

Promoting Outdoor Sports Tourism by Natural Resources and Environment Protection

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Abstract: As the pillar industry of China's economy, tourism ecology is the general trend of tourism development. The sports industry is a rising industry in China, and also a sunrise industry. The sports tourism of its sub industry has become more and more popular in recent years. In order to solve the shortcomings of the existing research on natural resources and environmental protection to promote outdoor sports tourism, this paper discusses the concept of sports tourism and sports tourism resources, the value of natural resources and SWOT analysis, and investigates and discusses the selected research area overview and the evaluation index system framework of ecological tourism protective development. Through the questionnaire survey and SWOT analysis method, this paper makes a statistical analysis of the service satisfaction and natural resource advantages of outdoor sports tourism. Through the statistical data, it is found that the lake and river resources account for 84%. According to the survey data of the health and service satisfaction of the scenic spot, the choice of "good" and "good" reached as much as 45%. Finally, according to the analysis of the survey statistics, this paper puts forward the improvement strategies for the protection of natural resources and environment to promote outdoor sports tourism.

1. Introduction

The development of ecological sports tourism can not only drive the development process of local cities, but also respond to the national strategy of targeted poverty alleviation. It is also conducive to better promoting the development of ecological sports tourism, effectively promoting the integrated development of sports and tourism, transportation, catering, hotels and other related industries, and producing good economic and social benefits.

Nowadays, more and more scholars have done a lot of research on the promotion of outdoor

sports tourism in natural resources and environment protection through various technologies and system tools, and have also made certain research achievements through practical research. Based on the big data analysis framework of GraphLab, UmedaS has established the design idea of resource data model by adopting the framework of distributed computing technology, and formed the outdoor sports tourism analysis model; The spatial description state of outdoor sports tourism resources was measured by KElmogorov method, and the measurement data of spatial protection state were obtained. After that, it was imported into the outdoor sports tourism resources research and calculation system, and the data were statistically processed, so as to analyze the research results of outdoor sports tourism resources promotion. The measurement results show that the scheme has good spatial security [1]. In combination with the "core edge" theory of spatial structure optimization, Mcsharry PE designed the key indicator system of the economic strength system of 19 sports tourism evaluation indicators in Anhui Province according to the spatial characteristics of sports tourism resources. 19 indexes were analyzed by principal component analysis and cluster analysis. The analysis also puts forward the sports tourism structure adjustment strategy of "three horizontal, one vertical and one circle" [2]. DobieS has made clear the basic advantages of the integration of mountain tourism industry through the research on the comparative advantages of mountain resources, water resources, talent environment, competition advantages and other fields in Guizhou Province, which provides some policy support for the provincial and above government departments to actively promote the integration and development of mountain tourism industry, opens up new ways for market development, and effectively promotes the development of the industry [3]. Although the existing research on natural resources and environment protection promoting outdoor sports tourism is very rich, there are still some limitations in its practical application.

According to the idea of raising, analyzing and solving problems, this research takes the development of leisure outdoor sports tourism project resources in a city as the research object, using SWOT analysis method and questionnaire survey method to conduct research. This paper uses SWOT method to analyze the internal and external factors of the development of sports tourism resources in small towns. SWOT analysis can effectively avoid subjectivity and blindness in strategic decision-making, provide more scientific theoretical basis, and propose targeted strategies for natural resources and environmental protection to promote the development of sports tourism resources. At the same time, it also provides some reference for the development of similar sports tourism resources.

2. Protection of Natural Resources and Environment to Promote Outdoor Sports Tourism

2.1. Sports Tourism

First, sports tourism has a regional attribute, that is, it is not in the place of daily life, which is one of the tourism characteristics; Second, the way of sports tourism is to visit or participate in sports activities, which is the interactive feature of tourism and sports [4]. Third, the physical basis of sports tourism is sports resources. Fourth, sports tourism is an activity. Tourism provides a platform for sports. As a form of tourism, sports tourism takes sports activities as a carrier and belongs to the category of tourism. It is an industry with great development potential [5].

2.2. Sports Tourism Resources

It is the sum of all events and factors generated in nature and in the process of human social activities, with sports events, stadiums, sports culture and sports experience as the carrier, forming a great attraction for sports tourists, and forming corresponding social, economic and ecological

benefits for the development of tourism [6]. Sports tourism resources are not necessarily developed and utilized, but can also be in the state of being developed and utilized, in research or developed and utilized [7].

2.3. Natural Resource Value

Natural tourism resources are public goods, and their economic value is characterized by no market price and price uncertainty [8]. The value of natural tourism resources can be divided into use value and non use value [9]. Figure 1 shows the value components of natural resources.

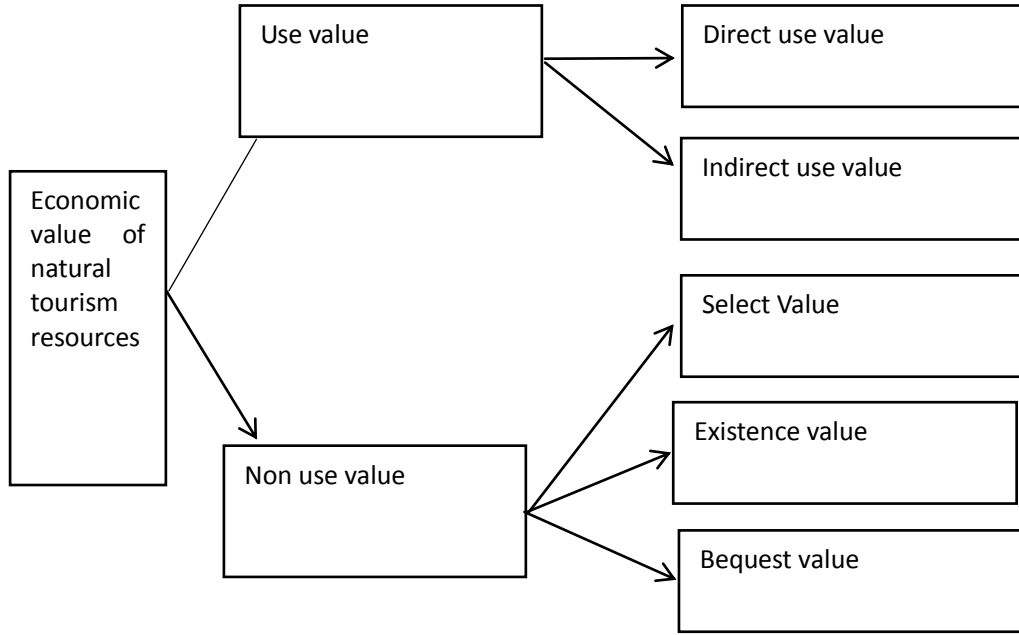


Figure 1. Value composition of natural tourism resources

2.4. SWOT Analysis

(1) Index matrix and weight calculation of each level

The judgment matrix of strengths, weaknesses, opportunities and threats is obtained by comparing each influencing factor between SWOT groups in pairs. Then the AHP hierarchy analysis in SPSSAU software is used to calculate the weight of single level indicators between SWOT groups and between groups, and then the weight value is obtained [10]. The specific calculation steps are as follows:

First, use the product square root method to calculate the geometric mean \bar{Q} of each line of the judgment matrix:

$$\bar{Q}_x = (\prod_{y=1}^m b_{xy})^{1/m}, x, y = 1, 2, \dots, m \quad (1)$$

Then, the geometric mean value of each line is normalized to obtain the eigenvector Q :

$$Q_x = \frac{\bar{Q}_x}{\sum_{y=1}^m \bar{Q}_y}, x, y = 1, 2, \dots, m \quad (2)$$

The strengths, weaknesses, opportunities and challenges are displayed through the matrix, and they are combined and matched to make feasible decisions [11]. The details are as follows:

1) Advantage opportunity (SO) strategy is a kind of strategic model that is generally considered to be very ideal, which is based on the inherent advantages of things and fully combines external opportunities to develop itself [12].

2) Disadvantages Opportunity (WO) strategy is a strategy to seize the opportunities brought by the external environment, make up for the shortcomings of things themselves, and develop strengths and circumvent weaknesses [13].

3) The advantage challenge (ST) strategy refers to that things use their own strengths to avoid or reduce the impact of external environmental factors on the development of things.

4) Weakness challenge (WT) strategy is a strategy to avoid the defects and deficiencies of things themselves and the impact of the external environment, which is relatively defensive [14].

(2) SWOT strategic orientation

The strategic quadrilateral is an important basis for formulating the strategic type of sports tourism resources development under the protection of natural resources and environment, and the strategic type is selected according to the quadrant of the coordinates of the falling point in the quadrilateral. The strategic azimuth is determined by the center of gravity G of the strategic quadrangle, and the quadrant of point G is the priority development strategy [15]. The calculation formula of point G is:

$$G(I, J) = \left(\frac{\sum_{x=1}^4 Ix}{4}, \frac{\sum_{x=1}^4 Jx}{4} \right) \quad (3)$$

3. Research on the Promotion of Natural Resources and Environment Protection to Outdoor Sports Tourism

3.1. Framework of Evaluation Index System for Ecotourism Protective Development

This paper mainly aims at the characteristics of natural reserves of "forest ecosystem" type, and establishes the evaluation index system framework for the protective development of ecological sports tourism in this type of natural reserves (see Table 1 for details). For other types of natural reserves, based on the principle of "adjusting measures to local conditions", the indicators can be increased or decreased [16].

Table 1. Protective development evaluation index system

Target layer	Index
Environment and resource protection	Atmospheric SO ₂ concentration
	Atmospheric TSP
	Land capacity
	Soil organic matter
	Chemical composition of soil
	Forest coverage
	Appearance of a forest
	Guarantee degree of ecological compensation funds
	Traveler waste and disposal rate
	Tourism environmental capacity
	Protection degree of scenic spots (including cultural scenic spots)
	Water and soil loss area
	River flow/negative ion content of groundwater
	BOD and CO ₂ index of water body
	Protection degree (or diversity) of animal and plant resources

3.2. Overview of the Study Area

According to the mainstream classification of sports and leisure featured towns, a shooting hot spring sports and leisure featured town in a city belongs to a sports and leisure featured town of health and fitness [17]. At present, the town mainly consists of five sectors, namely, hot spring health care sector, water sports sector, nationwide fitness popularization sector, Jiangxi Provincial Sports Bureau sports sector, and outdoor sports sector, integrating more than 30 kinds of sports, including UFO shooting, swimming, badminton, table tennis, fitness, water sports, mountain climbing, rafting, yoga, tai chi health care and outdoor expansion, and integrating entertainment and leisure, health care, hot spring health care A comprehensive ecological health sports and leisure theme town integrating healthy green food, orange, organic fish and other elements [18].

4. Research on the Promotion and Application of Natural Resources and Environmental Protection to Outdoor Sports Tourism

4.1. Statistical Analysis of Outdoor Sports Tourism Data under the Protection of Natural Resources and Environment

(1) Satisfaction degree of outdoor sports tourism natural resources service

Some research methods will also help us to use SWOT analysis to analyze the development and utilization of sports tourism natural resources. By issuing the returned questionnaires, we found out the satisfaction of the general population with the service quality of the local "hiking", "camping", "rafting", "mountain biking" and "outdoor expansion" projects in Hangzhou and the sanitation of the scenic spots in these aspects when participating in the natural resources of sports tourism.

Table 2. Statistics of satisfaction degree of outdoor sports tourism natural resources service in a city

Project	Outdoor expansion	Foot	Camping	Drift	Mountain Bike	Outdoor expansion
Good	7.3%	9.5%	10.4%	8.5%	7.5%	11%
Preferably	46%	47%	47.5%	44%	50.4%	36%
Commonly	37.4%	34.5%	32%	38.4%	39.5%	38%
Poor	9.3%	8%	5.4%	9%	2.6%	10%

According to the survey and statistics of the data in Table 2 and Figure 2, the choice of "better" and "good" among the options is up to 45%. After careful analysis of the data, we note that the proportion of the choice of "general" is also a large proportion. Therefore, we draw a conclusion that the infrastructure conditions for tourist participants to reach the scenic spots and the service level of tourist destinations should be further improved. The survey results of the data of "mountain biking" show that the majority of tourism participants choose the "average" item, and there are the most, while the number of tourism participants who choose the "good", "poor" and "poor" items reaches 22.8%.

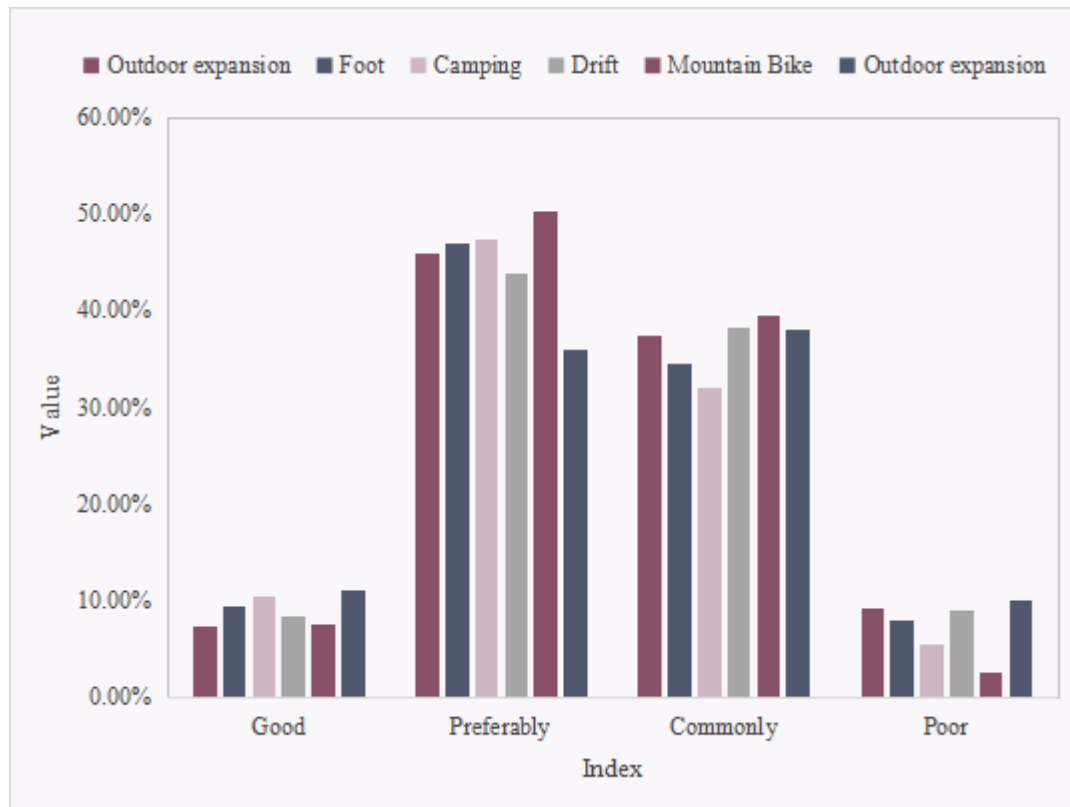


Figure 2. Satisfaction data of outdoor sports tourism natural resources service in a city

(2) Statistics of Natural Resources Advantages of Holiday Sports Tourism in Hangzhou

Through the investigation on the advantages of the natural resources of holiday sports tourism in a city, the percentage of the number of tourists participating in the natural resources of holiday sports tourism can be clearly analyzed, and the advantages of the natural resources of sports tourism can be analyzed. The specific data are shown in Table 3.

Table 3. Statistics of natural resources advantages of sports tourism

Resources	Frequency	Percentage
Mountain	112	74.7%
Lakes and rivers	126	84%
Rural field	75	50%
Mountain forest	85	56.7%

4.2. Strategies for Natural Resources and Environment Protection to Promote the Development of Outdoor Sports Tourism Industry

(1) Ecological planning concept

The design should realize the communication and interaction between users, buildings and the environment. The coastal ecological sports tourism industry planning scheme focuses on the integration of indoor and outdoor environments. Through the extension of landscape space, it effectively increases the sense of space flow, and ultimately creates a comfortable ecotourism complex environment highly integrated with nature.

(2) Ecological theme conception

The ecological theme concept expresses the designer's awe and respect for the natural

environment. The coastal ecological sports tourism industry should, according to the characteristics of sports tourism resources, form a complex of multiple theme types, such as health care and elderly care, leisure vacation and living, hot spring recuperation, theme park, etc. by integrating spatial organization, and build Guangxi coastal area into a diversified and composite sports tourism destination with vacation, leisure and entertainment, sports, sightseeing, food shopping, and cultural experience, It focuses on the development of coastal sports projects, a new type of business based on the development of sports industry, and a sports tourism complex with ecological concept.

(3) Ecological supporting facilities

The ecological sports tourism scenic spot should also follow the example of the nature reserve and divide the scenic spot into three parts: the core area, the buffer area and the general sports tourism activities. The basic principle of ecological design should conform to the locality and save natural capital. It requires the design to respect traditional culture and local knowledge, adapt to the natural process of local places, use local materials for construction, and use natural resources sparingly.

5. Conclusion

This paper takes the ecological outdoor sports tourism resources of the town as the research object, and adopts the research methods of questionnaire survey and logical analysis to conduct SWOT analysis on the promotion of the development of outdoor sports tourism by the protection of natural resources and environment. It believes that the superior natural resources effectively support the development of ecological sports tourism resources, and the inferior natural environment conditions restrict the development of ecological tourism. Based on the SWOT analysis results of the development of ecological sports tourism resources in a city, and following the development principles, this paper proposes strategies for promoting the development of outdoor sports tourism through natural resources and environment protection from four aspects: planning concept, theme conception, service management and supporting facilities.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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