

# *Sustainable development strategy of hiking tourism in Kunming city*

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**Abstract:** With the popularization of healthy lifestyle and the diversification of tourism consumption, hiking tourism, as an emerging form of tourism, is gradually emerging in Kunming city. This paper focuses on the sustainable development of hiking tourism in Kunming city, and puts forward corresponding strategies. Based on the analysis of hiking tourism resources, market structure and environmental protection, the study found that although Kunming has rich natural landscape and national culture, hiking tourism is still faced with problems such as imperfect infrastructure, unclear market structure, insufficient development of cultural resources and environmental protection pressure. To this end, the paper puts forward strengthening market segmentation and product innovation, improving infrastructure construction, promoting industrial integration and paying attention to ecological protection. The research aims to provide theoretical support and practical guidance for the sustainable development of hiking tourism in Kunming city, and promote the coordinated development of local economy, ecological protection and cultural inheritance.

## **1. Introduction**

Hiking tourism refers to the experiential ecotourism activities with hiking as the main way of travel in the outdoor travel area different from the daily living environment<sup>[1]</sup>. In the tourism industry, hiking tourism has a unique and important position. It not only enriches the diversity of tourism products and meets the diversified tourism needs of tourists, but also plays a positive role in promoting local economic development, promoting ecological environment protection and inheritance of cultural heritage.

Domestic and foreign scholars have brought the correlation between tourism and economic development into their research field, and discussed the economic growth of tourism in different regions through various research methods<sup>[2]</sup>. The influence and its interrelationship<sup>[3]</sup>. In this context, the research on the sustainable development of hiking tourism in Kunming city is of great significance. On the one hand, as an emerging form of tourism, hiking tourism can inject new growth impetus into the local economy, promote employment and increase income; on the other hand, its development is closely linked to ecological environment protection and cultural heritage

inheritance. Therefore, the study of the sustainable development of hiking tourism in Kunming will not only help to optimize the local tourism industry structure, but also provide the experience of sustainable tourism development in other regions.

## **2. Analysis of the current situation of hiking tourism resources in Kunming city**

### **2.1. Rich in hiking resources**

Kunming, as an important city in southwestern China, is renowned for its unique natural landscapes and rich ethnic culture. The spring like climate, diverse topography, and profound historical and cultural heritage here provide excellent conditions for hiking tourism. With the development of the economy and the improvement of people's living standards, tourism has become an important component of people's leisure life. Hiking tourism, as a way of getting close to nature and promoting health and environmental protection, has rapidly developed globally in recent years.

Kunming is located in the middle of the the Yunnan-Guizhou Plateau and has the reputation of "Spring City". It has a mild climate and looks like spring all the year round. The terrain is adjacent to Dianchi Lake to the south and surrounded by mountains on three sides, providing diverse landforms and rich natural landscapes for hiking tourism. The soil in Kunming is mainly composed of acidic red soil and brick red soil, and the vegetation type is subtropical evergreen broad-leaved forest. These natural elements together constitute the unique ecological environment of Kunming.

Kunming, as a hot city for hiking tourism, offers multiple unique hiking routes to meet different needs from entry-level to expert level. In 2024, the Yunnan Provincial Sports Bureau released 20 "2024 Yunnan Classic Hiking Routes" including Kunming, among which Kunming's routes such as the Yunnan Nine Plateau Lake Ring Line and the Yunnan Vietnam Railway (Yiliang section) are particularly prominent. The hiking routes in Kunming are mainly concentrated in the main urban area, Anning City, Jinning District, as well as Xundian County, Dongchuan District and other places. In the southwest, centered around the main urban area of Kunming, hiking trails are scattered in a belt shape and distributed in a relatively concentrated manner. In the northeast, it is mainly concentrated in the Dagou Niu Mountain area in the western part of Dongchuan, while other areas are distributed in clusters and relatively scattered.

Kunming has various types of hiking tours through different forms of classification, such as hiking tours in Xishan Forest Park<sup>[4]</sup>, historical and cultural tourism routes<sup>[5]</sup>, and rural outdoor hiking tours<sup>[6]</sup>. Through research on hiking tourists in Kunming, it was found that outdoor enthusiasts in Kunming are mainly young people with low monthly income levels and low consumption frequency<sup>[7]</sup>.

### **2.2. Unique cultural and cultural tourism resources**

Kunming, as a famous historical and cultural city, has rich historical sites and cultural landscapes, including the Ancient Tea-horse Road, Yunnan-Vietnam Railway, Golden Hall and Xishan Longmen. These resources have injected a profound cultural connotation into the hiking tour route. In addition, Kunming is inhabited by many ethnic minorities, with rich and diverse ethnic cultures, such as the Torch Festival of the Yi ethnic group and the Huashan Festival of the Miao people, providing a unique folk experience for hiking tourism routes. At the same time, the surrounding areas of Kunming also have rich red tourism resources, such as the Red Army Long March memorial site in Xundian County. These resources can be developed as themed hiking routes, which have both educational significance and tourism value.

### 2.3. Government policy support

With the promotion of healthy lifestyles and the upgrading of tourism consumption, hiking tourism, as a healthy and environmentally friendly way of travel, is increasingly in demand in the market. In recent years, China has made great strides from a sports and tourism powerhouse to a sports and tourism powerhouse. The government has issued a series of policies to support the development of sports tourism and stimulate sports tourism consumption, making sports tourism a hot spot for social investment and a comprehensive industry<sup>[8]</sup>.

As an important city in southwest China, Kunming has promoted the vigorous development of tourism and other industries with its blue sky, clear water, pure land and biology, and realized the transformation of clear water and green mountains into gold and silver mountains. The "14th Five-Year Plan" Culture and Tourism Development Plan of Kunming City clearly proposes to promote the deep integration of culture and tourism and the high-quality upgrading of culture and tourism industry, which provides policy guarantee and development opportunities for the development of the hiking tourism industry. Kunming city is actively promoting the construction of tourism infrastructure, such as the slow traffic system around Dianchi Lake, the tourist car camp, etc. The improvement of these facilities will greatly promote the development of hiking tourism. We will strive to become a regional international center city, improve the level of tourism services through international cooperation, and attract more overseas tourists.

## 3. The restrictive factors for the development of hiking tourism in Kunming city

### 3.1 Inadequate development of cultural resources

Kunming and its surrounding areas are the settlements of yi, Miao, Bai and other ethnic minorities, with rich ethnic cultural resources. However, the current ethnic cultural experience in the hiking tour routes is mostly superficial, which is mainly manifested as simple ethnic song and dance performances or traditional costume display, lacking in the in-depth exploration and presentation of the national cultural connotation. Many ethnic traditional festivals and folk activities have significant seasonal characteristics, such as the Torch Festival of the Yi ethnic group and the Huashan Festival of the Miao ethnic group, etc. These activities are difficult to experience during non-festivals, making tourists unable to have a deep understanding of the local ethnic culture in other periods. Although the development relying on abundant natural resources has achieved success and brought economic benefits, the development and utilization of cultural resources are still insufficient, lacking distinct personalized features and distinctive ethnic and folk characteristics<sup>[9]</sup>. In addition, traditional skills and cultural customs in some ethnic minority areas are facing the dilemma of inheritance and lack innovation and modern display. For example, traditional handicrafts such as Yi embroidery and Miao silver jewelry making have failed to be effectively combined with modern tourism products, making it difficult to attract the attention of young tourists.

Although there are many historical and cultural attractions in Kunming city, the planning of hiking routes is not systematic, and it fails to organically connect these attractions into cultural-themed routes. Taking the hiking route from downtown Kunming to Shilin as an example, the historical and cultural relics along the way have not been fully integrated, leading to the fragmented presentation of tourists experience, and it is difficult to form a coherent cultural perception.

### 3.2 The structure of the hiking tourism market is not clear

Although the number of hiking routes in Kunming city is rich, the overall lack of unified

planning and integration, and the distribution is relatively scattered, failing to build a systematic and coherent hiking network. For example, popular routes such as Jiaozi Snow Mountain and Dianchi Lake route are independent and lack an effective series mechanism, making it difficult for tourists to visit multiple scenic spots through a single main line. In addition, the status quo of Kunming as a tourism transit station has not changed, tourists stay time is short, and the consumption potential has not been fully released.

Current hiking tourism products are relatively single, lack of innovative and diversified design, and mostly focus on natural landscape, while the products deeply integrated with cultural experience and ecological education are relatively scarce. In terms of infrastructure construction, the surrounding supporting facilities of some hiking routes are not perfect, which affects the overall experience of tourists. At the same time, there are not enough professional guides and service personnel, and some routes lack detailed explanations and security, which affect the tourist experience. In terms of infrastructure, problems such as unclear signs and lack of health facilities are common, reducing the comfort of walking experience. In addition, the lack of market promotion and brand building has led to many high-quality resources not being fully exploited and publicized. There is a lack of linkage between hiking routes, and the cultural connotation is not deeply excavated, so the tourist experience often stays on the surface. Security measures are not in place, the price system is not transparent, and the awareness of environmental protection is weak, which also restricts the healthy development of the market. To solve these problems, Kunming needs to strengthen market research, improve infrastructure, improve service quality, increase marketing and promotion efforts, deeply explore cultural connotation, and strengthen environmental protection and safety measures, so as to optimize the market structure of hiking and enhance the overall competitiveness.

### **3.3 Environmental protection and sustainable development**

How to protect the natural environment and avoid ecological damage caused by overdevelopment while developing hiking tourism is an important challenge.

As a historical and cultural city, Kunming preserves numerous ancient and famous trees, which are not only living cultural relics, but also reflect the trajectory of climate change in Kunming throughout history<sup>[10]</sup>. During its tourism development, there has been serious damage to natural and cultural resources. If effective measures are not taken, it may lead to irreparable losses<sup>[11]</sup>.

Hiking tourism mostly occurs in areas with good natural ecological environment<sup>[12]</sup>. But the frequent activity of visitors may lead to vegetation trampling, soil erosion, and ecosystem destruction. For example, around Jiaozi Snow Mountain and Dianchi Lake, the vegetation coverage is reduced due to tourist trampling, which affects the ecological integrity and biodiversity of the ecosystem. In addition, with the increase of hiking activities, its impact on the environment is also reflected in water pollution, air pollution and noise pollution. Because hiking involves clothing, food, shelter, transportation and other aspects, it affects the atmosphere, soil and water resources. It will often cause irreversible damage to ecological resources. For example, arson in Kunming damaged 165 square meters of plants. Therefore, how to achieve the balance between environmental protection and tourism development in the development process is an important challenge for Kunming hiking tourism.

## **4. Sustainable development strategy of hiking tourism in Kunming city**

### **4.1 We will strengthen government guidance and promote sustainable development**

As a new way of tourism, hiking can attract a large number of tourists, directly drive the

development of local catering, accommodation, transportation and other related industries, and promote economic growth; The development of hiking tourism needs all kinds of service personnel, including tour guides, service personnel, rescue personnel, etc., which provides a large number of employment opportunities for local residents; The development of hiking tourism can enhance the popularity and attraction of Kunming, form a unique tourism brand, and attract more tourists and investment; Hiking is often combined with the local natural landscape and cultural characteristics, which helps to protect and inherit the local cultural heritage.

In the development process of hiking tourism in Kunming city, ecological protection should be placed in the core position to ensure the sustainability of tourism activities. At the same time, local communities are actively encouraged to participate in the hiking tourism industry and promote the establishment of a benefit-sharing mechanism. In addition, promoting the concept of green tourism is committed to reducing the negative impact of tourism activities on the environment.

The development of hiking tourism can drive local economic growth, promote the deep integration of culture and tourism industry, and provide new impetus for the sustainable development of local economy and society.

The municipal government should establish a special fund for the development of hiking tourism to support key projects and infrastructure construction in this sector. Tourism training institutions must enhance professional training for practitioners to improve their service levels and professional skills. Human resource departments need to attract and cultivate high-level talents in tourism management, marketing, and planning to promote innovative development of the hiking tourism industry. Regulatory authorities ought to strengthen supervision and inspection of the implementation of the hiking tourism development plan to ensure that all policy measures are effectively implemented. Evaluation committees should regularly evaluate the development outcomes of the hiking tourism industry and adjust and optimize policy measures in a timely manner.

In the development and service provision of hiking tourism products, the awareness of ecological protection should be strengthened, and environmental protection education activities should be actively carried out. Tourism authorities and environmental organizations should enhance the environmental awareness of tourists and practitioners through these measures.

At the same time, the local communities will continue to be encouraged to deeply participate in the development of the hiking tourism industry, further realize the benefit sharing, and promote the coordinated development of the community economy and the tourism industry.

In order to ensure the long-term healthy development of the hiking tourism industry, it is necessary to formulate a forward-looking industrial planning, and regularly conduct scientific evaluation of the innovative effect of tourism products and services to ensure that they adapt to the needs of market changes and sustainable development.

## **4.2 Strengthen market segmentation and product development**

The government and tourism authorities should define the target market of Kunming's hiking tourism, such as outdoor sports enthusiasts, cultural experiencers, and ecotourists. They should build the brand image of Kunming's hiking tourism by leveraging the natural and cultural characteristics of the "Spring City" to create a unique hiking brand. Tourism planners must develop differentiated hiking products according to different market segments to meet the diverse needs of tourists. Marketing teams should utilize social media platforms such as Weibo, WeChat, and Douyin to publish content related to hiking and attract the attention of potential tourists. Local stakeholders can collaborate with well-known outdoor bloggers and opinion leaders to promote hiking in Kunming through their social influence. Content creators ought to produce high-quality hiking content, such as introductions, travel notes, and videos, to enhance the appeal and



communication of the content.

By identifying and analyzing potential tourist groups both domestically and internationally, subdividing the market according to their needs and preferences, covering adventure, ecology, culture, and other tourism types, and predicting the future demand trends of each market segment, we can provide a scientific basis for product development and marketing strategy. On this basis, we will develop diversified hiking tourism products, such as theme hiking, family hiking, challenge hiking, etc., combined with modern technology (such as AR navigation, intelligent tour guide) innovative experience, and launch featured products for different seasons, to make full use of the climate advantages of Kunming like spring all the year round. At the same time, combining the natural landscape and cultural characteristics, the development of ecological exploration, historical culture, folk experience and other theme products, and provide customized services to meet the personalized needs.

In addition, we will combine hiking tourism with local agriculture and culture, develop agricultural activities such as picking and farming experience, as well as cultural theme routes such as ethnic village visits and historical and cultural relics parade, and pay attention to ecological protection and promote sustainable development. Tourism operators and local businesses should develop distinctive tourism products and local delicacies to enhance the added value of tourism. Government agencies and community organizations must encourage communities to participate in planning and management to directly benefit local residents. Industry stakeholders ought to utilize modern information technology to improve service quality and management efficiency.

#### **4.3 Improvement of infrastructure and services**

In terms of infrastructure, in order to improve the overall quality of the hiking tourism in Kunming city, the infrastructure construction should be strengthened, including improving the hiking tourism routes, optimizing the transportation connection system and strengthening the information services. At the same time, the level of service standardization should be improved to ensure that tourists can get high-quality service experience, and a sound security system should be established, covering rescue services and risk early warning mechanism.

In terms of tourism experience, tourism authorities and service providers should establish a smart tourism service platform to provide online booking, intelligent navigation, real-time information push, and other services. Tour operators ought to provide personalized hiking services based on tourists' interests and physical conditions. Activity organizers should incorporate interactive elements during the hiking process, such as ecological workshops and cultural experience activities, to enhance tourists' participation and experience. Data analysts need to utilize big data, cloud computing, and other technologies to analyze tourists' behavior and provide personalized tourism suggestions and services. Safety management teams must improve the safety and convenience of hiking through intelligent management systems, including intelligent monitoring and emergency rescue systems. Technology developers can create panoramic immersive experiences through digital means, such as the four-dimensional real scene kernel system, allowing tourists to experience the changing seasons and the flow of light and shadow within the scenic spot.

Combining with Kunming's rich multicultural and natural landscape, we provide a variety of hiking tourism products. By strengthening situational experience and interpersonal interaction, ritual theory is used to deepen the study of hiking tourism experience. In addition, it focuses on the safety and health of tourists, and provides professional hiking guidance and health care services to comprehensively improve tourist satisfaction and the sustainability of hiking tourism.

#### 4.4 Sustainable development strategy

In the development of hiking tourism in Kunming, ecological protection is the primary principle to ensure that tourism activities do not cause damage to the natural environment. Tourism authorities and project developers should conduct an environmental impact assessment before implementing tourism projects to ensure that all activities are within the environmental carrying capacity. Tour operators and product designers need to develop eco-friendly hiking tourism products, such as ecological hiking and birdwatching. Cultural event organizers ought to create cultural experience activities with local characteristics by leveraging Kunming's rich cultural resources. Local governments and tourism boards must collaborate with local communities to ensure that hiking tourism development aligns with community interests and development needs. Revenue management committees should ensure that tourism revenue benefits local communities and promotes sustainable community economic development. Environmental education departments need to strengthen ecological education for tourists and local communities to enhance environmental awareness. Conservation agencies must establish protected areas in important ecological regions, limit the number of tourists, and protect the ecological environment. Environmental monitoring teams should set up a hiking tourism environmental monitoring system to regularly evaluate the impact of tourism activities on the environment. Feedback collection units need to establish feedback mechanisms for tourists and communities, and adjust and optimize tourism development strategies in a timely manner.

#### 5. Conclusions

To sum up, a series of strategic suggestions for the sustainable development of Kunming hiking tourism are proposed. First of all, we should strengthen market segmentation and product innovation, develop diversified hiking tourism products, combine modern technology to improve tourist experience, and provide customized services for different seasons and tourist needs. Secondly, improve infrastructure construction, optimize transportation connections and information services, improve the level of service standardization, to ensure that tourists get high-quality tourism experience. In addition, hiking tourism should be deeply integrated with local agriculture, culture and other industries to develop tourism products with local characteristics and increase the added value of tourism. Finally, we must pay attention to ecological protection, promote the concept of green tourism, encourage local communities to participate in the tourism industry, realize benefit sharing, and ensure the sustainability of tourism activities.

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