

Blue Planet: A Study on the Sustainable Development of Ecotourism in Roof of the World

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Abstract

Compared with the South Pole and North Pole, the Qinghai–Tibet Plateau is called the roof of the world’s high pole. The Qinghai–Tibet Plateau is called the roof of the world—Gaoji. The Qinghai–Tibet Plateau, the roof of the world, has attracted much attention because of its unique geographical location, climatic conditions and rich biodiversity. The purpose of this paper is to discuss the importance of biodiversity protection on the Qinghai–Tibet Plateau and propose some suggestions for its sustainable development. Through a literature review and case study, this paper analyses the present situation and threats to the ecotourism environment on the Qinghai–Tibet Plateau, probes strategies and measures for biodiversity protection, and proposes some methods and suggestions for sustainable development. The results show that the development of ecotourism still needs to be combined with technology in a larger context, strictly regulating human activities and increasing human awareness of environmental tourism.

Keywords

third pole, ecotourism, sustainable development, Qinghai–Tibet Plateau

1. Introduction

Ecotourism involves the dual responsibility of protecting the natural environment and maintaining the livelihood of local people. In recent years, against the policy backdrop of “ecological protection priority,” Qinghai Province has actively expanded green ecological spaces, fully leveraging the value of ecology. Ecotourism has been taken as an important means to promote economic and social development, with the goal of creating an international ecotourism destination.

2. The Present Situation and Problems of Ecotourism in Qinghai–Tibet Plateau

2.1 Research on the Ecological Tourism Resources on the Qinghai–Tibet

Plateau will, to some extent, constrain the deep development of its ecological tourism resources. First, owing to the fragile ecosystem of the Qinghai–Tibet Plateau, the development and utilization of its ecotourism resources are difficult, resulting in increased development costs. Moreover, owing to factors such as vast land and a sparse population, inconvenient transportation, and limited contact with the outside world,

the development of ecotourism faces many difficulties. Second, the development of ecotourism on the Qinghai–Tibet Plateau faces the problem of talent shortages. Owing to the harsh geographical environment and relatively low level of economic development, attracting and retaining excellent ecotourism management and service talent is difficult, which restricts the development of ecotourism on the Qinghai–Tibet Plateau (Luo, 2021). In addition, people's weak environmental awareness is one of the problems facing the development of ecotourism on the Qinghai–Tibet Plateau. In the development of ecotourism resources, unreasonable exploitation and utilization phenomena, such as the indiscriminate logging of forest resources, the hunting of many rare wild animals, and the disorderly excavation of medicinal herbs, pose severe challenges to the ecotourism environment. In summary, there are some problems in the development of ecotourism on the Qinghai–Tibet Plateau that need to be addressed through effective measures, as shown in Figure 1.

2.2 Regional Distribution Analysis

The distributions of different colored areas on the map were analysed to understand the geographical distribution characteristics of Sanjiangyuan National Park and Nature Reserve.

2.2.1 Area Analysis

The areas of different regions are calculated and compared to understand the proportion of each part of the overall protected area.

2.2.2 Attraction Distribution Analysis

If the colors in the picture represent different attractions or regions, analyse the distribution patterns of these attractions or regions.

Owing to the possibility of unidentifiable specific names and legends in the images, our analysis is primarily based on color distribution and geographical features. This picture shows the area distribution of different regions in Sanjiangyuan National Park and Nature Reserve. The proportion of each area can be understood on the basis of the proportion shown in the figure. For example, Area A may occupy the largest portion of the protected area, whereas other areas occupy a smaller proportion. Through this visualization method, we can quickly understand the importance of each area in the overall protected area. This analysis helps us understand the geographical distribution characteristics of protected areas and the potential roles of different regions in ecological protection and planning.

3. Analysis of Ecotourism Demand on Roofs Worldwide

The government and local people will increase the protection of the ecotourism environment and increase the visibility of the Tibetan Plateau. Promoting China's natural scenery and magnificent scenery also enhances national confidence and pride, and more importantly, it has contributed to the development of local education and culture and improved local education and cultural standards (Yang, 2008).

Qinghai–Tibet Plateau, known as the “roof of the world” and “the third pole of Earth,” its unique geographical environment and ecosystem play an irreplaceable role in ecological security worldwide. The need for ecotourism at level III will be analysed from a number of perspectives:

3.1 Protecting the Ecological Environment

The ecological environment of Qinghai–Tibet Plateau is extremely fragile, once destroyed, it is extremely difficult to restore. Ecotourism helps to develop within conservation and achieve a higher level of conservation. The Tibetan plateau is one of the most biodiverse areas in the world, with many rare and endangered species. Through ecotourism, biodiversity can be promoted, and ecological balance maintained. As a sensitive area of global climate change, the ecological protection of the Tibetan Plateau has great significance in addressing global climate changes.

3.2 Promotion of Economic Development

Third-Polar ecotourism can bring considerable economic income to the Qinghai–Tibet Plateau region and promote local economic development. For example, the village of Cala can attract a large number of tourists through the Peach Flower Festival, and the annual disposable income of the villagers increases significantly. The development of ecotourism requires a large number of service personnel, including guides, hotel employees, catering practitioners, etc., providing diverse employment opportunities for local residents. It can promote the optimization and upgrading of the local industrial structure, transforming from the traditional agricultural and livestock industry to the service industry, and improving economic efficiency.

3.3 Achieving Sustainable Development

Third, polar ecotourism emphasizes the rational use and sustainable development of resources to avoid ecological damage caused by overexploitation. In the process of ecotourism development, environmental protection is always given the highest priority, ensuring the stability and sustainability of the ecosystem, thereby maximizing economic, social and environmental benefits and promoting the sustainable development of the region.

A total of 116 A-level tourist attractions have been developed, including the national 5A-level 4, 4A-level 13, 3A-level 45, 2A-level 38, and 1A-level 16. How to develop people in harmony with nature, ecology and the economy is a major issue facing Tibet's sustainable development. Achieving the harmonious development of man and nature, ecology and the economy will also benefit the Tibetan people more (Chen, 2009).

4. The Third Level is the Sustainable Development Strategy of Ecotourism

Moreover, the country has also set up many urban conservation areas, such as the Hoh Xil National Natural Reserve, Tibet Qiangtang National Natural Reserve, Qinghai Three Rivers Source National Natural Reserve and Xinjiang Altun Mountain National Natural Reserve (Liu, 2008).

4.1 Strict Protection of Glaciers, Wetlands and Other Important Ecosystems

The glaciers are important sources of water for the Tibetan plateau, and their disappearance has a significant impact on the ecosystem and the climate. Therefore, measures need to be taken to slow the rate of glacial melt, such as limiting the interference of human activities in glacial areas and carrying out information and education campaigns for glacial conservation; wetlands are an important part of the ecosystem of the Tibetan Plateau, which has variety of functions such as maintaining water sources, purifying water quality, harvesting floods and preventing droughts. It is necessary to strengthen wetland protection, establish urban conservation areas, and strengthen monitoring and assessment of wetland ecosystems.

4.1.1 Promotion of Biodiversity Conservation

The Tibetan plateau is rich in biodiversity and is a priority area for biodiversity protection worldwide. There is a need to establish biodiversity conservation networks, strengthen the protection of rare and endangered species and carry out biodiversity monitoring and assessment. Moreover, public awareness and participation in biodiversity conservation will be enhanced through information and education.

4.1.2 Implementing Ecological Restoration Projects

To restore the function of systems, ecological restoration projects, such as grassland improvement and afforestation, should be carried out.

4.2 Properly Planning Ecotourism Space

Focus on the sustainability of tourist routes and attractions to ensuring that tourism activities affect the ecological environment in the affordable range and reasonable control of tourism capacity to avoid tourism

activities in the ecological environment over pressure. An appointment system should be established to control the number of tourists and ensure the orderly conduct tourism activities.

Taking the advantage of the impression of “enjoying the new Tibet and safeguarding the third pole” tourism brand, we will build on the new stage of development of third pole ecotourism (Lu, 2022).

In summary, the sustainable development strategy for ecotourism in the Third Pole (Tibetan Plateau) needs to consider multiple aspects such as ecological protection and rational planning. Through the implementation of these measures, the healthy and sustainable development of ecotourism on the Tibetan plateau can be promoted.

5. Measures to Protect and Restore the Ecological Environment

Protecting and restoring the ecological environment of the Qinghai–Tibet Plateau requires comprehensive measures, including establishing nature reserves and ecological compensation mechanisms, increasing scientific research and technological support, and conducting regular environmental monitoring and evaluation.

5.1 Implementing Ecological Engineering

The Qinghai–Tibet Plateau is an important ecological barrier in China and even globally, and its ecological environment has a significant impact on the global climate and ecosystem. By implementing projects such as grassland protection and restoration, natural forest protection, and soil and water conservation, the ecological environment of the Qinghai–Tibet Plateau can be effectively improved, and the stability, sustainability, and self-recovery ability of its ecosystem can be enhanced. For example, the Three Rivers Source Ecological Protection and Construction Project aims to protect and restore the water tower function of the Qinghai–Tibet Plateau. The green economy and circular economy should be developed to protect the natural ecological environment of the Qinghai–Tibet Plateau (Huang, 2023).

5.2 Addressing Climate Change

The Qinghai–Tibet Plateau is a sensitive and critical area for global climate change, and its ecological environment and climate change have significant impacts on the global ecosystem and human survival. First, it is necessary to strengthen scientific research on ecological security and actively address climate change, including enhancing research on the uncertainty of the impact of glacier melting on water resources and ecology. Second, strengthening the comprehensive observation system and capacity building and enhancing the monitoring and prediction capabilities of the climate system are necessary. For example, reducing greenhouse gas emissions and conducting climate change adaptation research (Chen, 2009). In addition, it is necessary to increase the support capacity for climate change technology innovation and promote the popularization and publicity of climate change science. This study can help people better understand the impacts of climate change.

5.3 Regional Cooperation

The Qinghai–Tibet Plateau spans several provinces, including Xizang, Qinghai, Sichuan, Yunnan and other provinces. The ecological environment and economic development of these regions are closely related, so strengthening interprovincial coordination and cooperation is necessary. In terms of ecological protection, various regions can jointly carry out ecological engineering to strengthen the protection and restoration of the ecological environment. By strengthening cooperation, we can promote coordinated development among various regions; achieve resource sharing, complementary advantages, and mutual benefits; and make positive contributions to the protection of the ecological environment and economic and social development of the Qinghai–Tibet Plateau.

5.4 Increased Public Awareness of Attention

Through education and publicity activities, we aim to increase public awareness of the protection of the ecological environment on the Qinghai–Tibet Plateau and encourage them to contribute ideas and suggestions for ecological conservation activities (Gangla, 2024).

In addition to the above measures, it is also possible to promote the development of green industries, encourage and support the development of low-carbon and environmentally friendly industries (renewable energy development, ecotourism) in the Qinghai–Tibet region, reduce negative impacts on the environment, and achieve sustainable development in the region.

In addition to the above measures, it can also promote the development of green industries, encourage and support the development of low-carbon environmental protection industries (renewable energy development and ecotourism) in the Qinghai–Tibet region, reduce the negative impact on the environment and realize the sustainable development of this region.

As an emerging branch of the tourism industry, ecotourism needs to be separated from ordinary tourist areas; ecotourism emphasizes the protection and preservation of the natural environment and cultural diversity in tourism activities while providing tourists with high-quality tourism experiences.

6. To Promote the Development of the Ecotourism Industry, the Following Steps can Be Taken

6.1 Strengthening Legal Planning and Policy Support

To pursue economic benefits, some ecotourism resources may be over commercialized, resulting in the destruction of the original natural landscape and cultural characteristics. For example, some scenic spots on the Tibetan Plateau may have lost their original natural beauty due to excessive commercial facilities and tourist activities. The government should introduce relevant policies, carry out scientific planning for ecotourism, and formulate and improve relevant environmental protection laws and regulations to ensure that there is a legal basis for ecological protection. Strictly enforcing environmental protection standards and eliminating violations ensure that tourism activities are coordinated with the natural environment and cultural preservation. Policies may include financial subsidies for ecotourism projects, tax incentives, market access facilitation, etc.

6.2 Integrating Resources to Create a Distinctive Brand

Certain ecotourism resources are extremely attractive in specific seasons. For example, tourism programs such as skiing and winter ice activities can be carried out in some specific seasons, which leads to a substantial increase in tourism revenue and increases the well-being of the local economy. Therefore, according to the natural resources and cultural characteristics of the region, all kinds of tourism resources can be integrated to create a special ecotourism brand: tourism projects based on nature reserves, forest parks and scenic spots can be developed while local nomadic culture and folklore activities can be combined to provide a unique tourism experience (He et al., 2020).

6.3 Improving the Quality of Tourism Services

improving the quality of tourism infrastructure and services, including accommodations, transportation, food and beverages, and guide services, to ensure that tourists can enjoy a comfortable and high-quality tourism experience. Develop diversified tourism products: Develop diversified tourism products according to the needs of different tourists, such as eco-adventures, health resorts, and cultural experiences, to attract the participation of a wider range of tourists (Liao et al., 2017).

6.4 Promotion of Environmental Education

Environmental education should be integrated into the tourism process to increase tourists' awareness of environmental protection and guide them to participate in activities to protect the environment. For example,

environmental education centers can be set up in tourist areas, and environmental volunteer activities can be organized.

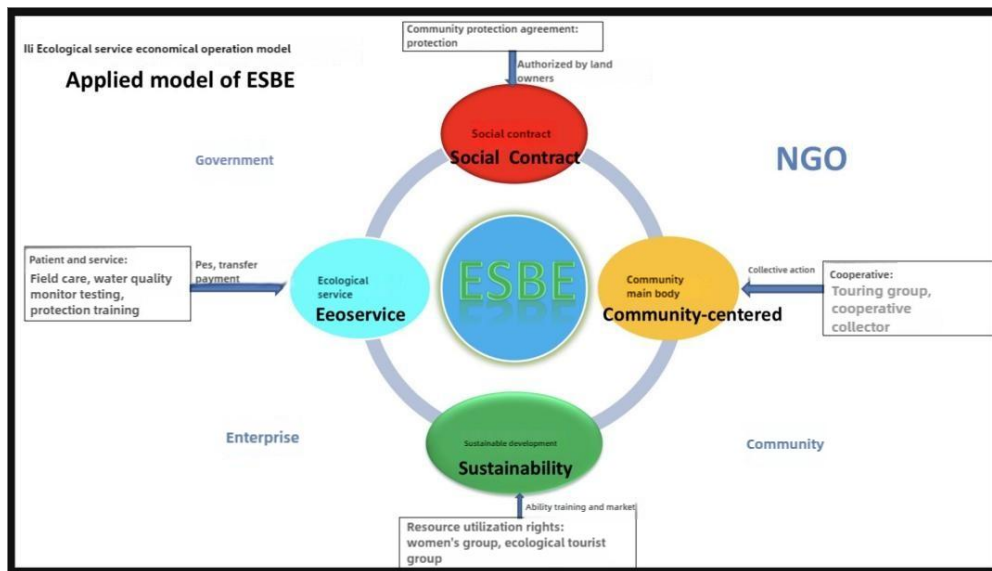
6.5 Strengthening Market Supervision and Environmental Protection

The supervision of the ecotourism market should be strengthened to ensure that tourism activities do not damage the natural environment or cultural heritage. Tourism activities and enterprises that violate regulations should be punished in accordance with the law.

6.6 Using Modern Technology to Enhance the Experience:

Modern information technology such as the internet, big data and artificial intelligence can be used to improve the efficiency and quality of tourism services and provide tourists with a personalized tourism experience. Through the implementation of these measures, the healthy development of the ecotourism industry can be effectively promoted, and the transformation and upgrading of the tourism industry can be realized while simultaneously protecting and promoting the ecological environment and the sustainable development of culture.

Figure 1: Operational Model of the Ecological Service-Based Economy



Data Analysis: Analysis of the Relationships between Participants: Analyse the interrelationships and interactions between the government, NGOs, businesses, communities, and social contracts. Role and responsibility analysis: Determine the role and responsibility of each participant in the ecological service-based economy. Cooperation Model Analysis: We study the modes of cooperation between different participants, such as between government and business, government and community, NGO and community, etc. Since the image contains conceptual models rather than specific data, our analysis focuses on understanding the structure of the model and the relationships between its various parts. This figure shows the relationships between different participants in the operational model of the ecological service-based economy (ESBE). In this model, the government, enterprises and communities are directly involved in the ecological protection agreement. Both the government and nongovernmental organizations are linked to the Community Protection Agreement, which shows their responsibility to protect the environment at the community level. There is no direct connection between NGOs, the government, and businesses, but they are all indirectly connected through the ecological protection agreement. This structure indicates that the successful implementation of the ecological service-based economy requires the collaboration of multiple participants, each of whom plays an important role in ecological protection and at the community level. Through this cooperative model, the goals of environmental protection and sustainable development can be promoted.

7. Conclusion

Through an in-depth exploration of research on the sustainable development of ecotourism in the Third Pole, this study aims to provide a comprehensive framework to promote the development and conservation of this area. The unique geography and cultural resources of the Third Pole region provide richness for the development of ecotourism but at the same time pose many challenges. This paper analyses the characteristics and cultural values of ecotourism resources in the Third Pole, as well as the problems faced in its current development, such as ecological damage and cultural dilution. The protection and sustainable development of biodiversity on the Qinghai–Tibet Plateau is a complex and long-term task. We need to distinguish ecotourism from ordinary tourism. Sustainable development still needs the joint efforts of the government, enterprises, tourism cooperatives and the public, and all-round supervision in four dimensions, namely, policy, law, management and operation, is needed to promote the construction of an ecological civilization in which man and nature live in harmony and cultivate human awareness of environmental protection. Moreover, the unique ecological environment and social culture of the Qinghai–Tibet Plateau should be protected and passed down.

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Funding

This research received no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

Acknowledgment

Not Applicable.

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