

Research on the Governance of Non-standard Problems of Heterogeneous Agricultural Cooperatives in the Context of Digital China-Based on the Reality Observation from 355 Cooperatives in a County of Ganzi Prefecture, China

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Abstract: Accelerating the construction of digital China is an inevitable trend of The Times, and it is also an appropriate move to comprehensively promote rural revitalization. Over the years, the positive effect of the growth of China's agricultural cooperatives on the development of rural economy is undoubted, but many problems have been exposed in practice, such as the non-standard problems of shell cooperatives. This paper In the digital China context takes 355 cooperatives in a county of Ganzi as an example to study the types and reasons of nonstandard phenomena in the development of heterogeneous cooperatives, and then puts forward using digital technology to strengthen the principal-agent relationship of cooperative governance mechanism; propagandizing the new cooperative law, enhancing the sense of legal system of members and other governance suggestions to promote the healthy and high-quality development of agricultural cooperatives.

Keywords: heterogeneity of members; agricultural cooperatives; digital China

1. Introduction

With its strong penetration capacity, digitalization has extended to the fields of agriculture, rural areas and farmers, becoming an "accelerator" to bridge the digital divide and comprehensively promote rural revitalization and innovative development. Giving full play to the empowering effect of digitalization and speeding up digital China is an inevitable trend of The Times, and also an appropriate move to comprehensively promote rural revitalization. With the implementation of China's rural revitalization strategy, farmers' professional cooperatives have achieved rapid growth across the country. Despite their fast development, these farmers' professional cooperatives have shown a number of problems in their operational practices such as non-standard conduct, which compromised the role of farmers' professional cooperatives in leading the economic development of China's rural areas and lowered the performance of state financial funds in support of special projects. In order to better regulate farmers' professional cooperatives and promote their healthy development, the Ministry of Agriculture issued the *Opinions on Guiding and Promoting the Standardized Development of Farmers Cooperatives* in 2014. In December 2017, the Standing Committee of the National People's Congress adopted the revised *Law of the People's Republic of China on Farmers' Professional Cooperatives*, which came into force on July 1st, 2018, and imposed stricter legal constraints and penalties on non-standard organizations and conducts. X County, located in Ganzi Tibetan Autonomous Prefecture (hereinafter referred to as Ganzi Prefecture), has been at the forefront of agricultural cooperative development in the Ganzi Prefecture area in terms of scale and speed. Due to the different attributes of their members in terms of natural resources, human capital, and social network, most of the farmers' professional cooperatives in X County of Ganzi Prefecture adopt a heterogeneous membership structure. Considering the many non-standard conducts revealed in heterogeneous farmers' professional cooperatives over the past few years, this paper will probe into the phenomenon of non-standardization in heterogeneous farmers' professional cooperatives through observation on the actual conditions of farmers' professional cooperatives in X County, so as to enrich the theoretical research results on improving the governance of heterogeneous farmers' professional cooperatives and provide some guidance for the healthy and sound development of farmers' professional cooperatives in the local area.

2. Literature review

2.1 Literature on the impact of digital transformation on agricultural cooperatives.

In recent years, the academic literature on the impact of digital transformation on agricultural cooperatives mainly focuses on the connotation of digital countryside and the current situation and problems of the construction of digital countryside. Peng Chao (2019) believes that digital countryside is a modern agricultural and rural complex jointly led by digital technology and digital industry. Guo Hongdong and Chen Xiaowei (2018) believe that digital countryside is a new economic form that can improve the digital and intelligent level of rural industry by relying on digital economy and modern information technology. Wang Yaozong and Niu Minglei (2018) argue that digital countryside is an important part of the construction of digital China and an extension of smart society in rural construction. Wen Tao and Chen Yiming (2020) believe that the integrated development of digital economy and agricultural and rural economy in China is faced with great challenges, especially in the aspects of digital infrastructure, digital talent cultivation and data sharing system. Lv Pusheng (2020) believes that the urban-rural digital divide will affect the digital transformation of agriculture and rural social construction, and hinder the process of urban-rural integration. However, there is a lack of relevant research on digital countryside in ethnic minority areas. Lu Jutian and Chen Canping (2021) discussed the major challenges faced by the construction of digital countryside in ethnic minority areas from the overall level.

2.2 Literature on the governance of agricultural cooperatives.

Academic studies that examine the impact of membership heterogeneity on farmers' cooperatives can be divided into two major categories. The first category (and also the vast majority) of studies tend to see the impact of membership heterogeneity on member relationships in a negative light. According to these studies, membership heterogeneity would lead to problems including a lack of clarity in the property and governance structure, and also reduce the willingness of members to cooperate with each other (Fulton, 1999). This would create more difficulties for the decision-making and coordination within the organization while hurting the membership loyalty and the willingness to invest^[1]. When examined from the principal-agent relationship, the heterogeneous membership structure will bring about the agency problem, which will lead to a lack of motivation in ordinary members to participate in the democratic management of the cooperative and place the control of the organization in the hands of few^{[1][3]}. What's more, membership heterogeneity also gives rise to the free-riding behavior of small and medium-sized members, which would hinder the collective and unified action of the organization. On top of this, the inadequate internal management system and lack of standardized operation in heterogeneous cooperatives have also aggravated the agency problem between their members^[5]. Noticing the non-standard operations and conducts of these cooperatives, the Chinese government has revised and improved relevant laws, regulations, and guidelines such as the *Law of the People's Republic of China on Farmers' Professional Cooperatives*, so as to promote the standardized development of farmers' professional cooperatives^[6]. However, Another category of studies tends to look at the impact of membership heterogeneity on the relationship between members in a positive light. According to these studies, short-term membership heterogeneity can help supplement various scarce resources to farmers' cooperatives. This can not only help avoid the agency problem among members, but also promote the incentive mechanism of key factors within the cooperatives^[2]. What's more, membership heterogeneity can also help improve the economic efficiency within the organization and contribute to the complementation of advantages between the members^[4]. To sum up, existing literature has explored the impact of membership heterogeneity on farmers' professional cooperatives from both positive and negative aspects. However, previous studies lack an in-depth analysis of the effect of heterogeneous membership structure on the non-standardization problem of farmers' professional cooperatives. Although some scholars argue that the heterogeneous membership structure plays a positive role in the development of farmers' professional cooperatives, such a positive effect might not be able to offset the negative impact in the long run. Therefore, on the basis of the existing studies, this paper will focus on the non-standardization problem in heterogeneous farmers' cooperatives, survey and observe the real situations in farmers' professional cooperatives of X County, Ganzi Prefecture, analyze the different types and causes of non-standardization problems in heterogeneous cooperatives, explore the measures to better regulate the non-standard practices and conducts, and enrich the theoretical research results on improving the regulation of heterogeneous farmers' professional cooperatives.

3. Types and manifestations of non-standardization problem in heterogeneous farmers' cooperatives

X County, located in the southeastern part of Ganzi Tibetan Autonomous Prefecture, Sichuan Province, lies in the transitional zone from the Qinghai-Tibetan Plateau to the Sichuan Basin. X County has 7 towns, 5 townships, and 145 administrative villages under its jurisdiction. By the end of 2020, the county had 355 farmers' cooperatives consisting of 5,520 members. Among these 355 farmers' cooperatives, 176 were engaged in farming, 162 in animal husbandry, 3 in the combination of farming and animal husbandry, 10 in forestry, 2 in service, 1 in tourism, and 1 in handicraft. Currently, the county has 3 model farmers' cooperatives at the county level, 9 at the prefectural level, 11 at the provincial level, and 2 at the national level. Due to the strong heterogeneity between cooperative members in terms of resource endowment, education level, income level, and technological capacity, a number of non-standardization problems have emerged in the practices and operations of farmers' cooperatives in X County in the course of rapid development. According to the requirement on the standardization of cooperatives prescribed by the *Law of the People's Republic of China on Farmers' Professional Cooperatives* and the basic criteria on the standardization of farmers' cooperatives adopted by Tang(2019), in combination with the 355 survey samples in X County of Ganzi Prefecture, this paper classifies the non-standardization problems in farmers' cooperatives into three major categories, namely shell cooperatives, "one-person" cooperatives, and cooperatives with unclear operating entities.

3.1 Shell cooperatives

These cooperatives have neither involved any farmers as their members nor engaged in any substantive production or operation activities. That being said, these organizations are not intended as shell cooperatives when they were first established, but discontinued their operation and business later due to various factors, such as lack of sustained development momentum, short-lived operation, etc., until all they have left is just an empty shell. However, since they haven't handled the cancellation procedures with relevant registration authorities, they are still counted into the total number of "farmers' cooperatives" in the statistics. Under the supervision of relevant government authorities, X County has actively guided the cancellation registration of 174 "shell cooperatives". According to the survey results, there are several reasons that have led to the formation of shell cooperatives:

First, cooperatives established to benefit from favorable government policies, gain financing and loan support, or obtain state subsidies, which failed to achieve sound operation or management to generate a reasonable cash flow during the support period, and went out of business with the disappearance of financial benefits, leaving only an empty shell of the short-lived organization. Second, cooperatives established blindly to follow the general trend: in the early days after the implementation of the *Law of the People's Republic of China on Farmers' Professional Cooperatives*, many villages and towns noticed the favorable policies for cooperatives in the provisions, so they blindly followed suit and set up a large number of cooperatives. However, due to the lack of management expertise or operational experience of these cooperatives, their products failed to gain customer recognition in the market. In the end, the organizational structure of these cooperatives became virtually obsolete, their business declined and their members dropped out one by one from the organization, until they turned into an empty shell that exists in name only.

3.2 "One-person" cooperatives

According to the *Law of the People's Republic of China on Farmers' Professional Cooperatives*, there should be at least five or more members in a cooperative. However, the phenomenon of "one-person" cooperatives could be observed in real practice. A part of the 355 farmers' cooperatives in X County are found to be "one-person" cooperatives. On the surface, these organizations are registered in accordance with the provisions of the *Law of the People's Republic of China on Farmers' Professional Cooperatives*, but their ownership and operational rights all belong to a single person. There is no actual cooperative relationship between the organization and its members. Except for the actual controller, the rest of the farmers are only nominal members and have no right to participate or be informed about the development and operation of the cooperative. According to the survey findings, the actual controllers of such cooperatives are usually outside investors or large family farms with sufficient factor endowments. Tempted by the favorable policies for farmers' cooperatives, they have applied for the cooperative status to obtain financial support funds. These cooperatives are essentially

one-person companies, in which the relationship between the organization and its members is merely an employment or land transfer relationship. These cooperatives simply “borrowed” the local farmers’ register of names without even the knowledge of the farmer “members” themselves.

3.3 Cooperatives with unclear operating entities

Cooperatives with unclear operating entities are farmers’ cooperatives with multiple operating entities such as enterprises and family farms all at the same time. The president of the cooperative may also have multiple identities as the legal representative of another company or owner of a family farm. Under such circumstances, the operating entity of the cooperative would be quite unclear and its management would be rather chaotic. According to the survey findings, although different operating entities of these cooperatives have their own independent financial management system and accounting system on the surface, they are actually under the control of the same management team. The president of the cooperative has absolute control over its management and cooperative members are kept away from the actual management of the organization. In a cooperative run by multiple operating entities, the ordinary farmers are only nominal members who do not exercise the rights or fulfill the obligations of members, and the profit distribution of the cooperative is dominated by only a handful of people. On top of this, different operating entities in the cooperatives would apply for financial support funds using different identities and through different channels, resulting in repetitions of occupancy of financial resources, low efficiency of fund utilization, and unfair distribution of financial support.

4. Root causes for non-standardization problem in heterogeneous farmers’ cooperatives

There are multiple reasons that have led to the non-standardization problem in farmers’ cooperatives. On the one hand, non-standardization is the result of the agency problem that exists in the organizations themselves; on the other hand, non-standardization is also related to the excessive external policy support and loopholes in the government regulatory system. The relatively low cost of non-compliance has fueled the motivation for non-standard conduct of the cooperatives.

4.1 The agency problem in farmers’ cooperatives

Farmers’ cooperatives are an economic organization whose ownership is shared among many members. The development foundation of cooperatives lies in the common economic interests of all its members. However, due to the agency problem between core members and small/medium-sized members, as well as between common members and management of the cooperatives, disputes and conflicts emerge as a result of the inconsistent objectives and goals of different subjects. For example, under the situation of heterogeneous membership structure, especially when certain core members (such as corporate members and large family farms) have a bigger say in the organization, the differences in members’ influence power can easily give rise to non-cooperative games. Under such circumstances, it’s quite likely that the core members won’t act on behalf of all members of the organization. In particular, they won’t act in the way desired by the vast majority of small and medium-sized members, as they have very different interests from that of the latter. Thus, the core members would in turn become the real controllers of the cooperative and give rise to the insider-control problem. In addition, when examined from the relationship between all members and the management team of the cooperative, common members tend to be “free-riders” due to the high cost of supervision over the management team. Under such circumstances, core members and common members of the cooperative would form consistent interests in terms of supervising and restraining the management team, so the relationship between all members and the management team would manifest as the agency problem between the core members and the management team.

4.2 Lack of internal governance mechanism

An inadequate internal governance mechanism has further aggravated the prevalence of non-standard conducts and practices in farmers’ cooperatives. For example, there’s one cooperative focused on the planting of morel mushrooms in X County, Ganzi Prefecture. This cooperative covers nearly 26,700 m² of land and has over 30 farmer members, making itself a fairly large cooperative in X County. However, this cooperative failed to establish a standard internal governance mechanism during its development. Although it has set up a supervisory board, this board doesn’t play that much a role in the management of the organization and is virtually of no use—it has neither achieved the desired

function of supervision in the major decision-making of the cooperative, nor realized transparency in management affairs or financial disclosure. In addition to this, some farmers' cooperatives haven't established a standardized financial management system, which created opportunities for the management personnel to misappropriate and embezzle the cooperative property. According to relevant laws and regulations, farmers' cooperatives must be equipped with professional accounting staff or hire bookkeeping companies, but the survey shows that some cooperatives lack accounting staff or keep accounting staff that's not professionally competent, resulting in the chaotic management of cooperative accounts, severe distortion of accounting information, and rampant corruption.

4.3 Excessive support of government policies

Farmers' cooperatives are highly subject to the policy environment of the countries in which they are located. Different national policies and industry support would shape the various development paths of farmers' cooperatives while giving rise to the non-standardization issues. With the implementation of China's rural revitalization strategy, favorable policies for developing farmers' cooperatives were rolled out by the government one after another, forming a relatively relaxed institutional environment for cooperatives. As can be observed from the specific provisions in both the old and revised *Law of the People's Republic of China on Farmers' Professional Cooperatives*, there are more policies targeted at "supporting" the farmers' cooperatives rather than "supervising" them. Under such circumstances, some grass-roots towns and villages have arranged for government support funds to focus on farmers' cooperatives with a stronger driving effect. As a result, these cooperatives gradually got into the bad habit of relying on the "blood transfusion" of government funding, instead of "generating blood" through independent and efficient operation in the market economy, which has deviated from the original purpose of their establishment. Therefore, although the favorable external policies have facilitated the rapid development of farmers' cooperatives, they have also given rise to the non-standardization problem in these organizations to some degree.

4.4 Inadequate regulatory and legal system

As the major target of the *Law of the People's Republic of China on Farmers' Professional Cooperatives*, most of the prescriptions on the operations and management of farmers' cooperatives are intended to guide their development and growth, without forming a clear and complete system on the regulation or legal responsibilities of the cooperatives. Although the revised *Law of the People's Republic of China on Farmers' Professional Cooperatives* that came into force in July 2018 added certain provisions on the legal responsibilities of cooperatives, both the old and revised laws have generally dealt with the unlawful conducts or practices of the cooperatives in a lenient manner. From the perspective of government supervision, there are still loopholes in the source and process supervision of cooperatives. For example, the industrial and commercial administration should have assumed the main responsibility for supervising cooperatives, but due to the aggressive development campaigns by local governments and the lack of assistance from other relevant authorities, it's difficult for the industrial and commercial administration to effectively identify the authenticity of the materials submitted by farmers' cooperatives from the very beginning. In addition, since the operation of cooperatives involves different government departments including agriculture, forestry, science and technology authorities, etc., a cross-management pattern has been formed in practice^[7]. As a result, non-standardization issues have cropped up one after another in the operations of the cooperatives. To sum up, the inadequate regulatory and legal system targeted at farmers' cooperatives, lack of clarity in the regulatory authority, and the lenient punishments for violations of relevant laws have provided ample space for the "arbitrary operations" of cooperatives and severely damaged their reputations.

5. Suggestions for improving the governance mechanisms of farmers' cooperatives

In view of the current non-standardization problem in the development of farmers' cooperatives in China, coupled with the increased competition and cooperation between farmers' cooperatives and the emerging agricultural operating entities such as family farms, it is imperative that relevant authorities improve the internal and external governance mechanisms of farmers' cooperatives to promote their standardized and healthy development^[8].

5.1 Using digital technology to strengthen the principal-agent relationship of cooperative governance mechanism

Most of the farmers' cooperatives in X County, Ganzi Prefecture have a heterogeneous membership structure. In these cooperatives, a good governance structure has not yet been formed: the decision-making power is concentrated upon a handful of core members, while ordinary members are in a weak position and kept away from the operation of the organization. In view of this, a governance model that relies on the internal governance of core members would be a good choice. That is to say, in heterogeneous farmers' cooperatives, the key to solving the problem of the principal-agent relationship is to give full play to the supervision and incentive mechanisms of the organization. Generally speaking, the supervision mechanisms of rural cooperatives can be divided into the internal supervision mechanism and the external supervision mechanism. The former functions through the general meeting of cooperative members, the council, and the supervisory board, while the latter mainly relies on government supervision. Digital technology has the ability to reduce the degree of information asymmetry, improve the level of governance of cooperatives by reducing the irrational degree of managers' decision-making behavior, improve the establishment, revision, implementation, supervision and feedback process of enterprise internal control system, help managers find problems in time, reduce business risks, and alleviate the contradiction between "limited knowledge" and "unlimited decision-making".

5.2 Strengthen the publicity of the Law of the People's Republic of China on Farmers' Professional Cooperatives and enhance the legal consciousness of cooperative members

The revised *Law of the People's Republic of China on Farmers' Professional Cooperatives* plays a positive role in defining the business scope of cooperatives, prescribing the forms of capital contribution by members, and guaranteeing the status of cooperatives as market entities, which has provided stronger support for regulating the non-standard conducts and practices of farmers' cooperatives. Taking advantage of the implementation of the revised law, relevant authorities can launch campaigns to boost its dissemination and publicity, provide relevant courses to increase the public's knowledge of the revised law, educate farmers about the revised law in combination with typical real-life cases, so as to guide the healthy growth and development of cooperatives. Apart from these, it is also suggested that relevant authorities carry out a comprehensive census of farmers' cooperatives, and de-register the large number of "shell" cooperatives through detailed investigation and review. For cooperatives with other non-standard conducts and practices, relevant authorities should require their legal representatives to study the revised law and order them to rectify their practices within a time limit prescribed by the law. For those cooperatives that still fail to measure up to the requirement of the Law after rectification, relevant authorities shall de-register them or allow them to transform into other business entities such as enterprises and large family farms according to the specific situation, so as to build a sound "exit system" for farmers' cooperatives.

5.3 Improve the external supervision mechanism and strengthen the penalties for unlawful conducts

To improve the external supervision mechanism for farmers' cooperatives, first, competent authorities should strengthen the authenticity verification of the application and registration materials submitted by the cooperatives; second, relevant authorities should tighten inspections on the operations of the cooperatives to ensure their standardization and compliance. For those cooperatives that have provided false application materials to obtain state financial funds, relevant authorities should rectify their practices or even revoke their qualification as cooperatives. Through regular on-site inspections and the use of big data technology, relevant authorities should identify the non-standard and unlawful conducts in the operation process of cooperatives and give timely instructions on their rectification. For cooperatives that have gained financial support from the government for special projects, performance assessment and big-data evaluation should be carried out on the project. As for enhancing the cost for violations of law, relevant authorities should cooperate with law enforcement agencies to strengthen the supervision and penalties on cooperatives with unlawful conduct and disqualify organizations with severe violations of laws and regulations. For cooperatives suspected of being involved in illegal conduct, regulatory authorities should report them to the judicial organs immediately and hold them accountable according to the provisions of law.

5.4 Cultivate acollaborative culture and introduce informal institutions into the governance mechanism

Making full use of the campaign in cultivating a strong local culture, cooperatives should actively enhance the consciousness of participation, cooperation, and responsibility among their members, establish proper agricultural production and operational philosophy under the new concepts of agriculture, rural areas, and farmers, and effectively enhance the loyalty of their members. The integration of culture, morality, customs, and other informal institutions into the governance mechanism of cooperatives can significantly promote the collaboration between different members based on mutual benefit and integrity, while effectively addressing the agency problem in the principal-agent relationship. The management team should uphold the professional ethics of objectiveness and fairness, actively commit themselves to the daily operation and management of the cooperative, take concrete measures to improve the governance mechanism of the organization, and build a good social environment for achieving the goals of farmers' cooperatives under the heterogeneous membership structure.

6. Conclusion

There is no doubt that the standardized growth of China's agricultural cooperatives plays a positive role in the development of rural economy. By reducing the degree of information asymmetry and the irrational degree of managers' decision-making behaviors, the digital transformation improves the governance level of agricultural cooperatives and promotes the standardized development of agricultural cooperatives. Based on the analysis of the causes of non-standard heterogeneous agricultural cooperatives in a county of Ganzi Prefecture, this paper puts forward policy suggestions on regulating the development of agricultural cooperatives in the background of digital China, thus expanding the ring the realistic path of high-quality development of rural collective economy in minority areas under the background of digital China.

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References

- [1] Cui Baoyu, Li Xiaoming(2008). *Study of Constraints on Endogenous Capital Supply in Heterogeneous Cooperatives: Based on Linhai Fengyi Cooperative in Zhejiang Province [J]. Finance and Trade Research, (40):40-41.*
- [2] Kong Xiangzhi, Jiang Chenyou(2010). *Heterogeneity among Members Influencing the Governance Mechanism of A Cooperative—A Case Study of the United Fruit Cooperative in Jingyan County, Sichuan Province [J]. Rural Economy, (9):8-9.*
- [3] Qi Huaijin, Cao Xiuqin, Liu Yanxia (2020). *The impact of digital economy on Corporate Governance: From the perspective of Information asymmetry and managers' Irrational Behavior [J]. Reform, (04):50-64.*
- [4] Zhang Jinghui.(2012).*Influences of Homogeneity and Heterogeneity on Farmers' Professional Cooperative—Study Based on Club Theory [J]. Qilu Journal,,(1):86-87.*
- [5] Zhao Bin, Toheter Tawuken(2016). *Cooperative Development and Ethnic Culture Inheritance:A Case Study of the Embroidery Cooperative in Ashenli Kazakh Ethnic Township, Changji, Xinjiang[J]. Journal of Changji University,(1):17-23.*
- [6] Tang Ligui(2019). *Study on the Irregular Phenomenon in the Development of Farmers' Professional Cooperatives [J]. Chongqing Social Sciences, (2):97-101.*
- [7] Gu Qingkang, Lin Lefen (2021). *Analysis on Information Transmission, Family Endowment Insurance and Farmers' Participation in Agricultural Scale Management—A Case Study of Farmers' Farmland Share Cooperatives' Participation Decision-making [J]. Journal of Agrotechnical Economics, (3):121-131.*
- [8] Fulton (1999), M. *Cooperatives and Member Commitment. Finnish Journal of Business Economics, (14): 418-437.*