

Research on Coordinated Development Strategy of Ecological Environment and Tourism Economy in Puzhehei Scenic Area

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Abstract: The positive coordination between the ecological environment and the development of the tourism economy represents the optimal state for the development of tourist attractions. With the continuous implementation of strict ecological and environmental protection policies and regulations, it is imperative to construct beautiful and harmonious tourist attractions. This is also a way to fulfill the current people's aspiration of making tourism a part of their lifestyle. The Puzhehei Scenic Area is abundant in ecological resources, presenting a vivid picture of mountains, waters, and farmlands. It stands as a typical example of wetland ecological tourism scenic areas. This study sorts out the existing problems in the current development of the Puzhehei Scenic Area by analyzing the coordination between the ecological environment and the tourism - economy development, as well as the development strategies appropriate for this coordination. From the perspective of achieving the harmonious development of ecological environment protection and the tourism economy, it specifically puts forward feasible strategies for the Puzhehei Scenic Area to meet the current requirements of tourism development in the new era.

1. Introduction

In recent years, ecological and environmental concerns have remained a prominent social issue. The degradation and contamination of forests, grasslands, rivers, and lakes have intensified, while pervasive smog and sky-obscuring sandstorms have triggered significant climatic and environmental transformations. Concurrently, accelerated social development and growing public aspirations for improved living standards have elevated tourism to a mainstream lifestyle choice. Diverse tourism models continue to emerge, including leisure vacations, seasonal migration residences, cultural-ethnic immersion experiences, and eco-wellness retreats. However, as an economic sector heavily reliant on ecological resources, tourism development fundamentally depends on environmental quality - any ecological alteration inevitably induces corresponding shifts in experiential tourism demands, subsequently reshaping destination images and impacting tourism economies. This symbiotic relationship between ecological preservation and tourism

economics necessitates the industry's crucial mission: identifying viable pathways for sustainable tourism development through coordinated eco-economic strategies. The Puzhehei Tourist Area, celebrated for its six signature landscapes - "Water Gardens," "Yi Ethnic Waterside Town," "Lotus Paradise," "Karst Wetlands," "Lake-Forest Peaks," and "Avian Sanctuary" - holds dual national designations as a Scenic Area and Wetland Park. Serving as Yunnan Province's premier plateau wetland destination, it represents an exemplary case study for implementing coordinated ecological preservation and tourism development strategies in protected natural areas.

2. The Relationship and Strategies of Coordinated Development between Ecological Environment and Tourism Economy

Tourism economies and ecological environments constitute an intricately interdependent duality - a symbiotic system where these two elements simultaneously constrain and reinforce each other, forming an integrated "tourism-ecology composite system." [1] When coordinated positive feedback mechanisms emerge between ecological preservation and tourism economies, proactive implementation of tourism development incentives coupled with environmental quality enhancement measures can effectively drive synchronized sustainable progress. Research on this coordination originated in the 1960s when numerous nations began recognizing the critical relationship between urban tourism expansion and ecological balance, prompting systematic exploration of synergistic development models through rapid urban tourism growth patterns. Chinese academia initiated parallel investigations during the 1990s, with studies predominantly examining practical applications for sustainable coordination between tourism economies and ecosystem preservation. [2]

2.1. The content of the coordinated relationship between the ecological environment and the tourism economy

2.1.1. The promoting effect of tourism economic development on ecological and environmental protection

The high-quality development of tourism economies enhances economic revenue, optimizes resource allocation, elevates living standards, strengthens environmental protection policies, and refines industrial structures, facilitating harmonious coexistence between human activities and natural resources while advancing resource conservation, environmental stewardship capabilities, and sustainable utilization practices in tourism development [3]. By curbing ecological resource depletion and pollution, such economic growth inversely creates expanded developmental opportunities for the tourism sector itself.

2.1.2. The supporting role of ecological environment protection in the development of tourism economy

The high-quality development of tourism economies operates within finite resource parameters, necessitating enhanced conservation capabilities to ensure sustainable utilization of ecological assets, thereby providing essential material foundations including production factors and robust environmental frameworks for premium tourism growth [4]. This developmental paradigm fundamentally depends on maintaining superior environmental conditions, as resource overexploitation and ecological degradation from unregulated tourism expansion would ultimately constrain sectoral progression.

2.2. Strategies for the coordinated development of ecological environment and tourism economy

2.2.1. The ecological environment carries and promotes the development of the tourism economy

The ecological environment carries the development of the tourism economy. The sustainable development and utilization of ecological resources can promote the sustainable development of tourism economy. Protecting the ecological environment is the guarantee for the development of tourism economy. In view of the actual situation of ecological pollution, resource destruction and reduced experience in scenic spots and attractions, environmental protection policies should be improved, environmental protection regulations should be implemented, environmental protection investment should be increased, environmental protection resource allocation should be optimized, environmental protection awareness should be strengthened, and it is necessary to create an environmental protection atmosphere in a comprehensive manner from the state, society, enterprises and the public.

2.2.2. The development of tourism economy promotes the protection of the ecological environment

The development of the tourism economy further guarantees the protection of the ecological environment. The high - quality development of the tourism economy lays an economic foundation for the development, protection and optimization of the ecological environment, the improvement of economic benefits, the enhancement of the image of tourist destinations, and the upgrading of pollution prevention and control technology. It is necessary to improve tourism industry policies, adhere to the macro - regulation of the tourism industry, and give full play to the natural optimization and elimination mechanisms of the market. Establish and build an ecological industrial chain for the green development of the tourism industry, develop new technologies, layout ecological business forms, and expand the space for the sustainable development of the tourism economy.

3. The current situation, contradictions and problems of the Puzhehei Scenic Area

Puzhehei Scenic Area was developed into a tourist attraction based on villages in 1992. In 1993, it was approved as a scenic area open to foreigners by the then National Tourism Administration. In 1996, it was rated as a provincial - level tourist resort in Yunnan Province. In 2004, it was recognized as a national scenic area. In 2009, it was rated as a 4A - level tourist scenic spot [5]. Finally, on December 29, 2020, it was announced as a national 5A - level tourist scenic spot by the Ministry of Culture and Tourism of the People's Republic of China. There are a total of 256 scenic spots in the area, each with its unique charm. There are 312 isolated peaks scattered randomly, 83 karst caves in various postures, 54 lakes connected to each other, 40,000 mu of wild lotuses blooming in competition, and 60,000 mu of high - altitude karst wetlands full of charm. The main scenic areas include Swan Lake, Pucaotang, and Puzhehei Karst National Wetland Park. The scenery varies in different seasons, and each season is beautiful and charming.

3.1. The current situation of Puzhehei Scenic Area

Puzhehei Scenic Area mainly features natural landscapes of mountains and waters. Its wetlands and rural scenery are truly unique. At present, according to local conditions, the scenic area has reasonably introduced business forms and formed six different functional areas from north to south.

In the Qinglong Mountain Tourist Area, tourists can climb Qinglong Mountain to feel the colorful land. In the Pucaotang Tourist Area, they can take a willow - leaf - shaped boat to enjoy the water town of the Yi ethnic group. In the Dawanzi Tourist Area, they can camp under the stars to purify their souls. In the Xuanshimei Tourist Area, seagulls and egrets compete, with lotus ponds and the blue sea, and the sky is high and the clouds are pale. In the Xihuang Wetland Tourist Area, they can watch birds and play with fish in the reed marshes. In the Water Sports Park Scenic Area, they can sail a boat and ride the waves. Currently, five different tourist routes have been developed. Tourists can choose sightseeing buses, cruise ships or bamboo rafts to shuttle through different areas and experience the ink - wash - like rural scenery. The scenic area takes advantage of its site resources to create a night - tour experience project "Lotus Pond at Night" in Puzhehei, hold the Puzhehei Marathon, host ethnic cultural festivals to attract visitors, launch the "Painted - Face Festival" activity, set up a characteristic commercial street and build a scenic area market.

3.2. The contradiction between ecological environment protection and tourism economic development in Puzhehei Scenic Area

After more than 30 years of development, the Puzhehei Scenic Area has been growing in scale. During this period, there were peaks of development. The vigorous filming of films, TV shows and variety shows, as well as the popularity of "Where Are We Going, Dad?", "Three Lives and Three Worlds: Ten Miles of Peach Blossoms" and "Three Lives and Three Worlds: Pillow Book", gradually brought the Puzhehei Scenic Area into the public eye and led to its rapid development. However, since 2020, due to the three - year - long pandemic, the Puzhehei Scenic Area has constantly shown signs of fatigue and weakness. The development of its tourism economy is not in proportion to its ecological environment advantages. The Puzhehei Scenic Area has failed to leverage its ecological resource advantages to boost the vitality of its tourism economy. On one hand, the biodiversity level within the scenic area has been on the rise, the water quality has been continuously improving, and the characteristic animal and plant resources are abundant, like the large variety of lotus flowers, with peach blossom jellyfish frequently appearing. On the other hand, the tourism economy has been continuously declining, tourism revenue has been constantly hitting rock bottom, and community conflicts and government - enterprise conflicts have emerged. It has fallen into the predicament of "a capable housewife being unable to cook a meal without rice", and the development of enterprises is struggling. The maintenance and development of the scenic area are inadequate.

3.3. The issues regarding the development of the Puzhehei Scenic Area

The sustainable advancement of ecological preservation confronts policy implementation challenges amidst persistent tourism industry downturns, as insufficient revenue undermines adherence to conservation-benefit equilibrium principles, forcing reliance on governmental administrative interventions to maintain regional environmental governance and resident welfare. Second, outdated management paradigms have hindered effective governance frameworks, resulting in disconnects between governmental environmental policies and emerging industrial synergies, while undefined conservation-development zoning boundaries have dampened operational initiatives and failed to cultivate community ownership of developmental responsibilities. Third, industrial monotony persists through overdependence on aquatic equipment rentals and non-ticketing operations, with newly introduced ventures failing to resonate with contemporary tourists, perpetuating stagnation in traditional "lotus pond water activities" while diminishing competitiveness in homogenized markets. Fourth, post-2020 attainment of AAAAA-level accreditation revealed maintenance deficiencies as established infrastructure

management systems and ecological-economic coordination mechanisms ceased functioning effectively, escalating remediation costs for improper maintenance damages. Fifth, brand equity erosion has confined the scenic area's identity to transient film-induced imagery of lotus landscapes, with plateau karst "paradise" branding remaining underdeveloped and cultural narratives stagnating in superficial scenic reproduction modes.

4. Improvement strategies for the tourism economic development of Puzhehei Scenic Area

To change the current situation of the slow development of the Puzhehei Scenic Area, it is necessary to both give full play to the advantages of the ecological environment and actively improve the business form level of the scenic area. The protection of ecological resource advantages and the development of the tourism economy should advance side by side and be coordinated. At the same time, appropriate optimization and adjustment should be made to the scenic area's marketing, product development and positioning.

Optimize resource allocation, adhere to the principle of adapting measures to local conditions, and balance the relationship between ecological environment protection and tourism economic development in the Puzhehei Scenic Area [6]. Relatively speaking, the Puzhehei Scenic Area has unique ecological resource advantages. In its typical karst landscape, mountains are scattered all over and the water area is vast, truly presenting the aesthetic feeling described as "Viewed horizontally, it's a range; seen from the side, it's a peak. It varies in appearance from far and near, high and low". Moreover, lotuses are reflected on the water surface, creating a hazy charm. If environmental problems emerge in the next few years or during the development of the scenic area, leading to ecological and environmental pollution, it will pose a severe survival challenge to the Puzhehei Scenic Area. The scenic area is likely to struggle to continue operating and may be forced to close for reorganization and transformation. The Puzhehei Scenic Area should focus on leveraging its advantageous resources, change the past habit of relying on traditional resource advantages, optimize the industrial structure, and enrich the business forms of the scenic area. Re-plan the tourist consumption in different areas within the scenic area, and rectify human and material resources. For example, for the climbing area of Qinglong Mountain, a unique Qinglong Mountain Climbing Festival can be created to explore local cultural resources. Activities such as climbing for inspiration, sketching, and commemorating ethnic cultural figures related to the Puzhehei Scenic Area can be carried out to achieve high - quality coordinated development between ecological environment protection and the tourism economy in the Puzhehei Scenic Area and earnestly attach importance to ecological environment protection.

It is necessary to strengthen the management mechanism through the principle of green development to promote the transformation of ecotourism in Puzhehei scenic area. The scenic area should give priority to optimizing the mechanism, balancing government regulation and community interests, playing the leveraging role of administrative governance, and promoting cooperative maintenance of the scenic area through community participation. Second, the relevant people should implement ecological strategic zoning, combine spatial planning with functional needs, utilize the unique resource endowment of the scenic area, and systematically enhance the core ecotourism products. Third, the scenic area must also modernize its infrastructure and establish an eco-transportation network integrating sightseeing routes, bike paths and waterway operations, while gradually adopting electric vehicles and water recycling systems. Fourth, relevant personnel should ensure the allocation of government funds for environmental management, effectively deploy ecological protection funds, and carry out timely pollution control and habitat restoration actions [7].

Strengthen brand integration to enrich cultural narratives and leverage indigenous tourism assets

through regional landscape optimization. Puzhehei Scenic Area's distinctive karst topography interwoven with ethnic heritage and mild climatic conditions maintains unique appeal across Yunnan Province and nationally, yet requires urgent thematic redefinition to revitalize diminishing water-town tourism value by refining locally distinctive offerings [8]. Concurrently, transition from site-specific tourism to regional integration demands holistic destination development, capitalizing on Puzhehei's mature ecotourism foundations to establish panoramic industry coverage. Scenic areas should be expanded geographically by strengthening urban-rural linkages in the landscape and harmonizing the ecological beautification of Qubei County with government zoning plans to create an image of an ecotourism city radiating from the core scenic area. They also need to promote inclusive participation by fostering resident involvement in tourism operations and environmental management to harmonize community relations while advancing the dual goals of economic growth and ecological conservation [9].

5. Conclusion

Under the current background of tourism development in the new era, Puzhe Scenic Area should continuously maintain the coordinated relationship between tourism economic development and ecological environment protection, always think about the challenges of its own advantageous resources in the constantly changing tourism environment, achieve brand marketing breakthroughs around tourism resources, and actively participate in market competition. The scenic area should combine the market demand for products and services with the actual situation that its own supply capacity can meet, and then focus on the tourism demand and the scenic area characteristics of the tone consistent with the clientele of the market, so that it can highlight the product characteristics, and create a broader pattern of the development of the whole region's tourism.

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