

The Research on the Sports Tourism Resources Development Evaluation

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Abstract. With the improvement of people's income and living standard, people's spiritual life has also been constantly enriched, and the consumption concept has changed consequently. People have more and more intense desire and demand on the tourism after the intense work. While as the emerging mode of traveling, the sports tourism is loved by people for its produced profound experience and uniqueness to the tourists. Carrying out the right development and reasonable utilization on the sports tourism in Tibet can promote the development of sports tourism in Tibet, and at the same time drive the development of other industrial chain so as to produce the positive effect on the sustainable development of Tibet and even the entire western areas.

Introduction

The sports tourism mainly takes the outdoor sports as the main subject, and takes the natural environment as the development carrier. And Tibet has the obvious advantages both on the natural environment and human geography. The sports tourism resources in Tibet are extremely abundant. No matter what it is, the high mountain and snow summit resources, the river and valley resources, or the lake resources, all of them show their great development potentials. In addition, the region's ethnic sports culture has its distinct characteristics, and all of the things above can be the favorable conditions for the development of sports tourism resources in Tibet.

Relevant literatures of existing sports tourism indicate that there are many countermeasure researches of existing sports tourism resource development, but there are few countermeasure researches based on the development of sports tourism resources evaluation. There are qualitative evaluation researches in the sports tourism resources evaluation researches, and there are few scientific, comprehensive and quantitative evaluation researches. The systematic research on the sports tourism resources evaluation theory is less involved. Based on the previous research, we use the method of expert interview and analytic hierarchy process to establish the sports tourism resources evaluation system so as to enrich and perfect the sports tourism resources evaluation theory in this paper.

The Construction of Sports Tourism Resources Evaluation System

The Construction Principles of Sports Tourism Resources Evaluation Indicator. Representativeness. The selection and confirmation of the sports tourism resources evaluation indicator should have representativeness and typicality. They can fully reflect the value, the natural properties, the development condition and the development value characteristics of sports tourism resources.

Completeness. The sports tourism resources evaluation indicator should give the full consideration to the requirement of completeness. As far as the evaluation objects are concerned, we not only need to consider the natural sports tourism resources value, but also need to consider the sports tourism value with Chinese characteristics. As far as the category evaluation is concerned, we not only need to consider the sports tourism resources value evaluation, but also need to consider its development value and development conditions.

Scientificity. The indicator system should be able to accurately and objectively reflect the hierarchy and the value of the sports tourism resources. Therefore, in the process of formulating the indicator system we should give the continuous research and analysis, and try to adjust and optimize so as to avoid the simple pile of statistical indicators and the repetition between the indicators. We should choose the indicator which can best reflect the important factors of sports tourism resources evaluation as far as possible.

Operability. For the setting of evaluation indicator we should consider its simplification and its easy implement to avoid using the indicator which is hard to obtain and measure so as to make the evaluation have the operability and ensure the feasible evaluation process.

The Construction of Sports Tourism Resources Evaluation System. For the first step, we should combine with the precious existing literature researches and take them as the basis to form the basic framework of Sports tourism resources evaluation indicator system.

For the second step, we should carry out a comprehensive and thorough investigation based on this object, namely sports tourism resources in Tibet to fully refer the characteristics of the local sports tourism resources and revise the prototype of the indicator system.

For the third step, we should consult with 31 experts respectively in the subject areas of geography circles, the tourism circles, the sports circles of Tibet University, Lhasa Teachers College, Tibet Agriculture and Animal Husbandry College, Tibet Sports Technical School, Tibet Mountaineering School. And then we combine with the experts' opinions to perfect the evaluation indicator system. And eventually the evaluation indicator system is confirmed as follows. It includes 3 first class indicators, 11 second class indicators and 22 third class indicators.

The Weight Confirmation of Sports Tourism Resources Evaluation Indicator. The Confirmation Steps of the Indicator Weight. We should construct the judgment matrixes. Assume that A is the corresponding upper hierarchy indicator of $a_1, a_2 \dots a_n$, then a_{ij} refers to a judgment of the relative importance of a_j to A and a_i .

We should make a_{ij} ($i, j = 1, 2, 3, \dots, n$) generally take the values as 1, 2, 3, 4, 5, 6, 7, 8, 9 and so on, the 9 rank scales. Their specific meanings are shown in the Table 1.

Table 1 "the 1-9 scale" and its meaning

The Scale with the Importance	The Specific Description of Definition
1	Compared with the two factors, and both of them have the same importance.
3	Compared with the two factors, and one of them is more important slightly.
5	Compared with the two factors, and one of them is more important obviously.
7	Compared with the two factors, and one of them is more important intensively.
9	Compared with the two factors, and one of them is more important extremely.
2, 4, 6, 8	The medium value of the above adjacent evaluation can be described as follows. 1) important slightly; 2) more important; 3) very important; 4) more important

intensively.

Reciprocal	Compared with the two large indicators, a_i and a_j , we obtain the judgment a_{ij} . From this we know that we compare a_i and a_j to obtain the judgment $a_{ji}=1/a_{ij}$.
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Generally speaking, the numerical value of judgment matrix is confirmed jointly by three aspects. First, we should refer to the relevant data of research object. Next, we should refer to the industry experts and scholars' advices and opinions. Finally, we should synthesize the understanding of the researcher himself about the problem. Assume that the judgment matrix shows the following relationship.

$$j = \frac{a_{ik}}{a_{jk}} \quad (i, j, k=1, 2, 3, \dots, n) \quad (1)$$

Then, we think that the judgment matrix has the so-called complete consistency. However, because the objective things have bigger complexity, along with different people have the differentiated cognitions, the deviation is inevitable. Therefore, it is not realistic to stipulate that all the judgment matrixes show the complete conformity, especially in the situation with more influencing factors. So in order to evaluate the scientific nature and accuracy of the results with hierarchical analysis process, we need to take the judgment matrix as the object and make the strict inspection on its consistency.

The Hierarchical Single Arrangement

As far as the hierarchical single arrangement is concerned, its fundamental purpose is to be based on the corresponding element in the upper hierarchy to achieve the corresponding weight value associated with it within the hierarchy.

As far as the hierarchical single arrangement is concerned, its essence is to be based on the corresponding characteristic roots and character vectors to do the corresponding calculations. Specially speaking, according to the judgment matrix A , we should adopt the following computational formula.

$$AW = \lambda_{\max} W \quad (2)$$

In the formula above, λ_{\max} refers to the largest eigenvalue of A , and W refers to the corresponding normalized eigenvector of λ_{\max} . Thus, the component W_i of W is the corresponding weighted value of the corresponding indicator with the hierarchical single arrangement.

For the judgment matrix A , when it meets the condition of complete consistency, $\lambda_{\max}=n$. However, under the general case, this situation does not exist. In order to achieve the effective test of the corresponding consistency of judgment matrix, it is necessary to calculate accordingly aiming at the consistency indicator.

$$CI = \frac{\lambda_{\max} - n}{n - 1} \quad (3)$$

When $CI=0$, then it shows that the judgment matrix meets the requirements of the complete consistency. On the contrary, with the continuous increase of CI , the corresponding consistency of judgment matrix will get worse.

When the random consistency is less than 0.10, we think that the judgment matrix has the ideal consistency. When CR is larger than or equal to 0.10, we should adjust the judgment matrix accordingly till its consistency meets the relevant requirements.

The Hierarchy General Ranking

When we know that the corresponding single arrangement result of all hierarchies at a certain hierarchy, we can confirm the corresponding weight value of the importance for all the elements of

this hierarchy with the upper hierarchy as the relative object by calculation. This is so-called hierarchy general ranking. In the process of hierarchy general ranking, we should carry out it based on “top-down hierarchy” order one by one. For the hierarchy general ranking, we also need to make the tightened inspection according to its consistency.

The Confirmation of Each Indicator Weight. The Adjustment of Matrix Data Acquisition. First, according to the correlations which have been confirmed between the hierarchical structures of each evaluation indicator we set up the survey form of the relative importance with the pair-wise adjustment about the indicators in the same hierarchy. 31 experts in the subject areas of geography circles, the tourism circles, the sports circles of Tibet University, Lhasa Teachers College, Tibet Agriculture and Animal Husbandry College, Tibet Sports Technical School, Tibet Mountaineering School fill out the survey form in this paper. We issue 31 questionnaires in total, including 29 valid questionnaires. Finally we deal with the survey forms respectively to construct the judgment matrix table of the corresponding experts. And we check to judge the consistency of the judgment matrix. For the judgment matrixes without passing the consistency check, we should return the questionnaires to the experts so as to adjust them till they pass the consistency check. That is to say, for the weights of the corresponding evaluation factors we can obtain the weight of each evaluation indicator in the general objective hierarchy through the hierarchy general ranking.

Finally the judgment matrix of each evaluation indicator CR is less than 0.10. So we judge that the consistency of matrix is comparatively good and it conforms to the requirements of the consistency check to make the determined value of weights be effective.

Table 2 The Weight Table of Tibetan Sports Tourism Resources Evaluation Indicator (The Hierarchy General Ranking)

The Evaluation Comprehensive Hierarchy B	Weight	The Evaluation Project Hierarchy C	Weight	The Evaluation Factor Hierarchy D	Weight
sports tourism resources value B1	0.3459	sports culture value C1	0.0928		0.0928
				popularity D1	0.0194
		ornamental value C2	0.0758	peculiarity D2	0.0186
				enjoyment D3	0.0378
				fitness D4	0.0324
sports tourism development value B2	0.4390	fitness and entertainment value C3	0.1773	leisure and entertainment D5	0.0724
				challenge and excitement D6	0.0724
		economic benefit C4	0.2832		0.2832
				enhancement of the social civilized degree D7	0.0317
		social benefit C5	0.0906		

sports tourism development condition B3	0.2151	cultural benefit C6	0.0652	increase of employment D8	0.0589
				culture protection D9	0.0169
				cultural communication D10	0.0416
				culture innovation D11	0.0068
		policy condition C7	0.0082		0.0082
				overall size of scenic spot D12	0.0166
		resources abundance C8	0.0257	density of scenic spot D13	0.0039
				quantity and quality of scenic spot D14	0.0052
		supporting facilities service C9	0.0257	transportation and communication D15	0.0110
				basic living facilities D16	0.0110
				service management level D17	0.0037
				target customer market D18	0.1040
		customer market C10	0.1299	potential customer market D19	0.0260
				quality of natural environment D20	0.0168
		environment quality C11	0.0257	climatic applicability D21	0.0024
				environment security D22	0.0064

The Analysis of Evaluation Results

Known from the relevant data of table 2, the corresponding quantitative evaluation comprehensive value of the local sports tourism resources is 7.7788. According to the relevant classification standard, it should be included in the category of sports tourism resources with Level 4. The weight of sports tourism resources value is 0.3459. The weight of development condition of sports tourism resources is 0.2151. These illustrate that the sports tourism resources value and the

development condition of sports tourism resources are the basis of achieving the development value. They are also one of the important factors which affect Tibetan sports tourism resources development. Seen from the setting score value, the sports culture value (the score value is 8.9501), and popularity of Tibetan sports tourism resources are both extremely high. And both of them have very strong challenge and excitement (the score value is 9.2337). The sports tourism resources have extremely high value of their own. At the same time the development of Tibetan sports tourism resources plays very important role in both of the protection (the score value is 8.0130) and communication (the score value is 9.1035) of Tibetan sports culture to help facilitate the inheritance and transmission of Tibetan sports culture. Seen from the policy condition (the score value is 9.2350), overall size of scenic spot (the score value is 8.1302), the quantity and quality of scenic spot (the score value is 9.2376), the target customer market (the score value is 9.1305), and the quality of natural environment (the score value is 9.3562), the Tibetan sports tourism resources have very high developable conditions. However, they have the relatively weak supporting facilities service. All of Tibetan transportation and communication (the score value is 4.1002), the basic living facilities (the score value is 4.3423) and the service management level (the score value is 4.683) can't meet the standards. These become the important reasons of hindering the Tibetan sports tourism resources to obtain the effective development. Compared with overall size of scenic spot (the score value is 8.1302), the quantity and quality of scenic spot (the score value is 9.2376), the score value of the density of scenic spot (the score value is 6.5617) is relatively low. It shows that the Tibetan sports tourism resources are extremely abundant. However, the area of Tibet is large, and the density of scenic spot is relatively weak. Therefore, we should strengthen the spatial layout and the integration efforts. We should make the combination and piece area division of Tibetan sports tourism scenic spot to make the planning as orderly line system so as to provide a good traffic environment for the development of local tourism.

In the evaluation hierarchy of sports tourism development condition, the weight of the customer market is the highest, and it is 0.1299. It shows that the customer market is the key factor which affects the sports tourism development and the customer market affects the economic benefits of the sports tourism development so as to affect the development value of sports tourism resources. Its comprehensive score value is 1.1363. And it has the highest proportion among the influence factors of development conditions. As the world-renowned tourist resort, every year many tourists at home and abroad come to visit Tibet with its famous name. What's more, it shows that the tendency increases greatly year by year, and it has very large tourist market space. The weight of policy condition is the lowest in the evaluation hierarchy and the score value is extremely high. It shows that the policy condition of Tibetan sports tourism resources development is very good, and the influence on the Tibetan sports tourism resources development is small relatively. The resources abundance, the supporting facilities service, and the environment quality are almost the same and their values are all 0.0257. However, the comprehensive score value of the supporting facilities service is only 0.1101. Compared with resources abundance (the comprehensive score value is 0.2083) and the environment quality (the comprehensive score value is 0.2063), it is extremely weak. It hints us that the corresponding supporting facilities system of the local sports tourism hasn't been established yet ideally so as not be able to meet the current needs and future development needs. If we want to develop the Tibetan sports tourism resources we need to promote the Tibetan supporting facilities service ability first and take the infrastructures as the object to make them get the organic integration. When we build and improve the transport network, at the same time we actively cultivate and output the high-level professional talents to promote the Tibetan traffic level, the communication level, the infrastructure level and the service management

level so as to play a role in supporting the Tibetan sports tourism from the aspects of hardware and software.

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