Research on rural spatial structure planning and development under the trend of rural revitalization

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Abstract

With the development of the country's economy and society, the industrialization structure of most rural areas is also facing upgrading. However, in the process of rural revitalization and development, relevant government departments often pay more attention to the development of cities, which makes it easy to have insufficient stamina in rural construction, resulting in a series of problems. The "Rural Revitalization Strategic Plan 2018-2022" clearly states: "By 2022, the institutional framework and policy system for rural revitalization will be initially improved, the rural living environment will be significantly improved, and the construction of ecologically livable and beautiful villages will be basically realized. Therefore, it is necessary to achieve the national goals. To achieve better rural revitalization and development, we must always adhere to scientific planning of rural spatial structure. The goals of this study are: 1. To investigate the current situation of rural spatial structure planning. Aims to understand its impact and trends on sustainable development. 2. Evaluate the strategies for optimizing land use and community development used in rural spatial structure planning. This study adopts qualitative research methods, and the collection and arrangement of data mainly from books, expert conclusions and online data are the basis of relevant theoretical research. The questionnaires and interviews mainly focused on understanding the rural regional environment and spatial environment needs, and based on the survey results, we discussed the overall planning strategy that is consistent with the rural spatial structure. Through comprehensive analysis, it is consistent with the research results. Based on this, this paper first discusses

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the connotation of rural spatial structure planning, then analyzes the current situation of rural spatial structure planning, and finally introduces the strategies of rural spatial structure planning. For the reference of relevant staff (National Rural Revitalization Strategic Plan 2018).

Keywords : rural revitalization trend, rural spatial stucture, planning, status quo

Introduction

Spatial structure planning between villages refers to within a certain range, guided by government policies and restricted by relevant laws and regulations, scientifically integrates various resources in the villages, and uses resources rationally, so that the rural society can obtain It is a way of development that promotes the development of economic integration and improves the living standards of rural residents. Under the current trend of continuous development of rural revitalization, it is necessary to enable resources to be reasonably regulated by the government through market allocation, so that rural resources can be combined with each other to promote sustainable development of the two. In general, rural spatial structure planning is relatively complex (Central Committee of the Communist Party of China and the State Council, 2022) . Currently, under the influence of economic globalization, the market economy is in the process of development, and some large and medium-sized cities are paying more attention to investment in business and service industries. Therefore, it is difficult for the development of traditional industries represented by township and village enterprises to receive due attention. The government or relevant functional departments have not paid more attention to the development of township economy, but have only superficially adjusted the resources of townships according to the actual situation of market economy. This adjustment method has certain limitations. It may cause some relatively high-quality rural resources to flow to cities with better economic development foundations and better infrastructure, causing township enterprises to face a serious shortage of resources required for economic development, thus restricting the development of township economies and directly leading to the construction of rural integration. and development is hindered. Rural spatial structure planning with government

participation can not only effectively prevent the blindness of pure market regulation, but also improve the utilization rate of rural resources (Pu & Bai, 2018).

Research Objectives

1. To investigate the present state of spatial structure planning in rural areas. Aim to understand its implications and trends for sustainable development.

2. To evaluate strategies employed in rural spatial structure planning for optimal land use and community development.

Literature Review

Because the government obviously lacks experience in rural spatial structure planning under the market economy, there are still some problems in the preliminary planning, mainly in the following aspects.

1. Insufficient administrative functions of the government

For a long time, most have implemented a relatively centralized administrative management system. At the same time, economic development has been under planned economy for a long time, and the theory of rural spatial structure planning started late. Therefore, the government's rural spatial planning and management process still lags far behind the standard level. This leads to certain loopholes in the formation of the rural spatial planning system. At present, rural revitalization is developing rapidly, and the township economy has gradually become an important part of the national economy. This can only put higher requirements and unilateral management pressure on the government's administrative management. Currently, the government has not established corresponding regulatory agencies to enable the rural spatial planning system to be implemented with stricter standards (Wang, 2018). There are large gaps in GDP, per capita GDP, and economic development levels in some regions, and the phenomenon of polarization is more prominent. In terms of per capita public fiscal revenue, the development level of some spatial units is relatively low. These all affect rural spatial structure planning, the most complex and wide-ranging social system engineering. The reason is that the

government's administrative management functions are insufficient and different regions cannot achieve balanced development.



Figure 1 The Practical Problems Existing in the Unreasonable Spatial Planning of Most Rural Areas
Source: Anning Cai,2024

2. There is a sound mechanism for public participation

Most of the public do not have the awareness to actively participate in rural planning. At the same time, the public does not fully understand their legal status and legal rights in rural planning, and does not even receive the protection they deserve. First, the public's legal knowledge about rural spatial planning is very vague. Although the public is allowed to participate in the rural spatial planning process, the degree of public protection is low due to the lack of relevant systems to regulate law enforcement. Second, the implementation mechanism for public participation in rural spatial planning is imperfect. At present, there are still many loopholes in the public participation mechanism when implementing rural spatial planning. In the implementation process of rural spatial planning, the public participation mechanism is mainly reflected in the following aspects: the subject and process of public participation in planning. There is a lack of connection between them, and the subjects and methods involved in each link are determined by the planning units and departments themselves, which does not fully protect the public's right to supervision and information; third, the public's awareness of active participation

is weak. In the process of public participation in rural spatial planning, the purpose is not very clear, and there are also certain problems with the participation methods. Sometimes participation can only take place under a government umbrella. To a certain extent, the government will directly determine the method of public participation, thus limiting the exercise of public participation rights.

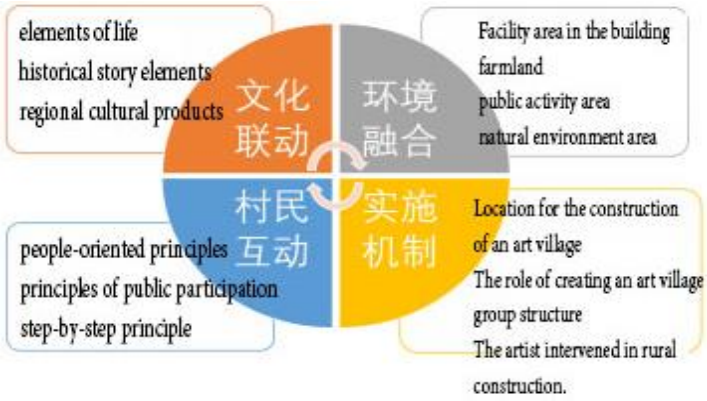


Figure 2 Construction Path Analysis of Rural Spatial Planning
Source: Anning Cai,2024

3. Rural spatial planning lacks forward-looking

Whether a city or town is livable is directly related to the scientific layout of the city or town. A city must have a healthy ecological environment. Only in this way can urban planning meet the requirements of sustainable development. Currently, there is a lot of idle space in rural areas, and the planning process is relatively lacking in foresight. This also results in a relative lack of public facilities in the urban area, very crowded roads, and very small space for outdoor activities, seriously damaging the ecological environment. The quality of life of rural residents cannot be guaranteed.

Research Methodology

This study uses qualitative research methods, mixed research methods, statistical analysis and descriptive analysis methods to conduct research combining theory and practice.

At the initial stage of the study, qualitative research methods were adopted, and through field surveys, interviews, participatory observations and other research methods, the comprehensive research content was summarized into opinions, which were applied to the research of the theoretical part.

This research generally collects data through questionnaires and expert interviews, and the questionnaire data covering multiple target groups is used as a sample.

Population range and sample

Objects to study the physical environment, research and analysis such as rural address, spatial layout, rural built environment, etc. Feasibility study analysis.

Statistics on the population of local rural residents, conducting interviews and surveys, using questionnaires to analyze living habits, lifestyles, folk culture, folk customs and cultural identity of villagers.

Survey industry experts, local governments, domestic and foreign tourists, ethnic culture researchers, etc., and local professional colleges and universities to obtain sample results.

Results

The structural planning of rural space is very important to urban development and can also play a very important role in the development of rural areas. Therefore, relevant departments need to attach great importance to this aspect of work. Take the following measures to carry out more scientific and reasonable rural spatial structure planning (Geng, 2019).

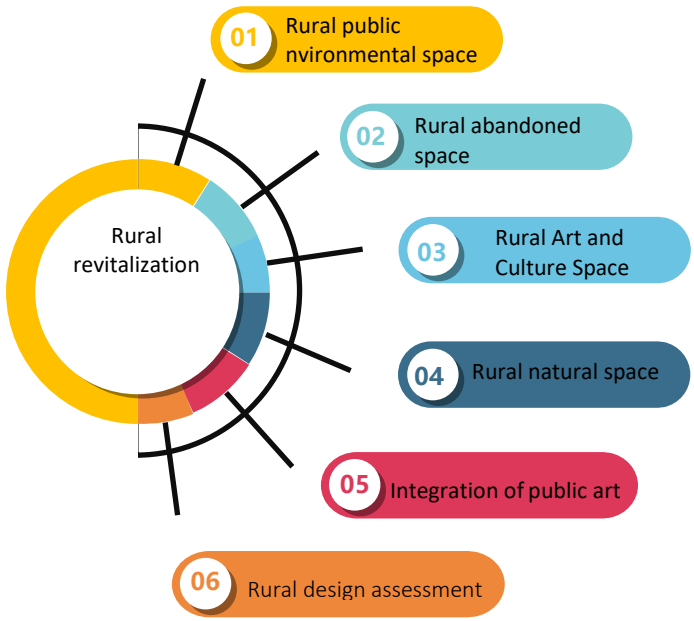


Figure 3 Design framework ideas in rural construction
Source: Anning Cai,2024

1. Rural spatial structure planning should adhere to people-centered

In the process of urban planning, people are very important. To comprehensively plan the rural spatial structure, people must always be firmly regarded as the core. In addition, we must always take the interests of the people as the guide, formulate more effective plans according to the actual needs of the people, and combine the construction requirements of local rural planning, so as to effectively increase the enthusiasm of the public to participate in rural spatial planning. Relevant government units should also fully improve the mechanism of public participation, so that people and villages can develop harmoniously with each other and satisfy the material and cultural requirements of the people as much as possible (Yan, 2018).



Figure 4 Villagers in the village need to communicate with each other in a reasonable public space.
Source: Anning Cai,2024

2. Change the traditional concept of urban planning

In the actual development, it is necessary to always replace the regional development strategy with a relatively simple urban development strategy. In the more traditional rural spatial structure, because too much emphasis is placed on urban development, the spatial planning of the city is relatively difficult. It is reasonable, but it completely ignores the planning of the countryside, which also makes the development of the villages extremely unbalanced. In order to achieve healthy development of rural revitalization, relevant departments must pay attention to the construction of a new socialist countryside and give full consideration to the construction and development of rural areas, so that cities can feed back the countryside and improve the regional transportation system in rural areas. Relevant government departments need to integrate the resource advantages of the villages and make the rural spatial structure can be reasonably planned, so as to promote the complementary functions of the villages and improve the regional economy in all aspects. On the other hand, when arranging the spatial structure planning of the countryside, we must always stand on a macro perspective, try to benefit the development of the entire region, break down the barriers between villages or large, medium, and small cities, and promote resources to obtain more effective resources. Distribution, so that the towns get comprehensive development (Wang, 2018).

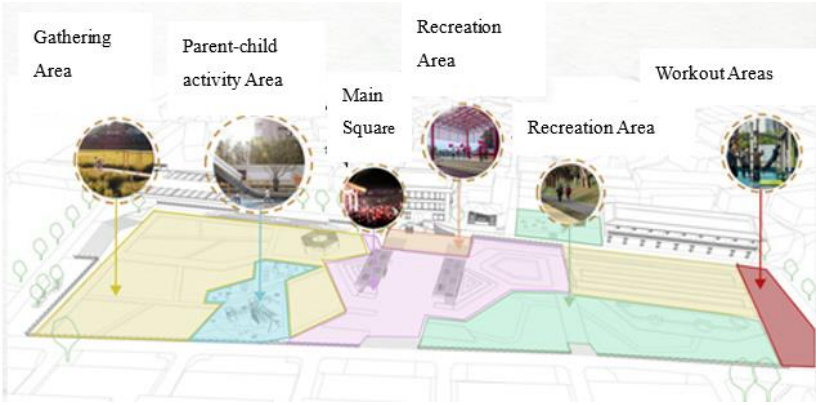


Figure 5 The optimization of rural spatial structure can obtain reasonable planning

Source: Anning Cai,2024

3. Promote the construction of rural ecological civilization

In the process of development, the protection of environmental resources is also very important. When planning rural spatial structure, relevant laws and regulations must be improved so that they can regulate and supervise the entire process of rural spatial structure planning. The problems of industrialization and rural revitalization have made environmental problems very serious, and even affect people's health. Therefore, when planning the spatial structure of rural areas, the government and relevant departments must pay attention to environmental issues, order the closure of some seriously polluting enterprises, and develop economical enterprises, so that the environment can be protected through legislation, so that Promote rural resources to be used more scientifically (Xiao, 2018). At the same time, it is necessary to improve the level of intensive land use in the main rural revitalization areas in the city, build a green channel integrating the countryside, and accelerate the pace of transformation and upgrading of energy-consuming industries and high-polluting enterprises. At the same time, the domestic garbage and sewage treatment in the countryside must be improved and improved, the intensity of land development must be strictly controlled, and the work of ecological migration should be carried out in an orderly manner, and the control of rocky desertification and the level of water and soil conservation should be strengthened so that the ecological The construction of

protected areas has been strengthened, and a livable environment has been well constructed through continuous improvement of the development model.

4. Strengthen the construction of key towns and central villages

Promote the revitalization of key villages and the community-based construction of central villages as soon as possible, promote the coordinated development of regions, enable villages to achieve coordinated development, and accelerate the optimization of rural space. First of all, it should be developed according to the urbanization of the suburbs, the revitalization of the countryside in the outer suburbs, and the communityization of the central village. Promote the construction of rural-integrated urban areas in large and medium-sized cities and cultivate a number of central towns. Secondly, it is necessary to cultivate a number of key small towns in the fringe areas of the city, improve their infrastructure construction and public facilities, cultivate leading enterprises that can drive the development of surrounding towns and villages, and increase the development scale of the secondary and tertiary industries.



Figure 6 Effective use of rural spatial planning to gain happiness from villagers
Source: Anning Cai,2024

5. Improving the hierarchical structure of cities and towns

At present, according to the scale and structure of the urban system, some cities have relatively large advantages in terms of economy and urban construction, but at the same time, the situation of uncoordinated development among large, medium, and small cities has become more prominent. This is very unfavorable for the coordinated development of different regions and villages. In the process of constructing the hierarchical structure of cities and towns, we must pay attention to the development quality and benefits of rural space, highlight the intensive and efficient production space, and at the same time

improve the livability of living space, and comprehensively improve the development quality and level of rural space. Promote industrial agglomeration, and improve the carrying capacity of the environment, so that the region can achieve coordinated development.

6. Break down the barriers to the flow of elements of rural resources

The optimization of rural spatial structure must pay attention to the free flow of resource elements. In some areas there are many mountains and few plains, and the development gap between regions and villages is very large. Resource elements must flow freely in order to improve the degree of economic development exchanges between regions and villages, and to minimize the development gap between regions and villages. In order to effectively break down the institutional barriers that impede the flow of rural factors and enable the free flow of rural factors, on the one hand, it is necessary to deepen the reform of the rural property rights system and the reform of the financial system within a large area. At the same time, it is also necessary to relax the conditions for settlement in large and medium-sized cities as much as possible, and formulate a more complete system for the flow of regional resource elements. Accelerate the establishment and improvement of the development support system that maintains the operation of the system, including the rural financial service system and the platform system for rural property rights transactions.



Figure 7 Rural public leisure activity space for the elderly and children

Source: Anning Cai,2024

Conclusions

To sum up, the structural planning of rural space is very important, and it can also play a very important role in the development of rural areas. The development of society requires the common development of rural construction. In the process of planning, we must always adhere to the

development concept of a harmonious society and sustainable development, comprehensively arrange the construction of rural infrastructure, take care of the lives of rural residents, and integrate high-quality rural resources.

and scientifically and rationally plan and arrange rural construction, which can effectively improve the development of various industries in the countryside. Such as planning rural public leisure space, surrounding landscape planning, commercial entertainment and leisure environment.At the same time, rural structural planning should always focus on the people, try to change the misconception that cities are the mainstay, and make rural structural spatial planning more rigorous. Inspire rural vitality.It is necessary to be able to always adhere to the city to lead the countryside, and fully optimize the spatial structure of the countryside, so as to rationally allocate various elements in the process of rural construction, so that rural construction can drive more improvements in the rural economy.

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References

Central Committee of the Communist Party of China and the State Council (2022). Opinions on carrying out key tasks in comprehensively promoting rural revitalization.

Geng, L. (2019). Focusing on the Nanjing-Hangzhou Ecological Economic Belt and Seeking a New Chapter of Transformation and Development - The 2019 Annual Working Conference of the Urbanization and Spatial Strategy Research Professional CommitteeofJiangsu Urban Planning Research Association was held in Liyang. Jiangsu Urban Planning.

National Rural Revitalization Strategic Plan (2018-2022). Office of the Central Rural Work Leading Group

Pu, R., & Bai, H. (2018). Research on the Optimization of the Spatial Structure of Tourism Urbanization and the Coordinated Development of Urbanization in Minority Areas - Taking Northwest Yunnan as an Example. Journal of Dali University: Comprehensive Edition. the Academy of Economics and Economic, 20(1), 11-16.

Wang, Z. (2018). Research on Rural Space Transformation and Development under the Background of New Urbanization.China Collective Economy. 10(2),1-2.

Wang, M. (2018). Urban Planning Research on Promoting the Healthy Development of Urbanization. Architectural Engineering Technology and Design. 20(1),42-58.

Xiao, G. (2018). Research on Rural Spatial Structure and Driving Forces in Chongqing. Chinese Agricultural Resources and Regional Planning. 39(1),138-142.

Yan, J. (2018). Research on the Development and Countermeasures of Green Urbanization from the Perspective of Justice - Taking Suzhou as an Example. China Famous Cities. 000(009): 24-28.