).Current Challenges in Financing Agricultural Cooperatives. Choices, 26, 105-125.
- [3] Kung,J.K.Chapter 3:The role of property rights in China's rural reforms and development[J].The Chinese Economy,2002,35(3):52-70.
- [4] Terry V D. Scenarios of Central European Land Fragmentation [J]. Land Use Policy,2003,20:149.
- [5] Janvry A D, Emerick K, Navarro M G, et al. Delinking Land Rights from Land Use: Certification and Migration in Mexico[J]. American Economic Review, 2015, 105(10).
- [6] Cheng Guoqiang, Luo Biliang, Guo Xiaoming, "agricultural co operation system": a new breakthrough in China's agricultural management system, red flag manuscript, 2015 (09), p19-21.
- [7] Chen Ming, Wu Xiaolong, Liu Zuyun Ownership awareness, local knowledge and practice of rural land ownership confirmation -- An Empirical Study on the confirmation of rural land contractual management rights in Hilly and mountainous areas of Guizhou Province [J] Agricultural economic issues, 2014 (2): 65-74.
- [8] Men Xiuqin. Investigation on the operation of Chongzhou rural land joint stock cooperative [J]. Journal of the Party School of Chengdu Municipal Committee of the Communist Party of China, 2013 (03): 93-96.
- [9] Berry A. The Case for Redistributive Land Reform in Developing Countries[J]. Development & Change, 2011, 42(2): p.637-648.
- [10] Unnevehr,L. &Hoffmann,V. (2015). Food safety management and regulation: International experiences and lessons for China. Journal of Integrative Agriculture, 14(11), 2218-2230.
- [11] Faguet J P , Fabio Sánchez, Villaveces M J . Land Reform, Land Fundia and Social Development at Local Level in Colombia, 1961-2010[J]. Social Science Electronic Publishing, 2015.
- [12] Wang lulu Research on Problems and Countermeasures of rural land circulation in China [D] Liaoning Normal University, 2011.
- [13] Elizabeth Brabec,Chip Smith,Agricultural land fragmentation:the spatial effects of threeland protection strategies in the eastern United States[J].Landscape and Urban Planning,2002(58):255-268.
- [14] Chen Huiguang, Qian Zhonghao, research on the surplus right and withdrawal right of farmers' land property in the land joint-stock cooperative system [J], China land science, 2011,25 (07), p19-24.
- [15] Xu xuchu. Talking about land share cooperatives again [J]. Chinese farmers cooperatives, 2019 (07): 52-53.
- [16] Shi Jinshan, research on the innovative value of Nanhai Community Land Shareholding System [J], modern township, 2006 (07), p7-10.
- [17] Liu Junjie, Zhang Longyao, Wang Mengjun, Xu Yuzhe, the impact of rural land property rights system reform on Farmers' income -- preliminary evidence from Zaozhuang, Shandong [J], agricultural economic issues, 2015,36 (06), p51-58 + 111.
- [18] Cheng Guoqiang, Luo Biliang, Guo Xiaoming, "agricultural cooperation system": a new breakthrough in China's agricultural management system, red flag manuscript, 2015 (09), p19-21.
- [19] Sun Dongsheng, Kong fanpi, Qian Jingfei, developing land share cooperation and integration of three industries is an effective way to ensure food security and increase food and agriculture income [J], agricultural economic issues, 2017, 38 (12), p4-7 + 110.

- [20] he Yiming, Luo Biliang. Agricultural land circulation, transaction costs and property rights control: Theoretical Paradigm and game analysis [J]. Rural economy, 2012 (01): 7-12.
- [21] Ma Yulei, Lin Jiamin, Jiang Hua, Zou fan, research on the impact of land joint-stock cooperative system on Farmers' Income Increase -- Based on the survey in Humen Town, Dongguan, Guangdong [J], Guangdong agricultural science, 2012, 39 (04), p201-204.
- [22] Wang Yan, Yang Junxiao Risk and prevention of leading enterprises driving agricultural industrialization [J]. Guangdong agricultural science, 2012 (6): 186-189.
- [23] Zhang Yunhua, Guo Cheng, Jiangsu case of agricultural management system innovation: land share cooperation and professional production contracting [J], reform, 2013 (02), p151-158.
- [24] Li Xiaojin, Liu Yiqin Analysis of cooperative members' willingness to deepen cooperation and its influencing factors -- Based on the survey data of farmers' professional cooperatives in Zhejiang Province [J]. JOURNAL OF HUNAN AGRICULTURAL UNIVERSITY (SOCIAL SCIENCE EDITION), 2015,16 (03): 26-31.
- [25] Ding Tao. Research on Farmers' willingness to transfer land contractual management rights -- Empirical Analysis Based on logistic model [J]. Economic issues, 2020 (04): 95-103.
- [26] Kong Xiangzhi, Xu Zhenyuan Analysis on the influencing factors of transferring out land farmers' choice of transfer objects -- Empirical Analysis Based on comprehensive perspective [J] China rural economy, 2010 (12): 17-25, 67.
- [27] Luo Mingzhong, Wan Panpan, Chen Jianghua The impact of rural land ownership on Farmers' participation in land cooperation -- An Empirical Analysis Based on a sample questionnaire survey of farmers in Guangdong [J]. Rural economy, 2018 (03), p31-36
- [28] Lin Lefen, Ma Yanyan, analysis of farmers' behavior choice and influencing factors in the process of Land Shareholding -- Based on a survey of 1007 households [J], JOURNAL OF NANJING AGRICULTURAL UNIVERSITY (SOCIAL SCIENCE EDITION), 2014, 14 (06), p70-79.
- [29] Meng Liu, Xu Chengguang, Zhang Ying, empirical analysis of influencing factors of farmers' land transfer behavior [J], statistics and decision making, 2017 (11), P 108-111.
- [30] Gao Jianzhong, Wu Linfang, Cheng Jing Analysis of farmers' willingness of farmers' professional cooperatives with land contractual management rights [J], Journal of Northwest A & F University (SOCIAL SCIENCE EDITION), 2012, 12 (01), p16-20
- [31] Yang Zongjin, Liu Siwei, empirical investigation on property right cognition, organizational trust and farmers' willingness to participate in shares [J], statistics and decision making, 2011 (13), p97-99.