

A Review of Theoretical Studies on the Organic Connection between Small Farmers and Modern Agricultural Development

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Keywords: Small farmers, Modern agriculture, Organic connection

Abstract: The report of the 19th National Congress of the Communist Party of China has made a major decision to implement the strategy of revitalizing the countryside. It clearly states that the organic connection between small farmers and modern agricultural development should be achieved, and the organic connection between small farmers and modern agricultural development should be promoted. Its essence is to solve the contradiction between decentralized small-scale operations and socialized large-scale production. Regardless of whether China's agricultural modernization can take a new path beyond the large farm model and the small farm model, more practical explorations and theoretical innovations need to be made. This article sorts out the connotation, development status, current connection mode and connection path between small farmers and modern agriculture. It can provide assistance for further research on the organic connection between small farmers and modern agricultural development in China.

1. Introduction

General Secretary Xi Jinping pointed out in the report of the 19th National Congress of the Communist Party of China: "To implement the strategy of rural rejuvenation, we must realize the organic connection between small farmers and modern agricultural development." In 2018, the Central Document No. 1 proposed that overall planning and consideration should be given to cultivating new agricultural operators and supporting small farmers. It is needed to take targeted measures to introduce smallholder production into the development track of modern agriculture. The practice of linking small farmers with modern agriculture is still being revised and developed. The relationship between small farmers' production and modern agricultural development is weak. In this process, how to meet the modernization needs of agriculture under the conditions of traditional small-scale operation is a core issue.

2. The Status of Small Farmers and the Development of Modern Agriculture

2.1 Development Status of Small Farmers

Small farmers are the key to understanding agriculture, rural areas, and farmers' issues, and are the basis for studying agricultural issues (Liu Jinhai, 2013). Vander Pregel pointed out that small-scale farming is not just a problem left over from history, but also an indispensable part of social progress. The existence of small-scale farmers is of great significance and makes our lives better.

The issue of smallholder farmers in China is more complicated. Therefore, to understand contemporary Chinese smallholders, we must first break away from the shackles of the traditional "closed and backward" epistemology, reverse the long-standing ideological stigma of smallholder groups, and pay attention to the characteristics of smallholders, society and nature (Pan Lu, 2012). Huang Zongzhi (1986) put forward the viewpoint of "commodity small farmers". He pointed out that with the conversion of land rent from the traditional sharing system to the quota system, the relationship between smallholders and landlords has gradually escaped the restrictions of complicated etiquette and customs, and the relationship of agricultural production has become a

pure commodity relationship. But the commercialization of agriculture has led to the differentiation of small farmers. The World Bank has made the definition of smallholders in depth and detailed, and classified farmers whose land area is less than 30 mu as smallholders (Si Mingyu, Jin Ziwei, 2019). Chayanov (1996) believes that “small farmers” refer to the owners or tenants of small plots of land (especially the identity of the owner). Frank Ellis (2006) believes that “small farmers not only represent a low social identity, but also represent past history.” Since the reform and opening up, smallholders have rapidly socialized and gradually evolved into socialized smallholders (Xu Yong, 2007). Farshad Araghi pointed out the core characteristics of the definition of the concept of smallholders: at the most basic level, smallholders are traditionally defined as agricultural participants who have direct access to the production of their way of living. The core of the concept definition is their production logic, namely survival. At this stage, the academic circles have not yet formed a unified concept for the definition of small farmers. The explanations of these theories on the economic behavior of small farmers are limited to specific historical conditions and institutional environment. Therefore, to effectively explain China's small peasant economic behavior and its characteristics, it is necessary to draw on existing theoretical paradigms, but also to explain them in a new social context (Xu Xuchu, Wu Bin, 2018). Kirsten Johnson (2005) and others emphasized that when defining small farmers, it is important to clarify what small farmers have in common, that is, some of their key characteristics. Han Changfu (2018) pointed out that the back of agricultural modernization is farmer modernization. The large number and long-term existence of small farmers is a big difference between China and the general agricultural developed countries. To achieve a joint solution to the problems of agriculture and farmers, small farmers must be included in the common track of modern agricultural development, and the ability of small farmers to develop modern agriculture must be continuously improved.

2.1.1 The Characteristics of Small Farmers

(1) Part-time business has gradually become the mainstream. With the acceleration of China's agricultural modernization process, urbanization, and industrialization, more and more high-quality rural labor is transferred to cities. This has resulted in the obvious part-time operation of small farmers. Small farmers no longer rely solely on the source of income from the land, but also take other measures to increase their economic income. It can be seen that part-time farmers have split into the largest group of farmers in China. Under the goal of maximizing family income, it is also a rational choice for farmers to choose part-time operations (Qian Zhonghao, 2008).

(2) Traditional culture has deep genes. The traditional Chinese agricultural culture has been closely related to the production methods of small farmers since its inception. The small farmer's production method gave birth to traditional agricultural culture. The traditional agricultural culture has provided ideological soil for the continuation of small-scale farmers' production methods, and the traditional cultural values rooted in small-scale farmers' production methods are still playing a role. On the one hand, traditional agricultural culture facilitates the preservation and maintenance of factors for farming civilization. On the other hand, the traditional agricultural culture also makes small farmers more confined to their own land, their vision is not broad enough. Therefore, without cracking the genes of traditional agricultural culture, it is difficult to achieve the goal of modern agricultural transformation.

(3) The degree of risk aversion is high. This is one of the important differences between small farmers and middle farmers and large farmers. Small farmers have poor risk tolerance. Scott (1976) believes that risk aversion is the dominant motive for smallholder economic behavior. The most serious risks that agriculture suffers are natural risks. The second is market risk. Finally, there is technical risk.

2.2 The Development Status of Modern Agriculture

Since the reform and opening up, China's agriculture has developed rapidly, basically meeting the needs of the huge population for agricultural products. However, it is undeniable that the current basic position of agriculture is still quite fragile, and agriculture is still the weakest sector in the national economy. Therefore, China is trying its best to explore and find a path of modern

agricultural development with its own characteristics. It is generally believed that the main characteristics of modern agriculture are reflected in the following aspects (Mao Fei, Kong Xiangzhi, 2012): marketization, technology, industrialization, mechanization, and socialization.

Modern agriculture is a complex system with a clear division of labor, a high degree of specialization, and a great influence from external factors such as politics and economy. Simply put, modern agriculture is divided into the following parts. One is the production of farmers. Second, instead of farmers, some suppliers are engaged in the production of agricultural elements, and farmers obtain these elements from suppliers. The third is the production of agricultural products sales, transportation and processing that are not completed by farmers. All kinds of materials needed for modern agricultural production, including fertilizers, pesticides, seeds, machinery, etc., all come from external market inputs. And agricultural products are no longer consumed locally, but consumed remotely through the market. Despite the differences in national conditions and people's conditions, the modernization of agriculture in all countries seems to pursue a common goal: "Improve technology as a means to save production costs, create surplus value, reduce agricultural employment as the goal, and to large-scale, collectivization, and exclude small-scale The single-family production method is a form, and modern agriculture is gradually highlighted in the trend of mechanization, chemistry, informationization and standardization."

3. Analysis on the Existing Models of Linkage between Small Farmers and Modern Agriculture

The connection between small farmers and modern agriculture is a dynamic evolutionary process. In recent years, various specific models of organic connection between small farmers and modern agriculture have emerged at home and abroad, which have played a role as a reference and demonstration for the organic connection between small farmers and modern agriculture in my country.

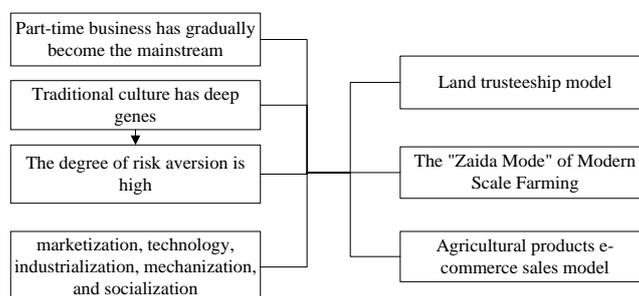


Fig.1 Connection Mode

In general, according to the current state of China's agricultural development, the following three models are the most successful in exploring ways to incorporate smallholder farmers into the development track of modern agriculture (He Yupeng, Wu Shunchen, 2019). The first is the land trusteeship model that replaces land-scale operations with service-scale operations in land-intensive planting industries (mainly food production) to achieve agricultural-scale operations. The second is the "Zhengda Model" in the capital-intensive animal husbandry industry, through the innovation of the government and social capital cooperation model to achieve "farmer ownership, enterprise management" modern scale breeding. The third is an agricultural product e-commerce sales model that directly connects producers and consumers through the Internet in labor-intensive agricultural specialty industries to reduce transaction costs and increase agricultural operating income. This model is represented by Taobao.

4. The Basic Path of Organic Connection between Small Farmers and Modern Agriculture

With the development of modern agriculture in China, small farmers have become closely related to it. The production materials and technology of modern agriculture have been integrated into the production of small farmers, and the production efficiency and benefits of small farmers have been improved. The integration of modern agricultural elements makes the relationship

between small farmers and modern agriculture appear. But in general, the relationship between small farmers and modern agriculture is still relatively fragile at this stage, so how to do a good job of connecting the two has become an argument.

Based on the author's discussion on organic convergence, the following four specific approaches are summarized and discussed in detail.

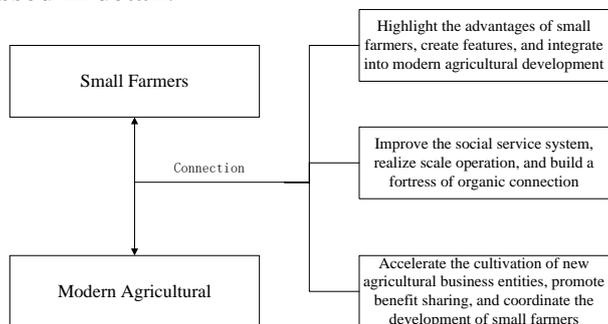


Fig.2 Connection Path

4.1 Highlight the Advantages of Small Farmers, Create Features, and Integrate into Modern Agricultural Development.

Zhang Hongyu (2017) believes that to realize the organic connection between small farmers and modern agricultural development, it is necessary to take the road of agricultural development with Chinese characteristics. In terms of development concepts, systems and policies, we must attach importance to and guide small farmers. Small farmers have a small investment and strong variability. Combining the characteristics of the region's climate and cultural differences will help create the characteristics of the region. Through the development of regional advantages, appropriate guidance will be given to small farmers to promote the development of regional scale characteristics, create geographic brands of various business types, and create and develop “one village, one product” and “one village, one product”. Thereby forming characteristic small villages and small towns. This can not only build a brand but also promote the development of rural tourism. Small farmers participated extensively, selling their own agricultural products and transforming their idle houses into guest houses. Small farmers should appropriately process semi-finished products or finished products according to their own characteristics of agricultural products to increase the added value of agricultural products. Small farmers can develop agricultural sightseeing activities, creative agriculture, experience agriculture, and develop solitary farmhouses based on diversified products to realize the connection between small farmers themselves and secondary and tertiary industries. Third, small farmers have strong adaptability and low management costs. It is also necessary to give full play to the utilization rate of land to adapt to the development of modern agriculture.

4.2 Improve the Social Service System, Realize Scale Operation, and Build a Fortress of Organic Connection

A sound agricultural socialized service system is the key guarantee for realizing China's agricultural modernization and service scale. In the process of developing modern agriculture in China, many typical cases have appeared everywhere. They have well realized the scale of services on the basis of the organization of farmers, and to a certain extent improved the local agricultural socialized service system. However, there are some obstacles to the production of small farmers in connection with modern agriculture. For example, the scale of land management is too small and fragmented, the main body of land transfer scale management faces greater business risks, and the land transfer has greater negative economic effects (Kong Xiangzhi, Mu Nana, 2019) and so on. Therefore, for ordinary household contracted management farmers, in what way and form to achieve agricultural scale operation is a major decision. In order to expand the business scale of small farmers and solve the problem of land fragmentation, it is necessary to improve the social service system, rely on industry as the basis, and provide targeted assistance based on the

characteristics and needs of small farmers' production and operation (He Qiujie, Wan Yuanying, 2018).

4.3 Accelerate the Cultivation of New Agricultural Business Entities, Promote Benefit Sharing, and Coordinate the Development of Small Farmers

How can we change the current organizational weakness of small farmers and promote their compatible development with modern agriculture? In fact, policy makers have also seen the problem and are constantly seeking ways to solve the problem. At present, the most representative path is through leading enterprises, farmers' professional cooperatives, family farms and other new agricultural business entities, as well as new agricultural service entities that provide various types of agricultural social services. Promote and organize small farmers with vertical integration and large-scale services to realize their compatible development with modern agriculture.

5. Conclusion

Although smallholder agriculture has many advantages such as intensive farming, autonomy, endogenousness and locality (Ye Jingzhong, 2013). However, based on the characteristics of modern agriculture and small farmers, traditional small farmers are very easy to become “marginal people” or losers in modern agriculture. In other words, the development of modern agriculture will inevitably squeeze out traditional small farmers, and it is extremely difficult to rely solely on traditional small farmers to organically connect with modern agricultural development. The organic connection between small farmers and the development of modern agriculture should be an organic connection, embedding and integration, rather than reluctant accommodation. Not all forms of small farmers can organically connect with modern agriculture. The organic connection between small farmers and modern agricultural development should effectively alleviate and overcome their own weaknesses. The process of realizing the organic connection between small farmers and modern agricultural development is the process of transforming and upgrading “traditional small farmers” and cultivating “modern small farmers”. Overcoming the weaknesses and disadvantages of small farmers depends not only on the growth of small farmers themselves, but also on corresponding institutional arrangements, especially organizational institutional arrangements.

Acknowledgment

This research has been partially supported by the Teaching Reform General Project of Taishan University(No.:201879), the project name is “Research on the Application of Three-dimensional Innovative Talents Training in Computer Science”; by Taishan University's Young Teachers' Research Fund Project(No.: QN-01-201704), by Taishan University's Young Teachers' Research Fund Project(No.: QN-01-201702), the national Spark Program project (No.:2014GA740055), This work was supported in part by the National Natural Science Foundation of China (No. 61703301), the Taishan Scholar Program of Shandong Province in China, and the Scientific Research Foundation of Taishan University (No. Y-01-2018019).We like to express our appreciation for the valuable suggestions from the referee and the editor of this journal which significantly improved the quality of the presented paper.

References

- [1] Liu jinhai.Smallholders' Socialization: Definition, Features and Tendency[J]. Academic Monthly,2013,45 (08):12-19.
- [2] Pan Lu.Retrospect Peasant Studies and their Current Debates[J].China Agricultural University Journal of Social Sciences Edition,2012,29(02):34-48.
- [3] Si Mingyu, Jin Ziwei. On the prospects and outlets of small farmers in China [J].Agricultural Economy, 2019(09):9-11.

- [4] Chayanov. Farmer Economic Organization. Beijing: Central Compilation Press, 1996.
- [5] Xu Yong. "Government Goes to the Countryside": The Modern State's Integration of Rural Society. Guizhou Social Sciences. 2007,(11).
- [6] Xu Xuchu, Wu Bin. Are Cooperatives an Ideal Carrier for the Organic Connection between the Production of Small Farmers and the Development of Modern Agriculture [J]. Chinese Rural Economy, 2018(11):80-95.
- [7] Johnson K, Wisner B, O'Keefe K. "Theses on Peasantry" Revisited. Antipode, 2005, 37(5): 944-955
- [8] Han Changfu. Actively promote the organic connection between small farmers and modern agricultural development [J]. Rural practical technology, 2018(03):22-24.
- [9] CHEN Hangying. Organic Connection between Smallholders and Modern Agricultural Development I Based on the Organized Smallholders and the Modern Agriculture with Social Foundation [J]. Journal of Nanjing Agricultural University (Social Sciences Edition), 2019, 19(02):10-19.