Analysis of “Geological Tourism +” Mode and Realization Path Based On Innovation

To cite this article: Chen Chang 2019 IOP Conf. Ser. Earth Environ. Sci. 221 012147

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Analysis of "Geological Tourism +" Mode and Realization Path Based On Innovation

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Abstract. Geological tourism is a basic supporting element and an important format in the development of tourism industry. It is also the development of the domestic tourism of the more systematic, mature and has been widely accepted by the tourists and favourite product type; To all kinds of geological parks or geological scenic spots as the representative of the geological tourism has made rapid development, Also face the bottleneck of their own development; To explore a variety of "Geological tourism +" innovative development model, for the future of geological tourism has a positive exploration of value and practical significance.

1. Introduction
Because the beautiful mountains, rivers and geological wonders distributes widely, it is a unique condition to develop geological tourism in China. In fact, looking back at the development of tourism since the reform and opening-up, we can easily observe that geological tourism plays an important supporting role in the tourism development. It is no exaggeration to say that geological tourism already holds up half the sky of tourism in China. Taking Yunnan province as an example, more than half of its famous tourism resources are basically geological tourism resources. In this background, it has become a common mission of the tourism industry and researchers to pay attention to the current situation of geological tourism development, face up to the problems and look for the strategies of sustainable development.

2. Analysis on the development status and choke point of geological tourism
2.1. Analysis of the development status of geological tourism in China

(1) Geological parks have become the main development carrier of geological tourism.

Since the first cultural and natural heritage sites were selected in 1972 in the world, natural heritages account for less than one-fifth of the nearly 1,000 projects selected, and some are dual-heritage sites. Most of these projects, which are listed in the world natural heritage list, are basically geological relics or unique landscape, and they are basically built into the world’s geological parks in China [1]. Other geological resources with unique geological value or geological landscape characteristics are reported and constructed in a series of national or provincial geological parks. For a while, a lot of geological parks appeared. by the end of 2015, China had 33 world geoparks, 189 national geoparks, 52 national geoparks approved for construction, and 235 provincial geoparks and construction qualifications [2]. The combination of geological science and tourism has invigorated two kinds of resources. Geological resources with popular science value, aesthetic value and market development value have been paid...
more and more attention by the market and the public, which has aroused the public interest in sightseeing and understanding. The rational tourism development based on protection also brings a large number of tourists, which is conducive to the sustainable development of geological tourism resources.

(2) The scientific planning and sustainable development of geological tourism have been put on the agenda.

The development of geological tourism will certainly promote follow-up and development of planning. The needs of world heritage management and the tourism management department require scientific and reasonable geological tourism development planning, project approval and argumentation opinions, and the planning of geological tourism scenic spots as the prerequisite for market development. In terms of the development of various geological tourism projects, although the planning level is high or low, it basically accords with the program requirements which are demonstration before project and planning before development. The situation of developing first and then making up planning still exists in some places, but it has been effectively curbed.

(3) The theoretical research and discipline construction of geological tourism have been paid much attention.

The theoretical study of tourism geography has become one of the hot spots in the field of tourism, and a lot of research and literature have been published [3]. Tourism geological education is on the agenda. Geological tourism discipline and curriculum construction have attracted attention in relevant universities. China University of Geosciences (Beijing), Jilin University, Chengdu University of Science and Technology, China University of Petroleum, East China University of Science and Technology, Kunming University of Science and Technology, and many other universities offer geotourism courses, and recruit tourism geoscience graduate students. The tourist geography education, textbook and training, from scratch to existence, from extensive to systematic and refined gradually, provide support for the development of the industry [4].

2.2. The main bottleneck of the development of geological tourism

The main bottlenecks in the development of geological tourism are as follows:

Firstly, the positioning of geological tourism in the tourism industry is not clear enough. In modern society, geoscience resources have the dual nature of geoscience resources and tourism resources, or can only use the traditional perspective to look at its geoscience resources? Is it optional, or can it play the leading role? Is it the object of tourism marketing, or can it be a featured product and backbone? Is it a protective development or economic benefit firstly? Although a certain amount of research has been done before, the industry management departments, tourism circles and enterprises have not yet formed a completely consistent consensus on the above issues, which is impossible for the development of geological tourism without influence and restriction. Most importantly, this ambiguity has a negative impact on the clarity of industry management policy and industrial development policy.

Secondly, the planning standards of geological tourism development have not been completely unified. The guidelines for the general planning of national geoparks (trial) which has been issued since 2000 and has not been revised or improved to the level of legislation is obviously not adapted to the rapid development of geoparks. Under the guidance of different development subjects, geological tourism resources are planned and developed as geological parks, wetland parks, nature reserves, tourist resorts and tourist attractions. As the management subjects of these projects are different, some managed by the urban construction department, some by the forestry department, some by the land department, and some by the tourism department, the result may be similar resources to form a very different or even different planning. If measured by the standard of planning identity, this kind of planning chaos will cause many loopholes and hidden dangers in protection, development and management. At the same time, it will lead to different policies of environmental protection,
land, forestry and finance, which will lead to waste of resources and increase of management costs. This is not alarmist.

Thirdly, the level of development, operation and management about geological tourism is still to be improved. Good food materials and raw materials cannot be cook good food, depending on the cook's skill. In the same way, it is also important concern whether the unique geological resources can be matched with the planning, development and management level. It is common to the situation of first-class resources, second-rate planning, third-rate development and fourth-rate management. The damage caused by human loss to resources and industries is huge and even irreversible in some cases, which should be highly valued by management departments and industries.

Fourthly, there are obvious differences in the operational status of geological tourism scenic spots. The first-class scenic spots, such as Zhangjiajie—Wulingyuan World Geopark, Jiuzhaigou—Huanglong Scenic Area, Shilin Scenic Area, Huashan Scenic Area, etc., have made a lot of money. However, some second-class or third-class scenic spots, including some national and provincial geoparks, lack popularity and passenger flow, can hardly survive after deducting management costs. The enthusiasm for local development of geological tourism projects cannot be unaffected.

Fifthly, the cultivation of talents about geological tourism is out of line with the development of the industry. On the other hand, the closed feature of education is also very prominent. It is separated by a wall or at least a layer of paper between industry development and enterprise demand. The integration of production and education is not carried out closely. Teaching and learning are difficult to put into practice. The level of scientific research achievements is not high, and scientific research and personnel training does not play a leading role in the industry.

2.3. Opportunities and challenges of innovative development

The tourism industry faces the improvement of quality and efficiency and the second leap. Similarly, geological tourism should not be conservative and complacent, and lack the passion and motivation for innovation. The development of economy and society and the innovative development of tourism not only bring new opportunities to the development of geoscience tourism, but also form challenges. It is necessary to take the initiative to respond, take active actions to seize the commanding heights of innovative development, seize the new opportunities, and push the development of geoscience tourism to a new level.

Geological tourism development faces new opportunities. First, the pace of China's economic and social development is clearly beyond the expectation and preparation of most people. The auto society, consumer society and tourism society have arrived, and the pace of well-off society is increasingly approaching. Second, welfare policies such as wage growth and paid holidays are likely to be implemented in advance, which will release great tourism momentum and make the whole tourism industry get the efficiency of interconnected development. Third, the development of tertiary industry and leisure industry attracts more and more attention from the government, the society and the public, which will have a positive effect on the development of tourism. Due to the regional characteristics and product characteristics of geological tourism, the service industry is much more dependent than other tourism forms. The full development of the tertiary industry represented by the service industry will surely bring more obvious and powerful support to the development of geological tourism.

At the same time, the challenges and constraints to the development of geological tourism cannot be ignored. First, this kind of influence of a slowdown in economic growth is whole area, all-direction, including tourist industry. Second, the challenges and impacts brought by the polarization of consumer groups which means that the young population represented by the post-90s and post-00s coexisted with the middle-aged and elderly population represented by the post-50s and post-60s generations. The consumption demand and tourism demand brought by the polarization are totally different, which brings obvious challenges to development and marketing. Third, product competition and diversion within tourism. Ecotourism, cultural tourism, ethnic tourism, combined product tourism, etc., all have a certain impact on traditional geoscience
tourism. Without sufficient understanding and effective strategies, it is bound to cause stagnation and passivity.

3. Analysis on the innovation mode of "geological tourism +"

3.1 The protection and rational utilization of geological resources is the basis of the innovative development of "geological tourism +"

When geological resources give play to their aesthetic attributes with necessary development, packaging and marketization, they become geological tourism resources with aesthetic, ornamental and market value, which can form tourism products and scenic spots. But even so, its scientific value as a geological relic, geological wonder and geological phenomenon has not disappeared, and the protection work cannot be relaxed, otherwise it may lead to destructive consequences. When using geological tourism resources to promote "geological tourism +" innovation, how to deal with the contradictory relationship between the protection and utilization of geological resources is a problem. The foundation and premise of "geotourism +" innovative development are composed of the concept of innovative, coordinated, green, open and shared development and emphasis on sustainable, clear protection red line, and use of legal means to protect geotourism resources.

3.2 The multi-functional in-depth development of geological resources and the integration and linkage development of surrounding resources are the main breakthrough point of "geotourism +" innovative development.

The foundation of "geotourism +" innovation comes from two aspects: one is the attention and deep excavation of the function of geoscience resources; the other is the organic integration and reasonable utilization of surrounding resources. Geotourism relies on geological bodies or geological phenomena that form the basis of landscape such as strata, rocks, structure, morphology, karst cave, ancient relic phenomenon, rivers and lakes, vegetation resources, weather, environment, etc. Due to the complexity and particularity of formation and structure, it often has the characteristics of geology, geomorphology and geohistory. In the process of geological tourism development, due to many factors such as different levels of knowledge and emphasis, the exploration of many geological features and hidden factors is not enough, and the scientific value and scientific popularization value are quite outstanding. To achieve meaningful innovation, "geotourism +" should make up this lesson well. Through in-depth exploration of the connotation of geoscience, value of popular science and cognitive significance, tourism products with gradually aging life cycle will glow new vitality or achieve upgrading and upgrading, which is undoubtedly the meaning of innovation. At the same time, it is necessary to change the geological tourism narcissistic, the environment of and around the blunt is isolated from practice, through scientific planning and coordination, the geological tourism and rural tourism, ecological tourism, scientific tourism, adventure tourism, such as sports leisure tourism extendibility tourism form together, make the "+" geological tourism innovation for solid mass base and community foundation.

3.3 "Refraining from doing some things in order to accomplish other things" is the necessary principle of "Geotourism +" innovation and development.

We should be cautious of projects that do not conform to the concept of innovative, coordinated, green, open and shared development, behaviours that has the potential to impact and disrupt resources, options with potential environmental and legal risks.

The premise of "do" is scientific, green, ecological, sustainable, upgraded and level, while the premise of "not do" is not to blindly pursue economic benefits and destroy non-renewable resources of geoscience, destroy the future of future generations!

4. Analysis of "geotourism + popular science" innovation path

4.1 "Geotourism + popular science" mode
This is very popular in the world. It emphasizes and resorts to Science popularization approach by using modern sound, light and electricity technology. The deep knowledge of geology, paleontology and the ancient historiography becomes an easy and intuitive way to tourists, and attracts tourists’ interest. The tourists enjoy the rich variety of geological wonders, and by the geological popular science knowledge education, to make up for their knowledge of short board. Tourists can not only enjoy rich and varied geological wonders, but also receive geological popular science knowledge education, so as to make up for their own knowledge shortcoming and increase their knowledge. In fact, through the emphasis on the value of popularization of science, geoscience resources have become more "people-friendly" and more able to adapt to the needs of tourists of different levels and different cultural levels, which has become the key point of many geoscience tourist attractions. The Chengjiang Museum of paleontology and paleochemistry and the Lufeng Dinosaur Valley are clearly ahead of other geological tourist attractions in Yunnan Province. Unfortunately, the popular science education of many geoscience tourism scenic spots still remains at the stage of compulsory indoctrination. The content copied from the geological textbooks cannot meet the needs of tourists, and the update is not timely and the presentation form is monotonous and inflexible. It cannot effectively improve tourists' scientific literacy, but also affects their perception and evaluation of resources. The model of systematic inculcation education is a traditional model widely adopted in most of China's geological parks, which is inaccurate and does not have a high degree of participation in the learning benefit of ordinary visitors to geological parks. As a result, it is no longer suited to the new needs of contemporary visitors.

Based on this, the mode of "geotourism + popularization of science" should take measures in such aspects as determination of development concept, selection of geological science popularization knowledge, selection of presentation method, application of scientific and technological means, conception of interactive method, cultivation of scenic spot characteristics, and efforts in marketing and publicity. By virtue of the advantages and strength of cultural and creative industries, innovative and integrated packaging can bring forth new ideas in the mode of "geotourism + popular science", giving people a fresh feeling.

4.2. “Geotourism + rural tourism" mode

Geotourism and rural tourism are two different types of tourism products, and their biggest contact is proximity in geographical space. In accordance with the principle of resources endowment compatibility and tourism benefit maximization principle, it is possible to make a mixture of the products of geological tourism and rural tourism. In the process of carrying out geoscience tourism, tourists can not only enjoy the value of scientific tourism, but also get the original ecological experience of rural living in the source area. At the same time, they can solve to some extent the problems of catering, accommodation and parking that emphasize the protection of the geoscience tourism area but cannot be given more attention. Agritainments distribute widely on the way to Kunming Jiaozi Snow Mountain Scenic area. Regarding Bamei Scenic area in Guangnan County and Puzhehei Scenic area in Qiubei County, it is difficult to distinguish they are geotourism or rural tourism.

The key to the mode of "geotourism + rural tourism" is to give full play to the complementary functions of the two products, which can not only distinguish the primary and secondary but also achieve product linkage. Playing the stage is geotourism resources, rural tourism is more of a stepping stone role. The sound of side drums will attract more attention to the development of such main and secondary matching, which can be regarded as a beneficial attempt to enrich the product line. The depth of tourism publicity ability in tourism marketing field will have a direct impact on the effect of this product linkage.

4.3. "Geotourism + eco-tourism" mode

Wetland parks, nature reserves, national forest parks and some geological parks, in addition to the development based on the resource, make full use of environmental factors such as vegetation,
meteorology and water body to carry out additional ecological tourism and fully activate the potential value of the resource itself, which can be regarded as one of the alternative innovation paths. It is human nature to get close to nature, and the coldness of geotourism and the vitality of ecotourism can form a complementary relationship, so that geotourism can get green nutrition help. The Wuyi Mountain Resort is a spectacular place with its unique geological structure, the great Danxia landscape, the green water of the mountains. The combination of them has contributed an unforgettable geotourism product. Laojunshan Scenic Area in Lijiang City is also known for its Danxia landform, complemented by the spectacular beauty of the "99 pools" green water and the *Rhododendron protistum*, the distinction degree and attraction are also high.

The coordinated development and protection of geoscience resources and ecological resources in the process of tourism development can make the scenic spot richer in connotation and depth of field. For scenic spots with good ecological foundation, such linkage should produce the effect of $1+1 > 2$.

4.4. "Geotourism + game experience" mode

The success of the model, "Disney", "Carnival" and "Wanda", "Hong Kong Seaworld", "Guangzhou Changlong", shows that the static tour way in some sense already cannot satisfy the needs of tourists and visitors. It is a problem to face for exploring more participatory and interactive experience tourism pattern. The low intelligence of tourists and the entertainment of tourism process is one of the interesting changes in contemporary tourism. Those who adapt to it and match with it can better survive, and those who ignore the challengers will inevitably be abandoned or tortured. The mode of "geotourism + game experience" has condition constraints and risk points. The glass walkway of Zhangjiajie and the participation of Lufeng Dinosaur Valley are all places that tourists enjoy talking about. Many conditional second-class scenic areas can also make bold attempts and innovations in this regard. For example, after the construction of the glass walkway in the Shimenguan Scenic area of the Cangshan Mountain in Dali, the tourist volume reaches thousands of people every day, which is in sharp contrast to the one before the construction of the glass walkway. Brainstorm and thinking innovation which are indispensable in tourism development are the premise of action innovation.

4.5. "Geotourism + adventure tourism" mode

There is a natural connection between geotourism and adventure tourism. Geoscience resources such as karst caves, Tiankeng, earth cracks, rifled valleys, deep canyons, etc., will arouse the curiosity of tourists and make them want to explore to satisfy their curiosity. There are many successful examples such as Dashiwei Tiankeng, Chuandong Tiankeng in Leye County, Tongling Canyon in Jingxi County and Yarlung Tsangpo Grand Canyon Scenic Area in Tibet. It is the foundation of "geoscience tourism + exploration tourism" that geoscience tourism scenic spots have "risks" that are safe to explore and attractive to people. Reasonable planning and adequate safety measures are the premise of the innovation of "geotourism + exploration tourism". It is the key to the success of "geoscience tourism + exploration tourism" to develop characteristic exploration projects by relying on geoscience tourism resources. Geoeexploration tourism should have more growth space in the future.

4.6. "Geotourism + leisure tourism" mode

Hot spring geological tourism resources, naturally with the endowment of health and leisure, has been used by mankind since ancient times. There are some successful examples of combined development, such as the glacier landform of Gongga Mountain + hot spring tourism in Sichuan Province, Tengchong Volcano + hot spring health tourism, Shuifu Oriental Grand Canyon Spring City + Jinsha River Grand Canyon adventure tourism, and Eryuan Geothermal Country + the ecological tourism of Cibi Lake. Alu Ancient Cave and Chengzi Ancient Village were combined with Alu Hot Spring Recreation and Sports Leisure Center in Luxi County, which has improved the competitiveness of the Alu ancient cave scenic
area. It must be pointed out that hot spring resources are both scarce and fragile. Improper protection and excessive logging of underground hot springs often lead to environmental pollution and the decline of water level in hot springs, causing community contradictions and other problems. Therefore, positioning and planning have become sensitive and key issues, which cannot be simply developed for development, resulting in the occurrence of ecological environment destruction.

5. Conclusions

“Geotourism +” is an innovative tourism model based on the existing foundation, focusing on improving product connotation, paying attention to in-depth development, realizing integration and interconnected development. It is not a revolution of thinking, but a practical model transformation and promotion strategy. For many geological-tourism scenic areas that are still within the life cycle but are not tepid due to many problems in planning, development and management, it can be regarded as an effective way to bring changes in appearance and performance in a short period of time, and can be fully tested on the premise of scientific demonstration and investment.

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