



Sustainable Rural Development under the Background of Rural Contraction

Binyu Zhao

Tianjin Normal University, Tianjin, 300382, China

zhao13042283015@163.com

Abstract. At present, with the continuous advancement of urbanization, many problems emerge in cities, such as labor loss, low production efficiency, a backward technical level, and a lack of rural resources. On the other hand, due to the rapid economic growth of cities, a large number of rural people are attracted to migrate by changing their traditional rural lifestyle and significantly improving their living standards. Therefore, in the process of national urbanization, rural development is faced with the problem of population shrinking, and a series of urban "pull" and rural "push" have accelerated the rural contraction. Based on the current situation of rural areas in China, this paper conducts a comparative analysis of the rural development in China and the "successful transformation" experience of rural areas in Minnesota in the United States. This study comprehensively considers the three aspects of society, economy, and environment, and the tripartite cooperation model of rural development (village government, villagers, and cooperative companies) is combined to solve the problems caused by rural contraction.

Keywords: Sustainable rural development, Rural contraction, Rural revitalization, Population shrinking in rural areas.

1 Introduction

In many countries around the world, the rapid social and economic development of cities and an increasing demand for urban life have brought about a decline of peripheral suburbs and rural areas. The declining areas on the outskirts of such cities can be called "rural contraction". At present, many countries have experienced a period of rapid development of urbanization, which is both an opportunity and a challenge for rural areas. Therefore, this study focuses on the analysis of rural contraction caused by urban development in terms of the occupation of land, resources, and manpower.

"Rural sustainable development" is defined as shaping the rural environment to provide an integrated system between human communities and animal and plant products, while meeting the current economic and environmental needs of human beings without harming the needs of future generations [1]. Some scholars have studied and classified contracted villages and found that contracted villages can be divided into overall spatial contraction, carrying function contraction, and human contraction from

three dimensions. That is, the reduction of construction space in rural areas and agricultural production land; the lack of single bearing function due to the limitation of land policy; and the lack of characteristic culture because of the long lack of guidance in rural areas [2]. Therefore, in 2002, Professor Frank Popper from Rutgers University proposed the concept of smart contraction in the study of adverse urbanization in the United States. Urban contraction should be smart and defined as reducing incremental planning, reducing population contraction and optimizing living and living space, and improving the quality of the living environment [3].

The main research content is divided into three sections. Firstly, to analyze the factors that cause the shrinkage of rural areas, the factors are divided into internal and external factors, namely rural "push" and urban "pull". Secondly, the current comparison of sustainable rural practices in the context of contraction is done; finally, solutions for China's shrinking rural areas are proposed. In terms of research methods, this paper takes a comparative analysis of the sustainable practices of the shrinking villages at home and abroad. Therefore, in the context of rural contraction, with the support of China's existing rural revitalization strategy, this paper can give reasonable reference opinions to the reconstruction of rural areas in China from the three aspects of politics, economy, and environment, thus helping the development of rural areas.

2 Factors Causing Rural Contraction

2.1 A Loss of Populations in the Countryside: "Push"

For local residents in most rural areas of China, there is a lack of pillar industries, resulting in few employment opportunities. The employment problem of a large number of people cannot be solved, and the development of agricultural production in each family alone cannot solve the livelihood problem of the whole family. At the same time, the problem of children's schooling and healthcare security cannot be solved in rural areas. Rural youth are "moving away from agriculture". The development of rural areas needs methods and strategies, so talents need to be introduced. However, for the grassroots cadres who come to work in rural areas, the rural wages are low, the working conditions are difficult, the salary of grass-roots cadres is linked to the local economic development, and the salary of grass-roots staff cannot be satisfied. There is a lack of cadres and practical technical personnel in rural areas. Most rural areas are lack of attraction, so residents cannot be retained.

2.2 An Increase of the Labour Force in the City: "pull"

Urban development speed, infrastructure, and urban greening are important parts of urban development. Cities are showing strong vitality and attraction because of their superior education resources, sufficient medical resources, convenient transportation, abundant job opportunities, broad career development prospects, basic conditions such as attracting talents, and environmental factors such as a high degree of greening and good quality of citizens.

3 A Comparative Analysis Between the Rural Areas of China and the United States

In this section, the author conducts a case study of the rural areas in Minnesota of the United States and northeast China. The cases are selected because the early agricultural development of Minnesota and northeast China attracted a large number of immigrants, and the changing of the structure and population composition of the two places complies with the definition of rural contraction in this study.

3.1 Similar Context of Population Shrinking

Minnesota is located in the north-central part of the United States with a continental humid climate and four distinct seasons. Summers are warm and rainy and winters are cold and dry. With abundant sunshine and a uniform precipitation distribution, early Minnesota attracted a large number of immigrants due to its superior natural geographical environment. Until the early 21st century [4], the agriculture population of Minnesota in the state's population fell from 49% in 1900 to 3% in 2000, and the region experienced four phases: prosperity, transition, depression, and steady development [5].

From 1911 to 1930, a large number and a steady flow of migrants flowed to the northeast region of China, which involved not only the choice of individual immigrants but also the internal demand for the transformation of the northeast region from an agricultural society to an industrial and commercial society. With the deepening of urban industrialization, more and more immigrants moved to urban areas, resulting in a population loss and the weakening of villager autonomy in northeast China; meanwhile, a large number of idle rural houses led to extensive rural land management [6].

3.2 Similar Causes of Population Shrinking

For Minnesota, the main reason for population contraction is the technological progress of Minnesota agriculture, which was changed from a labor-intensive industry to a capital-intensive one [7]. There are fewer rural employment opportunities, and a large number of rural people have moved to urban jobs.

For northeast China, on the one side, the development of agricultural mechanization has made the rural agricultural labor force, namely the first production labor force, become saturated. In most of the northeast countryside, the development of secondary and tertiary industries is relatively slow, making it difficult to undertake the surplus working population, thus leading to a population loss. In addition, a long term of the low position of agriculture in the market economy causes agricultural income to be low. Rural residents often choose to travel to cities to find jobs and increase their income. As a result, the rural labor force is hollowed out and shrinking; on the other side, the shortcomings of rural infrastructure and public services have led to the flow of rural elites to cities. The rural population is showing the characteristics of aging and low levels.

4 Suggestions on the Sustainable Rural Development in China

4.1 The Promotion of the Self-Development Model

After a series of contractions, the rural areas of Minnesota gradually developed under low population density [8], using limited areas and population for self-planning and adjustment of rural internal structure. Compared with Minnesota, the problem of rural development in northeast China extending from population contraction often aggravates the contraction itself, resulting in the circular accumulation effect caused by population reduction. Therefore, the rural self-development model of Minnesota can be learned.

According to Xu Yong's description of the restoration of villagers' self-governance, rural self-governance is divided into three stages. In the third stage of the form of villagers' self-governance, that is, the villagers' self-governance produced internally and externally below the administrative villages, his main contribution was to explore different effective forms of self-governance [9]. The model is based on the "village government + village enterprise + villagers" with the participation of external superior government and planning experts, learning from China's cooperative governance model for rural revitalization [10], and extending it through China's existing tripartite cooperation model. In such a model, the role of each group in the village is given full play. The village government introduces village enterprises, and enterprises provide work opportunities for villagers and develop rural tourism by selling local agricultural products. Within the tripartite cooperation model, the rural government plays the role of a decision-maker, the enterprise plays the role of a supporter, and the village plays the role of an actor.

The village government needs to take the lead in the management and plan the rural development routes in advance as a bridge connecting the higher-level government with the villagers and the village enterprises. The village government is supposed to actively communicate with the superior government, implement relevant policies, summarize and extract villagers' opinions and report truthfully to the superior government, and communicate with the villagers regularly to implement the development goals and direction of each stage. Village enterprises should carry out cooperative management (such enterprises refer to the organizations that cooperate with rural villages to develop and promote rural tourism and sales of related agricultural products) and make full use of local natural resources and human resources. Villagers provide capital for rural construction. They are classified as those who continue to conduct agricultural farming and have been trained to join the village enterprise management post or the service industry. The former can provide agricultural products for local companies, while primary farming, livestock, and breeding are the foundation of rural development; the latter solves the problem of the loss of population and female employment due to local employment opportunities, reducing the problem of left-behind children and the elderly. Villagers are the main body of rural revitalization and the masters of rural areas. Therefore, villagers of different ages should play their corresponding roles. At the same time, rural construction not only relies on the actions of the

remaining villagers as leaders and workers, but it can also attract migrant workers to return to their hometowns and increase foreign scientific and technological talents in the countryside. Thus, talents can be gathered for rural revitalization, party members can be trained among outstanding rural young people, and the construction of leaders of rural grass-roots Party organizations can be strengthened.

4.2 The Integration of the Three Industries

Minnesota adheres to the extension and optimization of the industrial chain, and it promotes a steady increase in the income of agriculture-related industries [5] because relying solely on agricultural development has great drawbacks. In northeast China, rural development faces mainly two problems: First, there is a low degree of scale operation: in rural areas, large areas of land are used for crop cultivation. Most of these lands cultivated by farmers cover a large area with low utilization efficiency, and there is a lack of unified crop cultivation and unified land management organization and means. Second, there is a weak industrial foundation: the development of the secondary industry in rural areas is mainly aimed at the agricultural products processing enterprises based on the primary industry, and the tertiary industry is mainly the rural tourism industry based on the service industry. However, in most rural areas of China, there are no transportation conditions and technological means (such as cold storage and preservation technology) to transport agricultural products. At the same time, tourists have strict requirements for catering and tourism, so the problem of how to ensure that rural areas meet the health standards of tourists and tourism still exists.

To solve these problems, it is important to extend the industrial chain and promote the integrated development of primary, secondary, and tertiary industries. For instance, low prices of rural land and related tax relief policies can be applied to attract enterprises to enter rural areas. It mainly aims at the processing of agricultural products in the primary industry and the development of tourism in the tertiary industry. Besides, agriculture can be combined with the primary and secondary industries. What is more, from the perspective of social sustainability, rural tourism, rural leisure, and the sightseeing agriculture system can be improved to establish the connection between rural areas and urban areas, strengthen the dominant position of farmers, alleviate the loss of farmers, and introduce talents to assist the development. From the perspective of environmental sustainability, it is essential to rationally use local land resources without causing pollution; the government needs to legislate to ensure that land resources are well used.

5 Conclusion

This paper focuses on the shrinking countryside by conducting a comparative analysis of Minnesota rural areas and northeast China rural development, It summarizes the reasons for rural contraction from two aspects: the rural “push” and the urban “pull”, both of which lead to an outflow of the rural population and the shrinking of rural areas. At the same time, in the process of analysis and comparison, effective experience is

found, and reasonable improvement plans are put forward for the shrinking villages from the perspective of changing the internal and external development modes and integrating the three industries.

Cities bring both opportunities and challenges to rural areas during the period of the rapid development of urbanization. This paper only focuses on the challenges faced by rural areas, namely the negative impact of urbanization development on rural areas, but at the same time, urbanization development also brings opportunities and motivation to rural areas, such as providing employment opportunities. Therefore, future research directions can be considered by combining the opportunities and challenges faced by rural areas, so as to provide more advice to sustainable rural development under the background of rural contraction.

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