

Obstacles and Countermeasures to the Revitalization and Utilization of Idle Agricultural Houses in the Context of Rural Revitalization--Take Nanzhanglou Village in Shandong Province as an Example

Yiling Ma^{1,*}

¹School of Public Administration, Sichuan University, Chengdu, 610065, China

*Corresponding author: 1491779419@qq.com

Abstract: The revitalization of idle farm houses is of great practical significance for activating rural land elements, awakening farmers' "sleeping" land assets, increasing farmers' income and providing land security for the implementation of rural revitalization strategy. This study takes Nanzhanglou Village in Shandong Province, a Chinese model village of the Bavarian Experiment, as an example, and explores the obstacles and countermeasures to the revitalization and utilization of unused farmhouses based on a comprehensive study of the current situation of unused farmhouses in the village. The study finds that the village faces obstacles to the revitalization of idle farmhouses, such as small scope of realistic permission, low willingness of farmers and poor information channels. In view of this, under the background of rural revitalization, it should make efforts to revitalize idle farmhouses by clarifying the direction of "feature-led development", introducing the mode of "multiple subjects and multiple industries", implementing the strategy of "batching and classifying", and opening up digital channels.

Keywords: Rural revitalization, idle farmhouse, revitalization and utilization, countermeasures

1. Introduction

The strategy of rural revitalization is the general grasp of the issues concerning agriculture, countryside and farmers in China and has been highly valued by the central government. To realize rural revitalization, it is necessary to fully utilize existing resources and conditions to establish a sustainable mechanism and attract various factors to the countryside [1]. Land, as the most important and largest resource and asset in rural China, is inefficiently used or idle currently. With the rapid urbanization and industrialization of China, a large number of rural people have flocked to cities, and the problem of hollowing out and decay of the countryside has intensified, resulting in a large amount of unused land, among which the phenomenon of unused agricultural houses is the most prominent. In view of this, the central government and various ministries have issued a series of policy documents to encourage the revitalization of unused rural houses. Under the policy guidance, local governments have also actively explored in practice, creating a number of models for revitalizing idle farmhouses, such as the "special industry" mode, the "rural tourism" model, the "village collective storage and rental" model, and the "digital promotion" model, etc.

In the context of rural revitalization, how to revitalize and utilize idle rural residential bases and idle farm houses, so as to enhance the efficiency of land resources utilization, increase farmers' income and provide strong support for rural revitalization, has also triggered the key attention of the academic circle. Scholars have discussed in detail the theory of revitalization of idle farm houses, obstacles to revitalization and countermeasures for revitalization. Zhang Y et al.(2022) have systematically explained the theory of idle house base revitalization using the theory of optimal allocation of land resources, push-pull theory, rural multi-functionality theory and polycentric governance theory [2]. Zhou J (2022) pointed out that the revitalization of idle house bases in China faces imperfect trading market, sporadic and scattered layout and unbalanced distribution of benefits [3]. Shi W M et al.(2021) proposed that the revitalization of idle farm houses in the context of comprehensive promotion of rural revitalization must improve the system of collecting and storing idle rural house bases and farm houses [4].

From the existing studies, academics have mainly focused on the relationship between idle farm houses revitalization and rural revitalization, relevant theoretical interpretation and influencing factors

of idle farm houses revitalization, and the research results of establishing idle farm houses revitalization mechanism from the practical level are still relatively few. Nanzhanglou village is located in the northern part of Qingzhou City, Shandong Province, which is a typical plain village. In recent years, the village has suffered from serious loss of permanent villagers, and the contradiction between a large number of unused farm houses and insufficient supply of land for industrial development has been sharpened. Therefore, this study takes it as an example, based on the village field research, and on the basis of a comprehensive analysis of the basic situation of idle farmhouse resources and realistic obstacles, designs idle farmhouse revitalization countermeasures with village characteristics, with a view to activating the property value attributes of idle houses in the village, improving land use efficiency, and providing meaningful references for the national idle farmhouse revitalization.

2. Basic situation of idle farm houses in Nanzhanglou Village

2.1 Quantity of idle house

There are 9 village groups in Nanzhanglou Village, with a total of 1,260 farm households, of which 116 households have idle houses, accounting for 9.29%, and 15 households have idle risk houses, accounting for 1.19%. The distribution of idle farm houses in the village showed the characteristics of "large scattering and small gathering", with an overall scattered distribution and only one group having a small gathering. According to the frequency of using idle houses within one year, idle farm houses were classified into three types: short-term idle (frequency >4 times/year), long-term idle ($1 \leq$ frequency <4 times/year) and completely idle (frequency <1 time/year). As can be seen from Table 1, the number of long-term idle and short-term idle farmhouses in this village is equal, both with 54 households, and the number of completely idle farmhouses is the lowest, with only 8 households.

Table 1: Types of idle agricultural houses in the village

Idle type	Number (households)	Percentage (%)
Short-term inactivity	54	46.55
Long-term idle	54	46.55
Completely idle	8	6.90
Total	116	100.00

2.2 State of idle house

According to the current utilization status of idle houses can be divided into three categories: completely vacant, occasionally living and used for storage, accounting for 45.69%, 46.55% and 7.76% respectively, as shown in Table 2. Interviews by village cadres revealed that most of the householders with completely vacant houses have multiple residences in the village or have housing in the town, and the idle houses do not assume residential functions; most of the householders with occasional residences are working outside the village or have gone to the city to help their children with childcare, and only return to the village for a short time during the New Year holidays and weekends, and the houses are idle on weekdays; there are also a small number of farmers who are engaged in agricultural farming and use the idle houses as warehouses for agricultural tools. There are also a small number of farmers who are engaged in farming and use their unused houses as storage for agricultural tools. It can be seen that the idle houses there are in a very inefficient state.

Table 2: Current state of idle houses in the village

Current state	Number (households)	Percentage (%)
Completely vacant	53	45.69
Occasional residence	54	46.55
For storage	9	7.76
Total	116	100

2.3 Reasons for idleness

According to the reasons for idleness, these houses can be divided into the following 7 types: multiple houses in the village, elderly people living with their children, working outside the village, buying houses in the city, elderly people passing away, elderly people living in nursing homes and others, specifically, the first 3 types are the main reasons for the idleness of farm houses in the village, accounting for 86.21%

in total. There are two main reasons, one is that a group of farmers who are in a position to improve their lives buy the buildings built by the village collective, and farmers move into their new homes and thus idle their original homes; the second is due to historical reasons such as the right to the residential base or the death of relatives inheritance caused by "multiple homes for one family ". The elderly living with their children accounted for 31.9% of the farmers, mostly children settled in the city, the elderly followed into the city to help children to look after the children, thus idle houses. Farmers who work abroad account for 18.10%, with domestic sites mainly in the city and foreign sites mainly in Australia. There is one house each in the rest condition

2.4 Housing quality

From the comprehensive consideration of housing construction age and external morphology, the village's idle houses were divided into three categories: relatively new houses, relatively old houses and dangerous houses, among which, there were 52 older houses built before the 1990s, 49 newer houses built after the 1990s, and as many as 15 dangerous houses, collapsed houses and no building cases, as shown in Table 3. The housing structure of the village can be divided into adobe, brick and soil, and brick mixed, with adobe mostly built before the 1980s, brick and soil mostly built in the 1980s and 1990s, and brick mixed mostly built after the 1990s. Overall, the village's idle farm houses are relatively new and mostly of brick and mixed structure, indicating that the quality of idle farm houses is good and there is a great potential for redevelopment and utilization.

Table 3: Quality and structure of idle houses in the village

Indicators	Types	Number(households)	Percentage (%)
Housing quality	Relatively new house	49	42.24
	Relatively old house	52	44.83
	Decrepit house	15	12.93
House structure	Adobe house	4	3.45
	Brick and soil house	35	30.17
	Brick and mortar house	77	66.38
Total		116	100

3. Obstacles to the revitalization of idle farm buildings in Nanzhanglou Village

3.1 Realistic licensing is restricted

There are two main modes of revitalizing idle residential bases and houses: remediation and reuse. Remediation of unused residential bases in rural areas can increase the available land area, solve the problem of land factor security or replace more construction land indexes. The main practices in various places are to implement the withdrawal of residential bases with compensation, linkage between urban and rural construction land increase and decrease, and the market of collective business construction land. Reusing farmers' idle residences is to allow all kinds of market players to use idle farm houses to develop new industries and new business models, etc. to promote the revitalization of rural industries. Farmers can revitalize idle farmhouse resources in various ways, such as self-employment, rental and shareholding. Combined with the reality of Nanzhanglou Village, the village does not belong to the national pilot of the house base system reform and does not have the privileged permission of the pilot area. At the same time, the village has strictly implemented the Sino-German co-produced "Nanzhanglou Village Development Plan" for many years, and the layout of the residential area is concentrated and contiguous, so there is little room for operation for remediation. Therefore, exploring the reuse of unused farm houses is the only path to revitalize unused farm house resources in the village.

3.2 Low motivation of farmers

Although villagers in this village are more receptive to new ideas and practices, most farmers still are hesitant due to small farmer consciousness and risk-averse consciousness, and the overall willingness of farmers to revitalize and utilize is not strong. After in-depth interviews with farmers who are not willing to participate, it is found that "family members have to come back to live during the New Year holidays, and it is not convenient to rent to others" is the main reason. At the same time, factors such as insufficient construction funds, not optimistic about the prospects of tourism development in the village, for storage, safety concerns, and the idea of keeping ancestors are also important reasons that inhibit farmers'

willingness to participate. The small number of farmers who are willing to join the revitalization do not have a clear preference for the development mode (self-owned or collective operation) and the specific utilization direction (rental or home stay) of the future development. Therefore, in the process of revitalizing idle farmhouses in the village, farmers who are not willing to participate should be encouraged to join the revitalization, and those who are willing to participate should be guided to choose a suitable revitalization method.

3.3 Poor information channel

The poor information channel is reflected in the both of land managers and idle farm houses. Firstly, Nanzhanglou Village has not yet established a dynamic database of idle farmhouses, and the village collective economic organization is the most landowner who lacks overall knowledge of the quantity, distribution, reasons for idleness and housing quality of idle farmhouses, so it cannot grasp the dynamic status of idle farmhouses. Secondly, the village lacks a channel to match social capital with idle resources, and the network of acquaintances is the only information channel, which is narrow. The main tenants are migrant workers who live seasonally during the farming period and businessmen in handicrafts and wholesale and retail businesses in the surrounding villages. At the same time, the value assessment of idle farmhouses determined by market mechanism has not yet been implemented, and the pricing of rental prices is not scientific, resulting in a lack of bargaining power for lessees. Therefore, the establishment of a full-factor dynamic database and information platform for idle farmhouses is an important foundation for revitalizing idle farmhouses.

4. Measures to revitalize idle farm houses in Nanzhanglou Village

4.1 Clarify the direction of revitalization of "feature-led" development

Nanzhanglou village is close to the city, not near the sea, no large enterprises, not close to major transportation routes, no mineral resources and has a large population and little land. It lacks tourism characteristics highlights, does not have the natural advantages of developing rural tourism. In 1988, it was awarded the Sino-German Land Remediation Project by virtue of its disadvantage, and became the Chinese model village of the "Bavarian Experiment". Over the years, the village has fully borrowed from the German rural development ideas, taking the land remediation project as the core to carry out land planning, arable land preparation and industrial development, and the infrastructure, living environment and farmers' income have been significantly improved. Therefore, it needs to make full use of the distinctive features of the Sino-German land remediation project.

At present, the problems of serious fragmentation of arable land, backward infrastructure construction and low efficiency of land use are widespread in rural areas of China, and there is a huge demand for local governments and academics to learn from the advanced land preparation concepts and practices of Germany. Therefore, based on the Sino-German land preparation model project, creating a rural revitalization school with idle farmhouses as a carrier, attracting governments and scholars at all levels nationwide to visit and study in the village, promoting the development of tourism industry in concert, and promoting the revitalization of idle farmhouses in diverse ways such as agritainment, home stay and rentals, which ultimately improves land use efficiency and increases farmers' income, is the best path to realize rural revitalization in Nanzhanglou village (as shown in Figure 1).

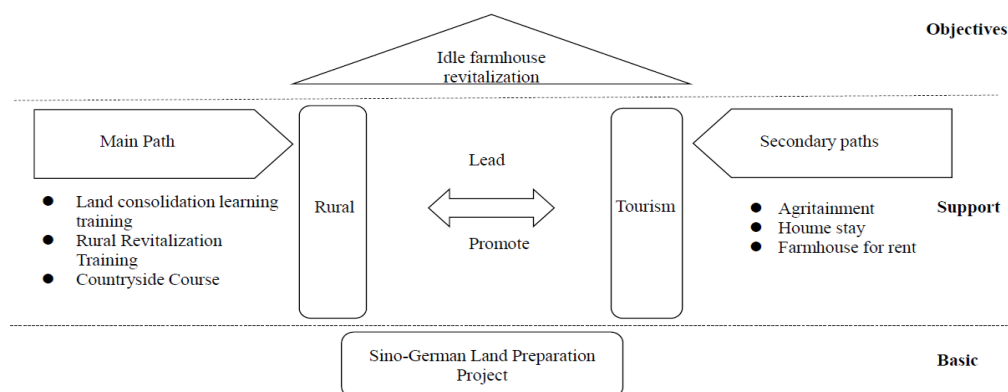


Figure 1: The mechanism of revitalizing idle agricultural houses

4.2 Implementing the strategy of "batching and classifying" for revitalization

It should be combined with the type of unused farm houses in the village, the condition of the houses, the will of the farmers and other factors, and adopt the strategy of "advancing in batches and leading by points" to revitalize the idle farm houses in an orderly manner.

The first batch is used to create training bases for rural revitalization and to exert demonstration effects. The first batch of farmhouses are used to build training bases for rural revitalization, constructing places such as practical classes for land preparation, demonstration sites for rural revitalization, and Sino-German rural construction experience exchange centers. Summarize and sort out the successful experience of Nanzhanglou village, and jointly offer relevant study courses and practical visits by German experts to attract government officials, scholars and companies nationwide. At the same time, the demonstration effect of the first batch of revitalization projects will be given full play to let villagers experience the practicality and profitability of reusing idle farm houses, so as to increase their active participation and lay a solid foundation for subsequent development.

The second batches develop agricultural leisure tourism and realize large-scale operation. Combined with the tourism planning lines, a batch of idle farm houses with location conditions and good quality will be selected to develop agritainment, home stay and recreation sanctuaries with characteristics of the local region, providing catering, short-term accommodation and other services. This batch of transformation is the largest and most extensive, and the main purpose is to revitalize idle farm houses in all aspects, vigorously develop agricultural tourism and leisure tourism, and form large-scale operation. This kind of houses accounts for a large proportion and are more difficult to transform. Therefore, in the process of reuse, village collective organizations should strengthen communication with villagers and assist in solving difficulties in terms of capital and operation.

The third batch implements the renovation of dangerous houses to supplement the follow-up needs. The idle farm houses in the last batch are the most difficult and costly to renovate, and are mainly used as back-up resources. Under the benign and mutual development of rural revitalization training industry and tourism development, as the number of people coming to the village for study and tourism grows year by year, the demand for clothing, food, housing and transportation will also climb, at this time the dilapidated houses are used as supplementary resources to ease the demand for construction land.

4.3 Introduce the "multi-body, multi-state" revitalization model

Diversified inventory models are introduced on the basis of farmers' wishes to stimulate the development of multiple businesses in the village.

The first is villager-owned development model. Villagers use their own resources and capital for the redevelopment and utilization of idle houses, and the form of development includes renting, develop agritainment and home stay. It is suitable for young and strong farmers who have enough transformation capital, certain management ability, and sufficient time and energy. Under this model, village collectives need to supervise and guide villagers to carry out reasonable redevelopment and utilization within the scope of planning and policy permission.

The second is village collective and villager cooperative development model. The operation of this model is led by the village collective, unified construction, renovation and operation management, focusing on the development of rural revitalization schools and leisure tourism. Under this model, two forms of participation can be adopted: "village planning and design, farmers contribute to the house" and "village funding, farmers contribute to the house". The former is suitable for villagers who are willing to renovate and have sufficient funds, while the latter is suitable for villagers who are willing to renovate but have insufficient funds.

The third is village collective, villagers and enterprises multi-party development model. The village collective, as the middle party, introduces a third-party professional operating company to develop leisure tourism in cooperation with villagers. The model of "villagers' house - collective introduction - company operation" facilitates the organic integration of all the advantageous resources, thus realizing high efficiency and benefit. This model requires the village collective to play a good role in communication and coordination and supervision of enterprises, timely disclosure of village affairs information, and the formulation of differentiated revenue distribution rules to fully protect the rights and interests of villagers and the collective, and promote multi-win situation.

4.4 Smooth digital inventory channels

The village should establish a database of idle farm houses and build an information platform of idle farm houses to realize dynamic mastering of all elements of information of idle farm houses and promote effective docking of social capital and idle resources.

First, establish a database of idle agricultural houses. The database integrates information query, statistical analysis, spatial analysis and dynamic update functions, and contains basic information on farm houses, information on farm houses and house bases ownership, information on farm buildings and house bases, etc. It is convenient for collective economic organizations to register information and classify and manage idle farm houses, and realize dynamic mastering of all elements of information on idle farm houses.

Second, build an information platform for idle farm houses. Based on the database, it can use digital technology to establish an information platform for idle farmhouses, covering functions such as information update of idle farmhouses, query of idle farmhouse conditions and reservation of idle farmhouse transactions, so as to open up urban and rural information channels and break the barrier of docking social capital and idle resources.

Third, promote the linkage of information platform. It should dock with the town and city's idle farmhouse information platform to synchronize the release of idle farmhouse information, and at the same time, link up with the publicity platform to publicize the village culture, past study and research activities to achieve multi-channel and multi-faceted publicity, thus enhancing the village's visibility and investment attractiveness.

References

- [1] Qian ZH, Mou Y. *Rural revitalization and rural land system reform*[J]. *Agricultural Economic Issues*, 2020(04):28-36.
- [2] Zhang Y, Zhou J, Lu P. *The theory and practice of revitalizing the use of unused rural house bases in the context of rural revitalization. The theory and practice of revitalizing and utilizing idle rural house bases in the context of rural revitalization: a study based on two cases in Anhui Province*[J]. *Agricultural Economic Issues*, 2022(04): 96-106.
- [3] Zhou J. *Analysis of the willingness, obstacles and its reform priorities in revitalizing and utilizing the idle rural house bases* [J/OL]. *Journal of Huazhong Agricultural University (Social Science Edition)*:1-10 [2022-11-10]. <http://kns.cnki.net/kcms/detail/42.1558.C>.
- [4] Shi WM, Cao J. *On the institutional construction of rural idle house bases and agricultural housing storage* [J]. *Economic Review*, 2021(10): 114-121.