

Discussion on the Construction of New Rural Human Settlement Environment in Guanzhong Area of Shaanxi Province and Its Application in the Construction of Native Landscape

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Abstract: The sustainable development of the new countryside faces many problems such as the gap between urban and rural areas, the uneven distribution of public facilities, the difficulty of poverty alleviation, and the monotony of villages. Based on the construction of new rural human settlements in Guanzhong area of Shaanxi Province, this paper starts from the aspects of system structure, content framework and technical methods, optimizes and perfects the new rural planning technology system, and provides technical support for the development of ecological sustainability in Guanzhong area. This paper analyzes the constituent elements of the rural living landscape in the new rural areas of Guanzhong, Shaanxi Province from the settlement scale, and discusses its pattern characteristics, and draws the pattern of the local living landscape.

1. Introduction

All urban areas in Guanzhong area actively carry out new rural construction planning, residential point system planning, village layout planning, new rural community planning and beautiful rural planning [1]. The facilities such as rural road hardening, environmental sanitation, activity plaza and medical and health facilities have been significantly improved, and the housing conditions and living environment of farmers have been significantly improved [2]. At present, the construction of new countryside has entered a new stage of history. In the past, the construction ideas focused on material space transformation have not met the demands of rural sustainable development in the new era [3]. The construction ideas need to be changed, the construction content needs to be improved, and the construction direction needs to be adjusted [4]. In the future, the construction of new countryside in Guanzhong area should be based on the principle of material environment and cultural spirit, and pay attention to new issues such as monotony of villages, inefficient use of facilities, indifference in humanities, and lack of democratic management.

The development of the local landscape has experienced four historical stages: the origin stage of the local design thought, the preliminary practice stage of the local style, the active stage of the local landscape design and the prosperous period of the native landscape [5]. So far, both the content and the method have achieved fruitful results and formed an independent academic field [6]. When it comes to the new countryside, it is necessary to discriminate between similar concepts such as new rural communities and livable beautiful villages. The new rural community and the livable beautiful countryside are optimized on the basis of reflecting on the initial practice of the review. This paper considers that both are concrete forms of the new countryside [7]. The new rural community focuses on the integration of land resources, integrates and decomposes several administrative villages, and centrally resettles farmers and shares public facilities, thereby realizing spatial intensification, population concentration and facility sharing. Due to the integration of rural land, the construction of new rural communities requires financial support, so it is applicable to villages that support the village or resource advantages and attract enterprises to invest [8]. The concept of beautiful village originated from Anji County, Zhejiang Province. It focused on the human settlement environment and pursued the sustainable development of industrial economy and ecological environment with the goal of "ecological beauty, life beauty, industrial beauty and cultural beauty". Subsequently, the

Ministry of Agriculture and the Ministry of Housing and Construction successively proposed the demonstration work of beautiful livable villages, and the beautiful villages have been widely recognized [9].

Rural sustainable development has significant spatial and temporal characteristics. This paper first elaborates and deconstructs the specific connotation and elemental composition of rural sustainable development under the background of the new era. After that, it draws on the concept of sustainable development in developed countries and proposes a multi-dimensional target system in Guanzhong. Taking this as the value orientation, following the principle of "time-space difference, spatial scale, and operational feasibility", starting from the spatial scale, a two-layer superposition suitable model system of "localization + type" in Guanzhong area is proposed. From the settlement scale, the composition elements and pattern characteristics of the rural life landscape in the new countryside are analyzed, and the mode of construction of the local life landscape is derived.

2. Construction of a Suitable Model for Sustainable Development of New Rural Living Environment in Guanzhong Area

The pattern is the high degree of intrinsic law of the things and the logic of the behavior. It influences the overall development direction and actual effect of the things through contact and operation mechanism. The successful application of the model is based on similar internal environments and external conditions. It is not possible to simply imitate and copy the experience of other regions, and it is necessary to make suitability adjustments and localization corrections.

2.1 Factor Deconstruction

Aliye Ahu Akgün et al. divide rural sustainable systems into five categories: physical space, social system, creation system, locality system and economic system. The deconstruction of the systematic elements of the sustainable development of the new rural human settlement's environment is shown in Figure 1.

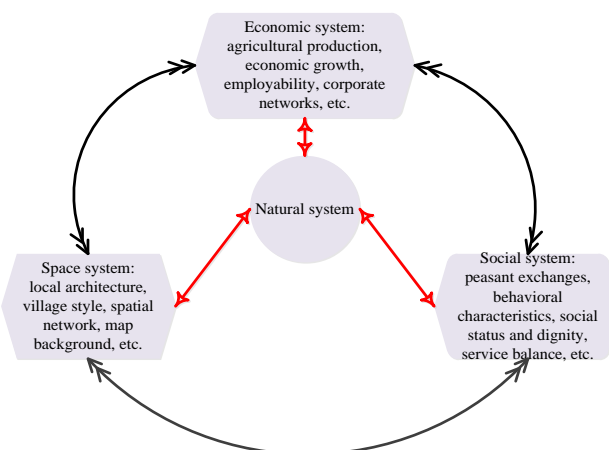


Figure 1. Deconstruction of the systematic elements of the sustainable development of the new rural human settlement's environment

Based on the existing theoretical results, this paper combines the actual situation of rural development in Guanzhong area and considers that the rural sustainable system includes four major systems: natural, economic, social and spatial. These four parts depend on each other and influence each other to jointly promote the sustainable development of the new rural system. The natural system mainly involves non-artificial environments such as soil, water, atmosphere and forest, including available resources and unavailable resources, which are the material basis for human survival. The economic system, including agricultural production, economic growth, employability, and corporate networks, is the core driving force for sustainable development in rural areas and has a strong driving force for the other four systems. The social system involves peasant exchanges,

behavioral characteristics, social status and dignity, balance of facilities, rural governance and democratic construction. In the context of the current gap between urban and rural areas, the social system is the key to sustainable rural development. The space system refers to the physical environment and its spatial connection of artificial construction, and corresponds to the natural system, such as village settlements, local architecture, village style, road network, map relationship, spatial structure, etc., which is the externalization of rural sustainable development.

2.2 Building a Concept Road

In actual work, the characteristics of rural regional differences are often neglected, the core problems of village construction are ignored, and the spatial scale characteristics of rural areas are neglected, which ultimately leads to the actual guiding role and poor targeting of the model. Therefore, when constructing the sustainable development model of new rural areas in Guanzhong, this paper attaches great importance to the regional, pluralistic, dynamic and scale characteristics of rural development.

The type model takes the micro-village scale as the entry point, takes the village construction as the guide, and comprehensively considers the natural conditions, population structure, industrial economy, space utilization, facilities, living environment and local culture, and divides the different village types in Guanzhong. Based on this, we will explore sustainable development models suitable for different village types.

2.3 Suitable Mode Construction

Following the principle of "differentiation, scale, and pertinence", according to the construction method of "type division - problem review - model deduction", starting from the macro-level and micro-scale, the sustainable development of new rural areas in Guanzhong area is constructed. The local model includes the northern ecological restoration and poverty alleviation linkage mode, the central efficiency improvement and quality optimization synchronization mode, and the southern ecological priority and characteristic economic win-win mode. The type model involves four dimensions of industrial economy, space utilization, facility support and human settlement environment, including modern agricultural model, labor export mode, rural tourism mode, agricultural park demonstration mode, leading enterprise leading mode, demolition and integration mode, and beautiful rural upgrading mode. The two-tier system of the appropriate model for sustainable development of new rural areas in Guanzhong is shown in Table 1.

Table 1. Two-tier system of suitable mode for sustainable development of new rural areas in Guanzhong area

Scale	Appropriate mode	Type division	Specific mode
Medium macro	Local mode	Northern overall lag zone	Northern ecological restoration and poverty alleviation linkage mode
		Relatively developed area	Central efficiency improvement and quality optimization synchronization mode
		Southern relative lag zone	Southern ecological priority and characteristic economic win-win mode
Microscopic	Type mode	Industrial economy is weak	Modern agricultural model
		Space utilization	Agricultural park demonstration model
		Facility supporting lag type	Independent matching mode
		Harsh environment	Village appearance rectification mode

3. Application in the Construction of Native Landscape

In this paper, we have explored many construction models for the relationship between people and the natural environment in Guanzhong area. The interpretation of this mode of creation is a multi-level, highly flexible and adaptable construction strategy formed by long-term exploration and practice under the constraints of Guanzhong's regional resources. People are adapting to the ecological environment. The ecological background of development has also become the spiritual sustenance of local people, and truly realizes the harmonious unity of heaven, earth and people.

The gully is inserted horizontally and vertically, and is naturally free, so that a plurality of free sills and deep grooves are formed above the flat raft. This unique topographical feature has created a unique road network structure within the new rural village of Guanzhong. That is to say, on the one hand, the main body of the road network is mainly a square road network; on the other hand, affected by internal gullies, the roads with lower grades are more prone to gully, free and flexible development. The emergence of such road network structural features is not only a constraint of geographical conditions, but also a model strategy for the harmonious development of human-land relations.

From the perspective of classification level, its facilities are divided into three levels: the main center, the sub-center and the node. At the same time, the most important public facilities in the village, such as the ancestral buildings and the ancestral hall, are set in the main center of the village. For example, various temples, commercial facilities, and plazas are set up in the sub-centers of the whole village. General public facilities, such as small squares and small-scale buildings, are arranged in the node-like space of the whole village. From the perspective of layout, the entire sacrificial center and administrative center are arranged at the entrance to the west gate of the old city, showing its unique and core important position; the cultural activity center is arranged in the southeast corner of the old city, mainly considering the orientation of the gods towards the open area. The other public spaces are scattered in the node space of the village, and combined with the open land constitute a general functional node.

4. Summary

The sustainable development of new rural areas in Guanzhong, Shaanxi Province has typical spatial and temporal characteristics. In the era of hollow villages and aging, it faces real problems such as extensive production methods, inefficient use of facilities, and monotony of village styles. This paper expounds and deconstructs the element system of the sustainable development of the new rural human settlements environment in Guanzhong area. It believes that the sustainable development of the new countryside involves four major systems: rural economy, society, nature and space. How to weaken and eliminate the contradictions and conflicts between various systems and promote the coordinated and sustainable development of various systems is its main content. The courtyard form in the landscape of the native courtyard presents a "long and narrow" spatial morphological feature. The low courtyard number is the main construction feature. At the same time, the courtyard space application presents the characteristics of "graded, central axis symmetry".

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