



Study on the Development Value of the Relationship between Natural Landscape and Human Ecology in Maitreya

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Abstract. The purpose of this study was to explore the relationship between natural landscape and human ecology in Maitreya City, Yunnan Province. By analyzing the characteristics of the natural landscape of Maitreya City, the influence of human activities on the natural environment, and the role of the natural environment on the human society, the dynamic interaction between the two is revealed. The results of the study show that the natural landscape of Maitreya not only provides important ecological services and resources, but is also significantly affected by human activities. Put forward the corresponding management suggestions to promote the protection of the natural environment and the sustainable development of human society. And put forward the corresponding development and protection countermeasures. Through quantitative and qualitative analysis of landscape value, combined with field investigation and expert consultation, the advantages and challenges of Maitreya City in tourism development, ecological protection and cultural inheritance are discussed. The research results will provide scientific basis and policy recommendations for the sustainable development of Maitreya City.

Keywords: Maitreya, natural landscape, human ecology, ecological services, development value

1 Introduction

1.1 Research Background

Located in central Yunnan Province, the city of Maitreya is known for its rich natural landscape and diverse cultural heritage, with rich natural landscapes and diverse ecosystems. With the development of economy and the growth of population, the impact of human activities on the natural environment has become increasingly significant, so it is particularly important to understand the relationship between natural landscape and human ecology. This study aims to analyze the impact of Maitreya's natural land-

scape on human society and the feedback of human activities on the natural environment, and explore how to protect the natural environment while promoting economic development. Bi Wenqi et al. [1] took Maitreya City, which is gradually transitive from central Yunnan to the southeast, as an example, and combined with its rich forest resources, carried out investigations and wrote analysis reports, and used current hot new technologies, remote sensing data, GIS spatial analysis, and other characteristics of landscape ecology simulation analysis. The comprehensive analysis results, combined with the spatial heterogeneity of landscape characteristics, human geographical environment and other symbiosis, guided the richness of biodiversity in the study area. In recent years, with the development of tourism, how to protect and utilize these unique landscape resources while promoting economic growth has become an important topic.

1.2 Characteristics of Maitreya Natural Landscape

The geographical position and climate of Maitreya are both advantageous. Maitreya is located in the middle of Yunnan Province, with fluctuating terrain and a subtropical humid climate [2]. Its warm and humid climate conditions have an important impact on the formation of natural landscapes and the distribution of ecosystems. The unique mountainous and hilly terrain provides a wealth of layers and variations to the natural landscape. From 2006 to 2016, there were more mixed forests and shrubland in the forest landscape area of Maitreya [3]. In recent years, great changes have taken place, and the largest area is pure forest, in fact, shrubland forest, suitable forest, mixed forest, again immature forest and bamboo forest, and finally for the harvest economic forest and nursery land. In general, Maitreya City was affected by natural environment and human disturbance in the early days, and the woodland landscape was seriously fragmented, with relatively dispersed patches and high degree of cutting and fragmentation [4]. However, with the dual impact of ecological protection policy and social development, the landscape change of forest in the city is not balanced in the region, that is, the integrity and connectivity of forest in complex mountain areas are improved. However, the fragmentation of forest around the town and in the dam area continues to intensify.

The major lakes and rivers in the Maitreya Scenic Area play an important role in the regional ecosystem and water supply. Primary forests and vegetation cover are also essential for biodiversity and ecological balance. With the changes of The Times, the vegetation coverage rate of the scenic spot has been increasing, which has gradually improved the rocky desertification of the soil. Xu Jiawei et al. [5] took the rocky desertification soil in the vegetation restoration mode of the Maitreya Scenic Spot as the research object, and measured its soil physical and chemical indexes and the distribution of different soil humus combinations. From the comprehensive soil quality index, the restoration effect of Yunnan pine pure forest restoration model is poor, but the restoration model with dry cedar and moist pine as the main restoration tree species is better in the primary forest soil planting in Maitreya City.

1.3 Research Objectives

The purpose of this study is to systematically evaluate the landscape value of Maitreya City, analyze its ecological, cultural and economic potential, and propose suitable development and protection countermeasures to achieve sustainable development.

1.4 Research Methods

This study adopts the quantitative and qualitative analysis methods of landscape value evaluation, combined with field investigation, questionnaire survey and expert interview, to comprehensively evaluate the landscape resources and development potential of Maitreya City. Exploring the relationship between Maitreya's natural landscape and human ecology involves understanding the impact of natural environment on human society and the feedback of human activities on natural environment.

2 The Impact of Human Activities on Natural Landscape

Human activities are the main driving factors of land use change[6]. With the rapid development of agricultural economy, cultivated land reclamation and agricultural activities have an impact on land use change and ecosystem. Land use and green cover change indirectly affect the value of ecological services by affecting the structure and function of the terrestrial ecosystem. Agricultural fertilizers, pesticides and domestic sewage pollute water bodies and affect water quality and ecosystems. Lei Xin and Hai Xinquan [7] analyzed the characteristics of land use change in the Qilian Mountains in recent 20 years based on the land use transfer matrix and dynamic attitude, estimated the carbon storage of the ecosystem in the Qilian Mountains, and estimated the economic value of carbon storage in different periods by combining the compound interest present value formula. The process of urbanization has also brought land development and infrastructure construction to change the original appearance of the natural landscape. Reservoir construction and excessive use of water resources put pressure on the ecosystem, and the exploitation of mineral resources causes pollution to land and water bodies, affecting the ecological environment. Air pollution from industrial emissions and transportation poses a threat to the quality of the environment and the health of the population. Therefore, the changes of population and urban land directly affect the economical and intensive use of urban land. For the Maitreya area, it is necessary to seek the harmonious coexistence between man and nature, to seek the maximum utilization and development value of land resources, which can promote the balanced development of the relationship between man and land, and can not always appear the situation of polarization.

3 The Role of Natural Landscapes in Human Society

3.1 Impact on Agriculture and Physical and Mental Health Development

The natural environment of Maitreya, especially the climate, soil, terrain and other conditions, has a decisive impact on agricultural development. Its warm climate and dense water system create very favorable conditions for agricultural production [8]. However, Yunnan Maitreya is a typical karst landscape, surrounded by mountains, and has a pleasant climate, which is suitable for the majority of elderly people. The natural landscape can provide a sense of tranquility, relaxation and pleasure, which helps to restore energy, reduce stress and relieve anxiety. In the nature of the Maitreya Scenic Area, people who go there usually because they can get away from the noise and pressure of the city, enjoy the peace of nature and fresh air, which is essential for people's physical and mental health, and protect the natural landscape helps to protect biodiversity, maintain ecological balance, as well as combat climate change and relieve environmental pressure. The protection of natural landscapes is an important part of the sustainable development of society.

3.2 Impact on Tourism and Related Industries

Because the natural landscape of Maitreya attracts a large number of tourists, it provides great support for the development of local tourism and creates rich employment opportunities for related industries, such as hotel accommodation industry and grape base wine manufacturing industry, which has also become a popular tourist destination. The prosperity of tourism has led to the growth of local residents' economic income and improved people's quality of life. At the same time, the protection of natural landscape also promotes the development of environmental protection industry.

3.3 Impact on Cultural Inheritance and Education:

The natural landscape of Maitreya is rich in history and culture, reflecting the harmonious coexistence between human beings and nature. By visiting and learning about natural landscapes, people are able to better understand and appreciate the beauty of nature and pass this beauty on to future generations. In addition, natural landscapes are an important resource for research and education in a variety of disciplines, helping to safeguard humanity's cultural heritage and foster environmental awareness among new generations.

4 Value of Ecological Development

In the process of urban construction, a large number of urban parks have also emerged in the city center, which have become the natural landscape area of Maitreya City, satisfying urban residents to return to nature by using their own unique resources and

geographical advantages. Ecological aesthetics is a reflection of human's understanding of nature, society and oneself in the aesthetic latitude[9].

Maitreya is rich in water resources, and there are hot springs everywhere, which nourish mountain forests and wetlands. At the same time, forests and wetlands play an important role in water conservation and regulation. The pleasant climate also plays a role in regulating the local climate, including temperature and humidity. Therefore, a wonderful natural landscape has been formed, which is closely related to the local ethnic culture and forms a unique cultural landscape, becoming an important source of tourism attraction, driving the development of local economy and providing huge economic value.

5 Development Countermeasures

5.1 Tourism Development Strategy

Currently, the tourism value of Maitreya is mainly hot springs. According to the value characteristics of the local landscape, tourism products with local characteristics are developed, such as eco-tourism and cultural experience tour, etc. With the characteristic natural scenery such as Maitreya Taiping Lake and Keyi Town, tourists are close to nature, natural resources experience services are developed, and transportation, accommodation and service facilities are improved. Improve visitor receptivity and satisfaction. In the renovation project of Maitrepurong characteristic high-speed railway town, the advantages of local characteristic resources are fully tapped and utilized, and the characteristic folk culture is displayed from the perspective of solving practical problems, so as to develop the economy and protect the culture of the characteristic high-speed railway town, and provide ideas and guidance for the planning of similar upgrading and transformation under the situation of upgrading and transforming the living environment of beautiful home construction [10].

5.2 Ecological Protection Measures

In the development of tourism at the same time, delimit natural landscape reserves, formulate protection and management plans to prevent over-exploitation. At the same time, strengthen the publicity of public awareness of environmental protection, improve the environmental consciousness of residents and tourists, and set up ecological protection experience projects in tourist attractions to encourage and publicize ecological protection. Designating ecological reserves to protect important natural landscapes and ecosystems. At the same time, ecological agriculture and green buildings are promoted to reduce the impact on the natural environment. We will strengthen the control and treatment of environmental pollution and improve the quality of water and air. Based on GIS technology, Niu Ledo et al. [11] evaluated and subdivided the natural suitability of human settlements in 13 counties and cities of Honghe Prefecture in Yunnan Province by applying such indices as topographic relief, climate comfort, engineering geology and hydrogeology, land utilization rate and green area of Maitreya City. The results show that the five counties around Maitreya City belong to more

suitable areas for human settlements. Eight counties and cities belong to the generally suitable areas for human settlements. Different countermeasures for regional development are put forward in view of different regions of human settlement environment suitability. Implement scientific resource management measures and make rational use of natural resources. Strengthen the publicity of public awareness of environmental protection and improve residents' environmental awareness.

5.3 Cultural Inheritance and Protection

There are many ethnic minorities in Maitreya City, most of which are Yi, and the local ethnic architecture is also quite distinctive. Therefore, more efforts should be made to publicize the characteristics of ethnic minorities, strengthen the protection and restoration of historical sites and cultural heritage, and maintain their original appearance. It also supports and encourages the holding of national cultural festivals, inherits and displays local traditional culture, and allows tourists to experience local cultural celebrations and participate in them for free. Zhang Huiji et al. [12] explored the effect of effective models of rural human settlement environment governance on advancing rural construction and promoting rural revitalization and development. Field research on human settlement environment governance was carried out in 4 typical villages in the border mountainous areas of southwest China. According to the habits and habits of local residents, the government system, and the theory and technology of enacting local representatives, these villages were divided into 4 main models of villagers, government, market and multi-center governance according to the different forces of governance subjects. Through in-depth study, it is found that different theoretical mechanisms are applicable to different environmental mechanisms. There are more residents living in remote locations and far away from the county seat and central town, and there are more farmers with complex and close family relations. The villages where they live are suitable for implementing the villagers' independent governance model, improving the villagers' cultural level, vigorously promoting the importance of cultural inheritance and protection, and improving the quality of individual residents. The government governance model can be implemented in villages with a large population, a certain level of education and strong government control over governance. Villages with strong economic and resource endowments, cultural history and convenient transportation conditions are suitable to implement the market governance model. The villages with better village development and better benefit linkage mechanism are suitable for implementing the multi-center governance model. The governance level and economic level of rural human settlements in the mountainous areas of southwest China are generally backward, the cultural level is uneven, the follow-up advocacy task is arduous, and the participation and enthusiasm of villagers need to be strengthened.

5.4 Policy Recommendations

Formulate comprehensive landscape resource planning and management policies to coordinate the relationship between tourism development and environmental protec-

tion. Local residents and stakeholders are encouraged to participate in decisions on the conservation and development of landscape resources to ensure sustainable development. Encourage community participation in the protection and management of natural landscapes, and strengthen local governance capacity. Xiang Yuqiong et al. [12] put forward some policy suggestions for rural ecological environment governance, which mentioned that the government and multiple social entities should participate in it. However, how to mobilize and promote cooperative actions in resource planning and management is a difficult problem in rural development. The qualitative research method based on grounded theory shows that social mobilization includes five paths: creating a comfortable environment for local villagers, building their normative awareness, striving to promote knowledge to change their fate, guiding knowledge, motivating and strengthening, and negotiating and dialogue. The core mechanism of social mobilization is embedded mobilization and stimulation at various levels. When the government is embedded in the administrative system, it should also promise corresponding benefits to the villagers, embed the rural society in ways such as incentives, and stimulate the villagers' cooperative action consciousness. Social mobilization can form three modes: authoritative promotion, emotional stimulation and power integration, which provide useful policy enlightenment for the rectification of human settlements.

6 Conclusion

This paper summarizes the main results of landscape value evaluation of Maitreya City, and points out its advantages and challenges in tourism development, ecological protection and cultural inheritance. Specific development suggestions based on the research results are put forward, including tourism product development, ecological protection measures and cultural inheritance strategies. The main relationship between natural landscape and human ecology in Maitreya City is summarized, and the influence of natural landscape on human society and the feedback of human activities on natural environment are pointed out. To put forward corresponding policy recommendations and management measures to promote the protection of natural landscapes and the sustainable development of human society.

7 Expectation

It is suggested that the evaluation methods of other landscape types can be further studied in the future to explore the impact of different development modes on the long-term sustainable development of Maitreya City, further study the dynamic changes of natural landscape and human ecology, and explore the impact of different environmental policies on the ecosystem. This paper summarizes the evaluation results of various landscape resources and points out the advantages and disadvantages of Maitreya City. The value distribution and potential of different landscape resources are analyzed.

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