

Classification and Application of Landscape Agriculture in Rural Leisure Tourism

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Abstract

The core content of beautiful countryside construction is to construct and implement modern landscape agriculture planning. The basic work of landscape agriculture planning and management is to classify landscape agriculture. In view of the requirements of new rural construction and the characteristics of agricultural land consolidation in China, this paper is based on the functions of landscape agriculture, location and farmers' economic behavior modification methods and topographic position index. A rural scale functional classification method for landscape agriculture was proposed, which is a secondary classification system using landscape and landscape subcategories. The method takes into account the dominant functions and spatial morphological characteristics of landscape agriculture, and can meet the needs of landscape agriculture planning in beautiful rural construction.

Keywords: Rural Leisure Tourism; Landscape Agriculture; Classification

1. INTRODUCTION

In the development and evolution of thousands of years, China's agricultural planting has formed many famous natural scenery based on the climate, topography, etc., relying on the natural environment. Land consolidation is the main content and landscape of the implementation of new rural construction planning. Important measures for agricultural design [1]. Tourism and leisure agriculture is a new type of industry based on agricultural management and combining agriculture with tourism [2]. It uses the idyllic landscape, agricultural management activities and farming culture to provide people with sightseeing, leisure and tourism. Around the central city, the vast rural area has formed a rural recreational area system with small cities and satellite cities as the center and broad rural landscape and rural life style as leisure content [3]. In the past, the formulation and implementation of land consolidation projects were directly based on land use classification. Its weakness was that it separated the regionality and integrity of the structure, function and ecological process of landscape agriculture, and affected the development and promotion of the comprehensive value of landscape agriculture [4]. In view of the actual situation and the requirements of beautiful rural construction, how to protect and restore the comprehensive value of landscape agriculture is an urgent problem for landscape ecology and planners.

2. CLASSIFICATION METHOD

The definition of landscape agriculture in this paper is as follows: landscape agriculture is a mosaic of landscape patches serving agricultural production in areas outside cities and towns, including farmland, woodland, garden land, grassland, hedge, rural roads, farmer settlements and agricultural service facilities. Agriculture and countryside have many functions, that is, production, life and ecology. Tourism and leisure agriculture and rural tourism are new ways to make full use of these three functions, especially life and ecology, so as to change the single function of agriculture and countryside [5]. Landscape agriculture retains many natural elements and is influenced and transformed by human needs. The needs of people's life promote the development of landscape agriculture, and the activities of farmers are the most direct and original landscape agriculture design [6]. The functional form classification method is adopted in the landscape agriculture classification, and the same landscape type must have the same landscape function and spatial morphological characteristics. The method adopts a two-level landscape classification system, namely landscape and landscape sub-categories.

3. LANDSCAPE AGRICULTURE

According to the natural suitability and geographical location of agricultural production, the dominant function of the plot is determined through comprehensive analysis and evaluation, and then, based on the difference of functional characteristics, it is divided into different landscape types [7]. Landscape ecology is the study of the overall spatial structure, interactions, coordination functions, and dynamics of many different ecosystems in a fairly large area. The landscape categories in this study can be divided into four categories: agricultural production landscape, agricultural service facility landscape, agricultural tourism and leisure landscape and agro-ecological landscape. The specific definition of each landscape category is shown in Table 1.

TABLE 1 DESCRIPTION OF LANDSCAPE AGRICULTURE

Landscape agriculture	Definition of Connotation	major category
Agricultural Production Landscape	Provide people with agricultural products and industrial raw materials directly. Agricultural products include grain, Fruits, oils, etc.	Arable land, garden land, aquaculture land, etc
Landscape of Agricultural Service Facilities	Providing service facilities for agricultural production and tourism services for urban residents The landscape.	Rural roads, water conservancy facilities, facility agriculture, sightseeing gardens and mining Picking gardens, farmhouse pleasures, etc.
Rural Settlement Landscape	The various forms of human living places in rural areas are the production and life of peasant households. The Bearing Space of Comprehensive Functions	With farmhouse, livestock shed, warehouse yard, green space beside house, health Accessory facilities under production conditions
Agroecological Landscape	It plays an important role in the maintenance of ecological environment in rural areas, and has the functions of soil conservation. Water Conservation and Biodiversity Maintenance	Ecological woodland, River surface, lake, unused open space, etc.

3.1 Landscape agriculture subcategory

Landscape sub-category: It is the basic unit of large-scale land consolidation and rural landscape planning and mapping. Topography is an important controlling factor affecting the intensity of land consolidation and development, including elevation and slope [8]. In the landscape agriculture category, different landscape agricultural sub-categories, such as paddy field landscape, dryland landscape, orchard landscape, tea garden landscape, and rural road landscape, are mainly divided according to the differences in land use patterns and coverage characteristics. According to the difference of spatial form (elevation and gradient) of landscape composition, different landscape subcategories are divided. The topographic position index is used to synthetically reflect the spatial differences of geomorphological conditions in an area.

Slope gradient and soil types (classified according to the phylogenetic soil classification in China) were selected as the main basis for the division of landscape agriculture units. According to the degree of slope restriction on agricultural tillage, it can be divided into four micro-landforms: flat land, gentle slope land, medium slope land, slightly steep slope land and steep slope land. See Table 2 below.

TABLE 2 SLOPE TYPE CLASSIFICATION

Slope	Landform types	Agricultural Utilization and Its Corresponding Measures
<4°	Flat ground	Good conditions, very suitable for agriculture
4~9°	Gentle slope land	Suitable for agriculture, generally mechanized tillage
9~18°	Middle slope land	Suitable for agriculture, but engineering water and soil conservation measures must be adopted
18~25°	Micro steep slope land	Applicable to forestry or agriculture, but must have engineering and Forestry

4. APPLICATION OF CLASSIFICATION RESULTS IN RURAL LEISURE TOURISM CONSTRUCTION PLANNING

4.1 Agricultural production landscape and its subcategories

Land consolidation is carried out in landscape agriculture, including land leveling and soil improvement projects. The real essence of rural landscape agriculture lies in the combination of ecology, organic production and service. On the basis of resource integration, grasping the essence of design and following certain principles will surely show

a brand new and different primary industry [9]. From the perspective of spatial pattern of tourism behavior, tourism shows two flourishing patterns: long-span and long-distance tourism in scenic spots and tourism in metropolitan areas. Especially in the metropolitan area, tourism has become the main body of short-term sightseeing and leisure tourism with urban residents as the main body. For medium and low suitable agricultural production landscapes, in the process of land leveling, focus on soil improvement, improve soil texture and configuration, and reduce the natural limiting factors of agricultural production. When zoning the sporadic landscape agriculture type, the partition principle is adopted to merge the small-area landscape unit plots into adjacent adjacent areas. The ecosystem of landscape agriculture and related subsystems are mutually restrictive and influential. In the process of developing rural tourism projects, order, coordination and symbiotic development between subsystems should be promoted.

4.2 Agricultural tourism leisure landscape and its subcategories

In the agricultural tourism leisure landscape, when land consolidation, attention should be paid to giving full play to the tourism and ornamental value of landscape agriculture, taking into account its production function. To carry out scientific research and product research independently or jointly with the outside world not only has the functions of tourism and agricultural production, but also has the functions of scientific research and technological demonstration. Biodiversity and ecosystems should be studied in the assessment and development process to identify the relevant obstacles to the sustainable development of landscape agriculture [10]. Based on the classification results of landscape sub-categories, farmland water conservancy and road engineering should be implemented for the middle and low topographical agricultural tourism and leisure landscapes without affecting the landscape heterogeneity and ornamental nature. The plan is based on the ecological concept of sustainable development, emphasizing the principle of being based on nature and aiming at people, creating a harmonious atmosphere of communication and dialogue between people and nature. Under the premise of ensuring ecological benefits, it will bring greater economic and social benefits to optimize resource allocation.

4.3 Agroecological landscape and its subcategories

The main functions of agro-ecological landscape are to conserve water resources and maintain biodiversity. From the classification of landscape, we can see that agricultural ecological landscape is mostly distributed in areas with low natural suitability and poor soil. Therefore, in addition to natural factors, the level of science and technology of builders is also crucial. As the material survival basis and basic economic source, our basic requirement is to maximize efficiency and safety, green and pollution-free. At the same time, combined with the classification results of landscape subcategories, the implementation of farmland shelter forest project and soil and water conservation project can not only prevent wind and regulate microclimate in middle and low terrain agricultural ecological landscape, but also in land consolidation. These are the characteristics of landscape agriculture. These characteristics of landscape agriculture can effectively enhance the experience of tourists. For the bare land and grassland in the high-altitude agro-ecological landscape, through certain land consolidation measures, the soil texture will be improved and developed into garden or plantation land.

5. CONCLUSIONS

The rural landscape is not only a visual perception, but also an experience of inner feelings. Aiming at the characteristics and regional differences of landscape agriculture in China, this paper proposes a dominant functional morphological landscape agricultural classification method, which takes into account the dominant functions and spatial morphological characteristics of landscape agriculture. This method fully takes into account the natural and human factors affecting the types of landscape agriculture, their functions and morphological characteristics, and can meet the needs of new rural construction planning and land consolidation. The research results are practical and innovative. However, considering that cultural and landscape functional characteristics exist in any landscape, it is difficult to separate them, and the classification system does not reflect them separately.

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