Research on the Development of Rural Ecotourism Planning of Regional Distribution based on GIS Technology

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Abstract. Rural ecotourism is a coordinated new type of tourism that is proposed in the context of traditional tourism and rural tourism that has brought about serious tourism pollution and global environmental protection. The development of rural ecotourism is of great significance for promoting the sustainable development of rural areas in China and properly solving the "three rural" issues. This paper first puts forward the concept and significance of rural ecotourism, then analyzes the conditions of rural ecotourism development, and finally proposes different rural ecotourism development models based on Gis. It is hoped that rural ecotourism will lead to a healthy, harmonious and sustainable development path.

Keywords: Rural Ecotourism, Development Model, Development Measures, GIS

1. Introduction
Rural ecotourism is different from ordinary tourism activities. Because its occurrence area is in the countryside, the rural primitive natural ecology and human landscape are the basis for appreciation, so that tourists can recognize nature and experience the rural ecology in the process of appreciating the rural scenery. Since its introduction, it has quietly emerged in the vast rural areas of China, and has played a huge role in promoting the development of rural economy, society and culture. Therefore, studying the development of rural ecotourism has important practical significance [1].

2. The connotation and significance of rural ecotourism
Rural ecotourism is a coordinated new type of tourism that is proposed in the context of traditional rural tourism bringing serious tourism pollution and global ecological environmental protection. It is a tourism activity that not only improves the quality of life of local residents but also protects resources and environment. Rural ecotourism is a combination of rural tourism and ecotourism. The development of rural ecotourism has important theoretical and practical significance. First of all, it can meet the needs of contemporary people's leisure and meet the current cultural tourism and eco-tourism boom, so it has broad market prospects. Secondly, using the village as a platform can not only improve the ecological awareness of local residents and developers, but also play a subtle role for tourists, thus contributing to the protection of resources and environment. Furthermore, the main source market for rural ecotourism is in cities. The development of rural ecotourism can help to coordinate the imbalance
of regional economy, especially urban and rural development. Finally, rural ecotourism integrates rural resources to promote the optimization of rural industrial structure [2]. Figure 1 shows the current development of rural ecotourism.

![Figure 1. Changes in rural ecotourism income in 2012-2017.](image)

3. Conditions for the development of rural ecotourism

3.1. Resource and environmental conditions
The development of rural ecotourism must have a certain resource environment as a support. First, the resource environment is required to be malleable. That is to say, under the condition that the ecological environment is not degraded, certain modifications can be made according to the needs of tourism product design or tourism demand. Second, the rural resource environment capacity is also an important factor to consider. In rural areas where resources are fragile and tourism capacity is small, it is generally not appropriate to develop rural ecotourism.

3.2. Market conditions
Villages with good resource and environment may not be able to develop rural ecotourism. The development of rural ecotourism depends to a large extent on its market demand. Generally speaking, due to the strong demand for short-term leisure for urban residents, suburban villages generally face greater potential customer demand. The villages near the well-known scenic spots also have scenic tourists as their source of tourists. Villages with outstanding resources can attract tourists with their special resources. Villages near the main traffic line can attract passers-by or tourists from nearby cities with their superior traffic conditions. The remote mountain villages where the resource environment is not prominent and the traffic is inconvenient are generally not suitable for the development of rural ecotourism [3].

3.3. Geographic conditions
The development of rural ecotourism must have certain location conditions. The geographical location determines the background of the rural resource environment. Traffic location is one of the necessary conditions for the development of rural ecotourism. The cultural location mainly considers the cultural characteristics of the village. The economic location is mainly based on the economic situation of the region where the village is located, and the close relationship with the surrounding developed regions. The tourist location is mainly to look at the development of surrounding tourist areas and similar products.
3.4. Socioeconomic and policy conditions
Rural ecotourism must be based on a certain social economy. The social and economic foundation is weak, the social capacity is small, local residents do not want outsiders to interfere with their normal life or local residents are reluctant to choose to develop tourism to change the status quo, then such villages are generally not suitable for the development of rural ecotourism. Rural tourism development will inevitably involve local government policies. If local government policies conflict with tourism development, it is difficult to develop rural ecotourism [4].

4. Rural ecotourism development model
Based on the characteristics of geographical distribution, the preliminary division of villages suitable for the development of rural ecotourism is shown in Table 1. Specifically, the first development model is that there is a big difference between urban and large industrial and mining areas and rural landscapes, and residents' demand for leisure and ecological experience is strong. In the busy daily life, it is often necessary to find a place with large environmental differences, to temporarily escape the usual living environment, and to reduce physical and mental fatigue or leisure in places with low cost and time. This provides opportunities for developing tourism in nearby cities or large industrial and mining areas with convenient transportation. The second development model is aimed at rural areas that are often close to railway stations or highways, and the traffic is very convenient. It mainly uses past tourists or nearby towns as the main source market. The third mode is that the village is close to the famous scenic spot or inlaid in the scenic spot, and the rural eco-tourism can be developed with the attraction, attraction and tourism facilities of the scenic spot. It mainly uses scenic tourists as its main market. The development of scenic spot-based rural eco-tourism is of great significance to scenic spots and villages. On the one hand, it enriches the content of tourism activities, enhances the attraction of scenic spots, increases the income of tourism destinations, and can enhance the taste of scenic spots to a certain extent. On the other hand, it is conducive to alleviating social contradictions and promoting rural social and economic development. The fourth mode is that the characteristics of rural tourism resources are outstanding, and they have strong enough tourist attraction. It is generally a famous village in the town, with typical agricultural landscapes and typical folk customs [5].

Table 1. Rural ecotourism development model.

| Rural ecotourism development model |
|-----------------------------------|
| ● The first development model is the support of urban and large industrial and mining areas. |
| ● The second development model is traffic support |
| ● The third mode of development is relying on scenic spots |
| ● The fourth development model is resource support |

5. Conclusion
The essence of rural ecotourism is to incorporate the concept of ecological civilization in traditional rural tourism, which reflects ecological protection, sustainability and enlightenment. In order to promote the sustainable development of rural ecotourism in China, it is necessary to follow the conditions for the development of rural ecotourism and adopt corresponding rural ecotourism development models for different regions. At the same time, it is necessary to build a rural ecotourism management model to maintain the protection of the unique natural environment and human environment.
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