A Research on Ecotourism and Environmental Conservation - A Case Study of Jiuzhaigou, China

Sepideh Khameneh Mohajer¹

¹MBA in Tourism Management, Student ¹School of Management, Zhengzhou University, Henan, China, 450001

Publication Date: 2025/09/19

Abstract: In recent years, ecotourism has rapidly developed as a new model in China. This study, through a case study approach and document analysis, examines the opportunities and challenges of ecotourism in Jiuzhaigou. The findings indicate that limited awareness among managers and tourists has led to damage to the ecosystem, management system, and human environment of the area. To achieve sustainable development, it is essential to strengthen visitor education, implement integrated management, and promote green transportation. By analyzing tourism resources and tourist behavior patterns, this study proposes strategies to guide management and improve visitor conduct, thereby offering a vision for the sustainable development of ecotourism in Jiuzhaigou and comparable regions.

Keywords: Jiuzhaigou; Environmental Conservation; Ecotourism.

How to Cite: Sepideh Khameneh Mohajer (2025) A Research on Ecotourism and Environmental Conservation - A Case Study of Jiuzhaigou, China. *International Journal of Innovative Science and Research Technology*, 10(9), 963-969. https://doi.org/10.38124/ijisrt/25sep697

I. INTRODUCTION

Ecotourism, as one of the emerging models of tourism, has experienced remarkable growth in China over recent decades, striving to balance environmental conservation with economic development ^[1]. Jiuzhaigou, located in Sichuan Province, represents a prominent example of this approach. Owing to its unique natural landscapes and rich biodiversity, it has been inscribed on the UNESCO World Natural Heritage List and attracts millions of tourists annually ^[2].

Despite these achievements, tourism development in Jiuzhaigou faces significant challenges. Studies have shown that the rising number of visitors, the carbon footprint of transportation, and weaknesses in resource management have placed considerable pressure on the region's fragile ecosystem [3]. Furthermore, natural disasters and climate change have increasingly threatened the sustainability of tourism development [4].

Under such circumstances, the role of government and public policy becomes particularly crucial. Research indicates that comprehensive planning and effective supervision can pave the way for sustainable development, while innovative measures such as the adoption of green transportation and electric buses have significantly contributed to reducing pollution and enhancing the visitor experience [5,6,7].

Accordingly, the aim of this study is to examine the opportunities and challenges of ecotourism in Jiuzhaigou and

to propose strategies for achieving sustainable development through document review and content analysis.

II. THEORETICAL FOUNDATIONS

Ecotourism, as a branch of sustainable tourism, has emerged with the aim of balancing environmental conservation and the socioeconomic development of local communities. Although widely recognized in the international literature under the term ecotourism, it lacks a universally accepted definition, and interpretations vary depending on national contexts and scholarly perspectives. Overall, ecotourism can be understood as an advanced form of traditional tourism that, while emphasizing natural and environmental resources, also encompasses indigenous cultures and local traditions. Innovation in meaning, implementation methods, and its community-based orientation are considered key features [8].

To clarify the concept of ecotourism, several theoretical frameworks have been proposed. Martha Honey (1999) identifies principles such as minimizing negative environmental impacts, educating tourists, benefiting local communities, and respecting indigenous cultures as its main indicators ^[9]. Similarly, Weaver (2006) presents a model of sustainable tourism that distinguishes between "minimalist," "balanced," and "comprehensive" approaches, ranging from strict environmental protection to extensive use of tourism for economic development ^[10].

These frameworks demonstrate that ecotourism is a dynamic and multidimensional concept, whose success depends on achieving a balance between environmental protection, community benefits, and positive tourist experiences. In destinations such as Jiuzhaigou, which combine rich biodiversity with a high capacity to attract visitors, the application of these frameworks offers valuable guidance for achieving sustainable development.

III. RESEARCH METHODOLOGY

This study employs document review and content analysis as its primary research methods. These approaches enable the researcher to systematically examine previous studies and derive new insights, upon which practical recommendations can be formulated.

A search of the CNKI database using the keyword Jiuzhaigou Valley initially yielded 2,350 academic articles. To refine the scope, relevant categories such as "Jiuzhaigou," "environmental protection," "ecotourism," "sustainable tourism development," and "Jiuzhaigou Scenic Area" were selected. Based on these filters, the number of articles was reduced to 193, published between 1998 and 2025.

For a more precise understanding of the current state of ecotourism in Jiuzhaigou, the analysis focused on studies published in the most recent five-year period (2021–2025). The content of these articles was examined with particular attention to issues such as resource management, environmental conservation, tourist behavior, and sustainable development.

Through this combination of document review and content analysis, the present study seeks to provide a clear picture of the challenges and opportunities of ecotourism in Jiuzhaigou and to propose strategies for advancing its sustainable development.

IV. INTRODUCING JIUZHAIGOU AS A CASE STUDY

Jiuzhaigou (九寨沟) located in northern Sichuan Province, Jiuzhaigou is recognized as one of China's most prominent ecotourism destinations. Covering an area of more than 640 square kilometers at an elevation of 2,000–3,000 meters above sea level, the region is renowned for its exceptional natural landscapes, including turquoise lakes, numerous waterfalls, dense forests, and snow-capped peaks [11]. Its rich biodiversity, featuring rare species of flora and fauna, has further enhanced its ecological value, leading to its inscription on the UNESCO World Natural Heritage List in 1992 [2].

A distinctive feature of Jiuzhaigou lies in the integration of its natural scenery with environmental aesthetics. Research has shown that the visual quality of the forests, combined with the vivid colors of its lakes and mountains, creates a unique experience for visitors [11,12]. In addition, interpretive trails such as Luohuahai play a vital role in raising tourist

awareness of environmental protection, drawing on educational resources related to vegetation, wildlife, and local culture [13].

Moreover, Jiuzhaigou's unique geographical setting and pristine ecosystem have earned it the reputation of a "living ecological museum." These attributes not only enhance its tourism appeal but also underscore the importance of sustainable conservation and management. Thus, Jiuzhaigou serves as a representative case for examining the interrelationship between ecotourism and environmental protection.

> Jiuzhaigou: An Ecological Tourism Destination with a Focus on Conservation

Chen Linglin nots that Jiuzhaigou is one of China's nationally significant scenic areas. In 1990, it was ranked at the top of the list of "China's Forty Best Tourist Destinations." In 1991, the area was included in the United Nations' World Scenic Spots Directory, and in December 1992, it was officially inscribed on the UNESCO World Natural Heritage List. Since then, Jiuzhaigou has gained international recognition as a premier tourism destination, often described as a "dreamlike and marvelous world" that attracts both domestic and international visitors.

In 2007, Jiuzhaigou was also included in the first group of tourism sites awarded China's highest national rating5A Tourist Attractions further reinforcing its status as a leading example of ecological tourism and conservation oriented travel in the country [14]. Recent studies further highlight Jiuzhaigou's role as a model of sustainable tourism and ecological conservation in China [1,2].

> Natural Features and Landscapes of Jiuzhaigou

Jiuzhaigou is a comprehensive nature reserve that harbors rare and valuable species, including the giant panda and the golden snub-nosed monkey. The reserve covers an area of about 643 square kilometers and is characterized by rich biodiversity and a number of highly endangered species.

In addition, Jiuzhaigou is designated as one of China's key national scenic areas, spanning about 720 square kilometers. Its core landscape elements consist of alpine lakes, groups of waterfalls, and surface streams. These features together with emerald-colored lakes, tiered waterfalls, multicolored forests, snow-capped peaks, blue ice, and Tibetan culture are collectively known as the "Six Wonders of Jiuzhaigou." For this reason, the reserve has earned the reputation of being both a "Marvelous Jiuzhai" and a "Fairyland on Earth."

Jiuzhaigou also holds the designation of National Geopark. Its conservation objectives include geological formations, unique lakes, surface water systems, waterfalls, karst features, and forest ecosystems, all of which hold high scientific research value ^[15]. Moreover, recent research on forest aesthetics and environmental interpretation trails has shown that Jiuzhaigou's unique ecological resources provide both scientific and educational value ^[12,13].

> Jiuzhaigou Valley Scenic Area

The Jiuzhaigou National Nature Reserve, located in Jiuzhaigou County of the Aba Tibetan and Qiang Autonomous Prefecture in Sichuan Province, is the first nature reserve in China established with the primary purpose of protecting natural landscapes. It is also regarded as one of the most renowned scenic destinations in the country. Jiuzhaigou has been recognized as a "National Model for Civilized Tourism Areas" and is often described as "one of the world's best ecotourism destinations."

Scholars also stress that the government's role in regulating tourism and promoting green transport, such as electric buses, has become critical to maintaining this status [5,6]. The reserve has consistently emphasized the protection of its pristine natural environment, striving to preserve its original ecological resources to the greatest extent possible. By promoting the scientific development of its natural tourism resources under the guiding principle of ecotourism, Jiuzhaigou presents a unique, ancient, and dreamlike vision of a "heaven on earth." The integration of untouched ecosystems, clean air, snow-capped mountains, forests, and lakes creates serene and breathtaking scenery. These qualities have earned Jiuzhaigou two prestigious international titles: World Natural Heritage Site and World Biosphere Reserve, further cementing its reputation as a sacred destination.

https://doi.org/10.38124/ijisrt/25sep697

By adhering to the principles of "ecological conservation" and "green tourism," Jiuzhaigou has developed a unique model of ecotourism management that serves as a valuable reference for ecological management in other tourism destinations across China. At present, ecotourism activities in Jiuzhaigou are primarily divided into two categories: Zharu Valley Ecotourism and Primitive Forest Ecotourism. (Table 1)

Table 1 Scenic Valleys and Main Attractions of Jiuzhaigou

Zharu Valley (扎如沟)	Rize Valley(日则沟)	Zechawa Valley(则査洼沟)	Shuzheng Valley(树正沟)
	Mirror Lake Virgin Forest; Nuorilang		Double-Dragon Lake;
Black Zharu Lake; Zharu	Waterfall; Nuorilang Group of		Shuzheng Lakes; Reed Lake;
Rock Monastery; Zharu	Waterfalls; Swan Lake; Grass Lake;	Long Lake; Five-Color Pond	Sleeping Dragon Lake; Tiger
Temple; Sacred Mount	Panda Lake; Panda Waterfall; Five-	(Zechawa Pond)	Lake; Rhinoceros Lake;
Zhayi	Flower Lake; Peacock River; Bamboo		Shuzheng Waterfalls;
	Arrow Lake		Shuzheng Village

> The Ecological Significance of Preserving Natural **Features**

Ecotourism plays a vital role in protecting natural resources and ecosystems. By limiting environmental degradation and adopting sustainable management practices, it contributes to reducing ecosystem destruction and safeguarding endangered species.

In March 2006, the Sichuan Provincial Forestry Department released a report entitled "Analysis and Evaluation of Ecotourism Resources." This report covered four key dimensions: landscape resource indicators, environmental indicators, ecological protection indicators, and indicators for utilization and development.

Among the 182 ecotourism sites evaluated across Sichuan Province, Jiuzhaigou ranked first due to its outstanding geological and hydrological features, rarity of biodiversity, aesthetic value, ecological diversity, and overall sustainability.

This remarkable achievement highlights Jiuzhaigou's ability to strike a sustainable balance between tourism development and environmental conservation [16].

V. CHALLENGES IN THE DEVELOPMENT **OF JIUZHAIGOU**

➤ Challenges Ecotourism and Environmental Protectionn

With its outstanding natural endowments and abundant ecological and cultural resources, Jiuzhaigou has become a renowned tourist destination, creating highly favorable conditions for the development of the local tourism industry. However, it is important to recognize that these resources are limited. Treating them as "inexhaustible and unlimited" inevitably leads to waste and environmental degradation a problem observed in many ecotourism projects across China, which has gradually become one of the main obstacles to the sustainable development of ecotourism.

In recent years, Jiuzhaigou's active development has attracted large numbers of domestic and international visitors, boosting local economic growth. Nevertheless, the rapid surge in tourist numbers has also created several challenges. These include the low level of environmental awareness among some visitors, resulting in waste accumulation and various forms of environmental damage. Pollution of natural resources such as biodiversity, soil, and water has intensified, and in some cases has even small-scale natural disasters. Moreover, overdevelopment driven by local management has disturbed the ecological balance of the reserve and posed serious threats to the sustainable growth of the tourism industry.

Ensuring the long-term sustainability of ecotourism in Jiuzhaigou requires effective measures, including enhancing visitor education, strengthening management and continuous monitoring, and standardizing tourism development practices

According to official statistics from the Jiuzhaigou County Bureau of Statistics, the region received more than 3.1 million tourists in 2020, including 3.107 million domestic and 0.41 million international visitors [18]. Several factors contributed to this notable increase: on the one hand, China's

https://doi.org/10.38124/ijisrt/25sep697

effective control of the COVID-19 pandemic and restrictions on outbound travel boosted domestic demand; on the other hand, the reopening of Jiuzhaigou after infrastructure reconstruction, accompanied by extensive government promotion, further stimulated tourist interest. In addition, the growing preference for nature-based and open-space tourism in the post-pandemic era positioned Jiuzhaigou as one of the country's leading domestic destinations. While this surge in visitor numbers supported local economic growth, it also placed heavy pressure on the area's ecological capacity, exacerbating problems such as vegetation degradation and the accumulation of non-recyclable waste. (FIG 1)

Environmental Protection and Natural Resource Challenges

Despite its outstanding natural advantages, Jiuzhaigou's resources are inherently limited, and misinterpreting this reality can result in waste and degradation. The sharp increase in tourist numbers has created multiple problems, including low levels of environmental awareness among visitors, waste accumulation, ecological damage, and excessive development by local management all of which have had negative impacts on the sustainability of the local tourism industry.

• Inefficiency of Management Mechanisms and Weaknesses in Service Quality

Jiuzhaigou's unique geographical location, complex topography, and high altitude have made tourism management particularly challenging. Managers and service staff often lack sufficient professional training, and the absence of comprehensive and effective management mechanisms has resulted in relatively low service quality. Moreover, the lack of career planning and incentive systems has reduced staff motivation, thereby negatively affecting visitor satisfaction.

• Lack of Systematic and Specialized Planning, and Environmental Degradation

With increased publicity, Jiuzhaigou has gained greater recognition and attracted growing numbers of tourists. However, infrastructure development has remained insufficient, while human construction activities have often been carried out without coherent planning or professional

design, resulting in limited harmony with the natural landscape. This situation has led to overexploitation of land resources, heightened environmental damage, and even the intensification of certain natural disasters.

• The Imperative of Developing the Ecotourism Market

Jiuzhaigou requires greater emphasis on the distinctive characteristics of its ecotourism products. This includes the development of more diversified services, such as scientific research tourism and health and wellness tourism, in order to provide visitors with a higher-quality experience. Furthermore, the creation of varied activities can enhance synergy between ecotourism and other related industries, thereby contributing to the region's sustainable development.

> Inadequate Professional Training of Managers and Staff

Jiuzhaigou, with its outstanding natural advantages and abundant human and cultural resources, has created favorable conditions for the development of local tourism. However, these resources are limited, and the misconception of viewing them as "inexhaustible" can lead to waste and degradation—an issue that has been common in many ecotourism projects across China and has become one of the main obstacles to the development of this sector.

In recent years, the large-scale development of tourism in Jiuzhaigou has attracted significant numbers of domestic and international tourists, thereby boosting the local economy. Nevertheless, the sharp increase in tourist numbers has also brought about several problems, such as the low level of environmental awareness among some visitors, leading to waste accumulation and damage to the natural environment. In addition, pollution of natural resources such as soil, water, and biodiversity has intensified, and in certain cases, even small-scale natural disasters have occurred. Alongside these issues, over development driven by local management has further threatened ecological balance and undermined the sustainability of tourism.

Therefore, to ensure the sustainable development of ecotourism in Jiuzhaigou, measures such as tourist education, enhanced management and monitoring, and the standardization of development activities must be adopted.

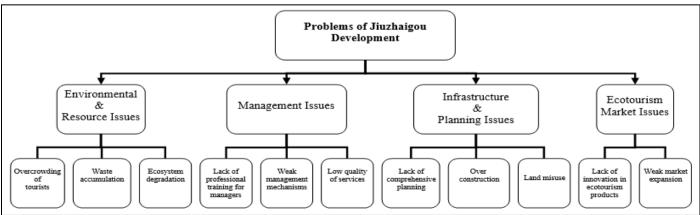


Fig 1 Problems of Jiuzhaigou Development

VI. STRATEGIES FOR THE SUSTAINABLE DEVELOPMENT OF ECOTOURISM IN JIUZHAIGOU

> Enhancing Environmental Conservation

Ecotourism is fundamentally based on environmental protection. The management of Jiuzhaigou must carefully assess its natural resources and formulate strategies to mitigate the negative impacts of tourism activities. Continuous monitoring of environmental conditions is also essential to minimize potential damage.

In addition, educating tourists and raising their awareness of environmental protection can encourage their active participation in conservation efforts, thereby creating favorable conditions for sustainable development [19].

➤ Scientific and Rational Approaches to Landscape Planning

To prevent excessive commercialization, the number and scale of commercial facilities must be strictly controlled. In the design and development of infrastructure, it is essential to ensure harmony between natural and artificial landscapes. Any construction should be carried out with minimal damage to the natural environment, while making optimal use of the existing topography and vegetation, in order to create an integrated and coherent whole [20].

> Strengthening Tourists' Environmental Responsibility

Tourist behavior is one of the key factors in environmental protection. Through both formal and informal education delivered by universities, media, and educational institutions tourists' sense of environmental responsibility can be strengthened. Visitors should learn not only to enjoy nature, but also to play an active role in its preservation.

Cultivating Environmentally Conscious and Responsible Tourists

According to scholars, a responsible tourist is one who possesses environmental awareness and never harms the environment for personal convenience. Universities, by establishing relevant programs and courses, should foster a new generation of environmentally responsible tourists and managers. In addition, the media should play a more active role in promoting the culture of ecotourism ^[21].

• Organizing Educational and Promotional Activities

Tourism authorities can enhance public awareness of ecotourism requirements by organizing conferences, workshops, and promotional campaigns. Such initiatives can transform tourists into active participants in environmental protection and foster sustainable coexistence between local communities and tourism.

> Improving Service Quality and Enhancing Tourist Satisfaction

Sustainable development is closely linked to tourist satisfaction. Jiuzhaigou should provide a diverse range of services, including specialized facilities for people with disabilities and tailored services for families. Enhancing infrastructure and service quality can significantly improve

the overall tourist experience and ensure the long-term sustainability of the destination.

https://doi.org/10.38124/ijisrt/25sep697

> Strengthening Integrated and Systematic Management

Comprehensive planning and in depth expert studies are required. Scientific design and better coordination between human-made structures and natural landscapes can enhance the aesthetic value of the area while preventing ecological degradation.

➤ Developing Innovative Ecotourism Projects

Diversifying ecotourism products and services can both alleviate tourist pressure and provide visitors with a more meaningful experience. Integrating ecotourism with scientific education and environmental research not only enhances tourists' awareness but also contributes to the cultural and scientific development of the region.

VII. PROJECTS AND CONSERVATION PROGRAMS

As one of the world's most significant ecotourism destinations, Jiuzhaigou has consistently sought to strike a balance between environmental protection and sustainable tourism development. To achieve this, a series of management, ecological, and service-oriented initiatives have been implemented, which can be summarized in three main dimensions:

> Culturally-Oriented and Nature-Harmonized Architecture:

Construction and design in Jiuzhaigou are guided by the principle of "harmony with nature." Traditional Tibetan and Qiang styles have been integrated with modern architectural elements, leading to the development of tourist service centers, ecological squares, and parking facilities with minimal visual intrusion into the natural environment. This approach not only contributes to preserving the pristine landscape but also highlights and reinforces the cultural identity of the region.

➤ Green and Sustainable Transportation

To reduce environmental pressures caused by high tourist flows, Jiuzhaigou has organized its transport system according to the principle of "pollution reduction." The adoption of clean-fuel shuttle buses, the separation of pedestrian and vehicle pathways, and the construction of wooden pavilions and rest stations are among the measures that have improved air quality while enhancing the overall visitor experience.

➤ Innovative Environmental and Managerial Measures

By discontinuing environmentally harmful activities (such as the rental of animals for transportation or tourist entertainment), Jiuzhaigou has taken a significant step toward biodiversity protection. The establishment of waterfree ecological toilets, combined with a smart waste management system, reflects innovation in sustainable infrastructure. Moreover, the development of a comprehensive wastewater and solid waste management system has effectively prevented the pollution of soil and

https://doi.org/10.38124/ijisrt/25sep697

water resources, providing a successful model for other ecotourism destinations.

VIII. RECOMMENDATIONS AND FUTURE PROSPECTS

Given Jiuzhaigou's prominent position in China's and the world's ecotourism sector, outlining future prospects and proposing practical strategies is crucial for ensuring its sustainable development. The key recommendations and forward-looking perspectives include:

- Comprehensive Resource Research and Targeted Conservation Measures: In-depth studies on natural resources, biodiversity, and the ecological carrying capacity of the region can provide a scientific basis for conservation planning. Protective measures should be tailored to the specific ecological characteristics and actual capacity of the ecosystem to preserve biodiversity while preventing overexploitation.
- Enhancing Tourist Education and Environmental Awareness: One of Jiuzhaigou's major challenges lies in the limited environmental awareness among certain tourists. Strengthening both formal and informal education through workshops, media campaigns, and promotional activities can play a vital role in shaping responsible tourist behavior and transforming visitors into active participants in environmental protection.
- Controlling Over-Commercialization and Harmonizing Artificial and Natural Landscapes :Excessive commercialization can undermine the authenticity of the natural landscape. Therefore, it is essential to regulate the number and scale of commercial facilities while emphasizing design principles that harmonize artificial structures with natural scenery. This approach enhances landscape aesthetics while alleviating environmental pressures.
- Improving Service Quality and Meeting Diverse Tourist
 Needs: Sustainable development is closely linked to
 tourist satisfaction. Jiuzhaigou should expand its service
 portfolio to include facilities for people with disabilities,
 family-oriented services, and upgraded infrastructure that
 improve the overall quality of the tourist experience.
 Such measures not only increase visitor satisfaction but
 also contribute to the region's long-term economic
 sustainability.
- Developing Innovative Ecotourism Projects and Integrating Scientific and Cultural Education: Diversifying ecotourism products through innovative projects can ease visitor pressure in certain areas while providing deeper and more educational experiences. Linking ecotourism with scientific research, cultural learning, and environmental education can transform Jiuzhaigou into an international hub for promoting environmental protection and sustainability.

IX. LIMITATIONS

This study has two main limitations. First, its focus is restricted to a single case "Jiuzhaigou" which limits the

generalizability of the findings to other ecotourism destinations. Second, the data used are primarily secondary, drawn from published articles, reports, and official statistics; consequently, the results are dependent on the accuracy and comprehensiveness of these sources. These limitations highlight the need for future fieldwork and comparative studies across different ecotourism destinations.

X. CONCLUSION

Jiuzhaigou, as one of the leading ecotourism destinations in China and worldwide, represents a successful example of the coexistence between tourism development and environmental conservation. The analysis demonstrates that although Jiuzhaigou possesses rich natural and cultural resources and has played an important role in attracting both domestic and international tourists, it has also faced multiple challenges. These include excessive tourist pressure, vegetation destruction, the generation of non-recyclable waste, pollution of water and soil resources, as well as shortcomings in management and training mechanisms.

Nevertheless, a variety of measures—such as the promotion of green transportation, the establishment of innovative ecological infrastructure, nature-harmonized architecture, and the education of tourists and local communities—have enabled Jiuzhaigou to present a practical model of sustainable ecotourism management. These efforts illustrate that a balance between economic development and ecological protection is not only achievable but can also enhance the international status of a tourism destination.

Accordingly, the future of ecotourism in Jiuzhaigou depends on the implementation of strategies such as scientific and systematic planning, controlling excessive commercialization, strengthening tourist education, improving service quality, and diversifying ecotourism products and activities. Achieving these objectives may transform Jiuzhaigou into an inspiring model for other protected areas in China and across the globe.

In conclusion, the case of Jiuzhaigou demonstrates that ecotourism, when combined with effective management and active tourist participation, can simultaneously safeguard the environment while ensuring sustainable economic and cultural development.

REFERENCES

- [1]. Zhang, X., Yang, S., Cheng, Y., et al. (2023). Reflections on the Sustainable Development of Jiuzhaigou Tourism under the Background of Ecotourism. In Proceedings of the 2023 Symposium on Labor Security Research of Chengdu University of Information Technology.
- [2]. Liang, Y., & Luo, J. (2021). Current Situation, Existing Problems and Countermeasures of Tourism Development in Jiuzhaigou Scenic Area. Tourism Planning, (1), 59–62.
- [3]. Yan, W. (2020). Analysis on the Spatiotemporal Evolution of Tourism Carbon Emissions and Its

- Influencing Factors in Jiuzhaigou. Journal of Green Development, (7), 112–119.
- [4]. Chen, Q. (2021). The Impact of Hazardous Weather on Tourism in Jiuzhaigou and Countermeasures of Meteorological Services. Journal of Tourism and Climate Research, (5), 44–50.
- [5]. Tan, M. (2022). The Role of Government in the Development of Ecotourism in Jiuzhaigou County, Aba Prefecture, Sichuan. Master's thesis, Southwest University for Nationalities.
- [6]. Luo, G. (2021). BYD Pure Electric Buses and the Launch of Green Sightseeing in Jiuzhaigou. Auto Review, (9), 36–38.
- [7]. Shangche Magazine Editorial Team. (2020). Opening the Green Sightseeing Journey of Jiuzhaigou: BYD Pure Electric Buses Protect the Most Beautiful Wonderland on Earth. Shangche, (10), 22–24.
- [8]. Chen, L., Yan, W., & Pan, H. (2012). Ecotourism Theory and Practice. Shanghai: Fudan University Press. (Fudan Excellence · 21st Century Tourism Management Series), p. 3.
- [9]. Honey, M. (1999). Ecotourism and Sustainable Development: Who Owns Paradise? Washington, DC: Island Press.
- [10]. [3] Weaver, D. B. (2006). Sustainable Tourism: Theory and Practice. Oxford: Elsevier Butterworth-Heinemann.
- [11]. Jiuzhaigou Scenic Area Official Website. (n.d.). About Jiuzhai. Retrieved from https://www.jiuzhai.com/about/jiuzhai-valley
- [12]. Chen, Q. (2022). Spatial Distribution Characteristics and Influencing Factors of Forest Aesthetic Quality in Jiuzhaigou. Journal of Forest Aesthetics, (4), 55–63
- [13]. Zhang, Y. (2022). Research on Environmental Interpretation Resources in Protected Areas: A Case Study of the Reed Sea Trail in Jiuzhaigou. Tourism Research Journal, (8), 77–85.
- [14]. Cheng, Y., Zhang, X., Yang, S., et al. (2023). Exploration on the Development Strategies of Ecotourism in Jiuzhaigou Scenic Area. Tourism Overview, (21), 76–78.
- [15]. Zhang, R. (2013). Research on the Harmonious Development between Jiuzhaigou Nature Reserve and Local Indigenous Residents (Master's thesis). Sichuan Agricultural University.
- [16]. Liu, X. (2007). Study on Ecological Protection in the Development of Ecotourism: A Case Study of Jiuzhaigou. Journal of Leshan Normal University, 22(3), 94–97.
- [17]. Yan, G. (2019). Problems and countermeasures of forestry development from the perspective of tourist attractions: A case study of Jiuzhaigou National Nature Reserve. Green Technology, (23), 259–260.
- [18]. Jiuzhaigou County Bureau of Statistics. (2021). Statistical Bulletin on the National Economic and Social Development of Jiuzhaigou County in 2020. Jiuzhaigou County People's Government. Available at: Jiuzhaigou County Government Portal https://www.jzg.gov.cn

- [19]. Feng, J. (2021). Analysis on Strengthening the Development of Nature Reserves. Guangdong Sericulture, (2), 42–43.
- [20]. Li, G. (2018). Problems and Countermeasures in the Ecotourism Development of Jiuzhaigou Nature Reserve. Green Technology, (11), 263–264.
- [21]. Li, G. (2012). Research on the Interactive Model of Ecotourism and Community Participation in Jiuzhaigou Nature Reserve (Master's thesis). Sichuan Agricultural University.