

High-Quality Development of Mount Lu Ecotourism: Influencing Factors, Pathways, and Research Prospects

—A Literature Review from a Multi-Theoretical Perspective

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ABSTRACT

Existing studies on the high-quality ecotourism development in Mount Lu have insufficiently integrated theoretical frameworks, making it difficult to address the complex challenges specific to Mount Lu. This study integrates the theories of sustainable development, scene theory, and community theory to systematically set goals for ecological protection, heritage preservation, community well-being, economic sustainability, and efficient governance in Mount Lu. It guides the transformation of resources into high-quality scenes and addresses the challenges of collaborative governance among multiple stakeholders. The study reveals the interactive mechanisms of multiple factors from five dimensions: environment, community, policy, management, and tourists. Specifically, environmental carrying capacity and policy coordination act as constraints; community empowerment and benefit sharing form the foundation; policy adaptability and management effectiveness are key factors; and the quality of tourist experiences and responsible tourist behavior serve as supporting conditions. Future research can apply the fsQCA (fuzzy-set qualitative comparative analysis) method to explore paths of multi-factor combinations, deepen localized policy evaluations, innovate community participation mechanisms, and provide support for constructing the “Mount Lu Plan” for coordinated ecological, cultural, and governance development in heritage sites. This will also offer references for similar heritage destinations.

Keywords: Mount Lu; High-quality Ecotourism Development; Sustainable Development Theory; Scene Theory; Community Theory

I. Introduction

Ecotourism, a form of tourism with low environmental impact and high sustainability, serves as a key model for balancing nature conservation and regional development. According to data from the United Nations World Tourism Organization (UNWTO), the market growth rate of ecotourism significantly outpaces that of traditional tourism, with an annual growth rate projected between 10% and 15%. Global consumers increasingly prefer healthier and more sustainable tourism forms. International organizations such as United Nations Educational, Scientific and Cultural Organization (UNESCO) and United Nations World

Tourism Organization (UNWTO) are also actively promoting ecotourism projects to leverage tourism’s role in protecting natural and cultural heritage. In May 2024, General Secretary Xi Jinping provided important instructions on China’s tourism industry, emphasizing the need to promote steady and far-reaching high-quality development, which paves the way for accelerating the construction of a strong tourism nation. The instructions stress protecting cultural heritage and ecological resources, adhering to cultural guidance and ecological priority, and innovating resource protection and utilization models. The 2024 Two Sessions have also identified strengthening ecological civilization construction,

encouraging green and low-carbon development, and continuously improving ecological environment quality as key government tasks. The “14th Five-Year Plan” includes promoting green development and fostering harmony between humanity and nature in its 2035 long-term goals. The Chinese government has proposed the vision of a “Beautiful China” and the development concept that “lucid waters and lush mountains are invaluable assets”, which clearly defines the critical role of ecotourism in advancing green development. It has successively introduced policy documents such as the Measures for the Evaluation and Assessment of Ecological Civilization Construction Objectives and the National Ecotourism Development Plan (2016–2025), laying a foundation for the long-term growth of ecotourism. The National Ecotourism Demonstration Area Construction and Operation Standards issued in 2011 has provided clear direction, making ecotourism a prevailing trend and public aspiration. Jiangxi Province has implemented policy documents such as the Jiangxi Province Health Tourism Plan (2021–2030), established ecotourism demonstration areas and tourist resorts, and gradually built “lucid waters and lush mountains” practice bases. These efforts have strengthened the value of ecological products, achieved coordination between ecology and economic development, and ultimately contributed to the high-quality development of the province’s ecotourism. The 2023 Mount Lu City Government Work Report (Jiujiang City) highlights that Mount Lu’s tourism industry adheres to ecological priority and green development, transforming ecological resources into green capital based on the “lucid waters and lush mountains” concept. However, challenges such as conflicts between ecological protection and economic development, and difficulties in tourist management persist. Thus, exploring paths for its high-quality development is crucial for achieving sustainability. Mount Lu’s ecotourism faces four major dilemmas: overloading of ecological carrying capacity, conflicts between cultural heritage protection and excessive commercialization, difficulties in coordinating multiple management actors, and pressure due to high brand expectations. Existing

research, hindered by a lack of theoretical integration, failure to deeply focus on Mount Lu’s specificity, and neglect of multi-factor interactions and policy implementation evaluations, struggles to provide effective solutions. Future research needs to construct an integrated theoretical framework to analyze Mount Lu from five dimensions, focusing on advancing fsQCA for multi-factor path exploration, optimizing localized policy evaluations (e.g., the governing one mountain through six approaches model), and innovating community participation mechanisms. These efforts aim to support the development of Mount Lu and similar heritage sites.

II. Theoretical Foundation: Concept Definition, Theoretical Integration, and Its Applicability

(1) Concept of high-quality ecotourism development

High-quality ecotourism development encompasses ecological protection, economic sustainability, enhancement of social benefits, and regional characteristics. In terms of theoretical connotation, it takes ecological priority as the fundamental premise, emphasizing the harmonious integration of ecological, economic, and social benefits (Wang Yubao et al., 2019). It represents a specific application of the theory of coordinated ecological and economic development in the tourism sector (Chen Linlin et al., 2022; Yu Fawen et al., 2020). From a practical perspective, high-quality development requires upgrading the development and utilization of tourism resources, innovating business formats, and improving service quality (Zhou Li et al., 2021). It also constructs a development foundation through community participation, governance optimization, and improvement of the living environment (Wang Zhaofeng et al., 2024). At the regional level, it is necessary to adapt measures to local conditions, integrate ecological sensitivity with characteristic resources, develop green industries, and safeguard ecological security (Xu Hui et al., 2020; Qin Jianxiong et al., 2023; Li Wenlu, 2024). Meanwhile, under the environmental constraints of the “dual carbon” goal, there is a need to strengthen the management of resource and environmental quality (Li Taohong et al., 2025). Development quality

can be enhanced through green transformation (Gao Yun et al., 2021), market-oriented approaches such as franchising (Huang Mengdie et al., 2021), and policy support (Qin Jianxiong et al., 2021). Additionally, high-quality ecotourism development must be nature-based, following ecological principles (Wiranatha, 2015). It also relies on sustainable community development (Mnisi & Ramoroka, 2020) and the realization of ecological product value (Iakovoglou et al., 2015) to become a key tool for balancing environmental issues and sustainable development (Indwar & Muthukumar, 2023). For Mount Lu's ecotourism, high-quality development centers on prioritizing ecological protection and maximizing sustainable comprehensive benefits. It should strictly adhere to ecological red lines, ensure the effectiveness of ecological protection, vitalize the utilization of cultural heritage, and guarantee authentic inheritance. By leveraging natural and cultural resources, it should provide immersive experiences and high-quality services, ensure fair benefits for the community and substantive participation in decision-making, actively develop green innovative industrial chains, and achieve economic sustainability. Furthermore, it is essential to establish an efficient and collaborative governance mechanism, coordinate multiple objectives, and form a core evaluation framework with goal-oriented guidance.

(2) Core Theoretical Foundations

1. Sustainable Development Theory

Sustainable development theory emphasizes the coordinated development of society, economy, and environment (Brundtland, 1987). It provides the core value orientation and target framework for the study of high-quality development of Mount Lu's ecotourism. Under the guidance of this theory, ecotourism emphasizes multi-stakeholder participation to balance resource use and community benefits (Chen Mengqi, 2023). The core of ecotourism is the long-term management of natural resources, thereby achieving a win-win for ecological, economic, and social benefits (Ding Juan & Yang Hui, 2023; Liu Liyan, 2022; Song Minjie, 2022). Moreover, ecotourism focuses on environmental protection and promotes high-quality development

and balanced economic growth through education, ethical concepts, community participation, and skill training (Tao Biaohong, 2012; Wang Hui, 2007). Sustainable development theory sets multi-dimensional comprehensive development goals, including aspects such as environmental protection, economy, society, and governance, emphasizing a long-term perspective, intergenerational equity, and systemic balance. It clarifies that the ultimate goal of high-quality development is to achieve harmonious coexistence between humanity and nature and sustainable prosperity.

2. Scene Theory

Scene theory emphasizes that tourist experiences are shaped by specific physical spaces, cultural atmospheres, social interactions, and activity content. The service environment of ecotourism scenic areas can enhance tourist experiences and promote ecological conservation and sustainable development (Meng Yu, Hou Zichan, 2024; Wen Lifang, 2024). The theory posits that the tourism cultural scene comprises elements such as tourists, hosts, residents, cultural characteristics, tourism activities, and spatial-temporal contexts, and the interaction of these elements determines the attractiveness of ecotourism scenic areas and tourists' participation modes (Ni Jiahui, 2023). The design of ecotourism scenic areas should balance environmental comfort, socio-cultural values, and consumption practices to achieve mutual benefits between urban and rural tourism (Xu Huan, 2023). For the high-quality development of Mount Lu's ecotourism, scene theory provides an effective tool for analyzing the dynamic balance of ecological, social, and economic factors. As a tourism destination integrating ecological and cultural heritage, Mount Lu must strike a balance between resource protection and tourism development, ensuring interaction and collaboration among stakeholders such as the government, communities, tourists, and enterprises (Huang Tai, Wei Man et al., 2023). Research indicates that flexible policies, deep community participation, and the fulfillment of tourist needs are key to promoting the sustainable development of Mount Lu's ecotourism (Research Team of Pengzhou Municipal Party School, 2023). The scene theory offers core insights into

enhancing the quality of tourist experiences through deliberate scene design and management. It guides Mount Lu to fully leverage its world-class natural landscapes and profound cultural heritage, creating deep, immersive, educational, and environmentally friendly experiences through contextual design, storytelling, and interactive participation. It addresses the challenge of achieving high-quality tourist experiences by emphasizing the integration of people, activities, physical environments, and cultural symbols within specific spaces to cultivate an attractive and impactful overall atmosphere (Huang Tai, Wei Man et al., 2023). It serves as a critical bridge connecting resource endowments and tourist perceptions, as well as an important pathway for cultural inheritance and economic transformation. Future research could adopt the fsQCA method to further identify key factors and optimization paths for Mount Lu's high-quality ecotourism development, providing practical guidance for sustainable balance among ecological conservation, social equity, and economic growth, and offering new perspectives for the application of sustainable development theory (Snelders & Wieringen, 2003).

3. Community Theory

Community theory explores how multiple stakeholders in ecotourism can achieve common goals and form a collaborative governance community through cooperation, building trust relationships, and sharing resources. This theory directly addresses the two core challenges of Mount Lu's efficient management and improving community well-being. It emphasizes that the key to resolving Mount Lu's complex management system lies in establishing effective consultation platforms, empowerment mechanisms, and fair benefit-sharing mechanisms (e.g., dividends, preferential employment), thereby enhancing community identity and sense of ownership, and stimulating the endogenous motivation of all parties to protect resources and improve services. The sustainable development of ecotourism emphasizes the importance of community participation, achieving synergistic win-win outcomes among stakeholders through political, theoretical, and empirical support (Zhou Yin, 2023). In tourism development,

communities, farmers, and social capital collaborate to address the challenges of resource integration and capital homogeneity, while balancing tourists personalized and general needs, and constructing an integrated internal-external development model (Tang Haorong, 2023). Community theory originates from Aristotle, Tönnies, and Hegel, emphasizing that communities should pursue the good and advocating the formation of moral consensus in modern society to promote harmonious coexistence among stakeholders and high-quality ecotourism development (Wei Tingxue, 2012; Zygmunt Bauman, 2003; Long Jingyun, 2015). In Mount Lu's ecotourism, community theory provides a new perspective for analyzing factors such as community participation, governance, and cultural inheritance, highlighting the community as a core stakeholder in promoting high-quality ecotourism development. Community theory provides organizational guarantees and operational mechanisms for achieving sustainable goals and enhancing tourist experience scenarios. It mainly addresses the issues of who governs and how to coordinate, ensuring the inclusiveness, fairness, and enforcement capacity of the development process. Future research will use the fsQCA method to reveal the combinations of factors promoting high-quality development, explore the symbiotic path between communities and natural resources, provide practical guidance for Mount Lu's ecotourism, and expand the application of community theory (Wu Yingying, 2017).

(3) Summary and Comparison of Different Theoretical Foundations for the High-Quality Development Path of Mount Lu Ecotourism

1. Theoretical Integration Framework and Its Applicability to Mount Lu

2. Core Functional Positioning of the Theories

Sustainable development theory, scene theory, and community theory complement and coordinate with each other, jointly constructing a layered and progressive integrated framework that facilitates a deeper analysis of Mount Lu's high-quality ecotourism development practices. Sustainable development theory (goal-guiding level) sets systematic visions and multi-dimensional goals, including ecological protection, heritage preservation,

Theoretical Levels	Key Issues Addressed	Specific Role in Mount Lu
Sustainable Development Theory	Development goals and ethical boundaries	Sets rigid constraints to balance conservation and development
Scene Theory	Resource value transformation and experience quality	Breaks the sightseeing trap and creates culturally immersive scenes
Community Theory	Multi-stakeholder collaboration and benefit distribution	Resolves contradictions in the fragmented governing one mountain through six approaches model

well-being enhancement, economic prosperity, and efficient governance. It emphasizes the coordinated development of the economy, society, and environment, with a focus on sustainable resource utilization and community participation. Mount Lu’s ecotourism must prioritize environmental protection to achieve social and economic benefits. Scene theory (core realization level) focuses on resource integration and scene design within Mount Lu’s specific spatial contexts, serving as a core carrier for high-quality, responsible tourism experiences and a means of cultural dissemination. It highlights the interaction between stakeholders, environments, and strategies, particularly how different contexts influence Mount Lu’s resource allocation and policy choices. Community theory (operational support level) addresses complex governance challenges by building multi-stakeholder collaboration mechanisms. These mechanisms aim to gather endogenous motivation, strengthen institutional guarantees, and ensure goal achievement while enhancing community well-being. It emphasizes cooperation among communities, governments, enterprises, and tourists—especially the central role of communities in ecotourism management—and advocates for resource sharing to advance Mount Lu’s sustainable ecotourism. Each theory emphasizes distinct aspects in ecotourism research: sustainable development theory balances resource conservation and economic benefits; Scene theory stresses flexible responses to diverse contexts; and community theory focuses on multi-party collaboration. Together, these theories form the theoretical foundation for Mount Lu’s high-quality ecotourism

development.

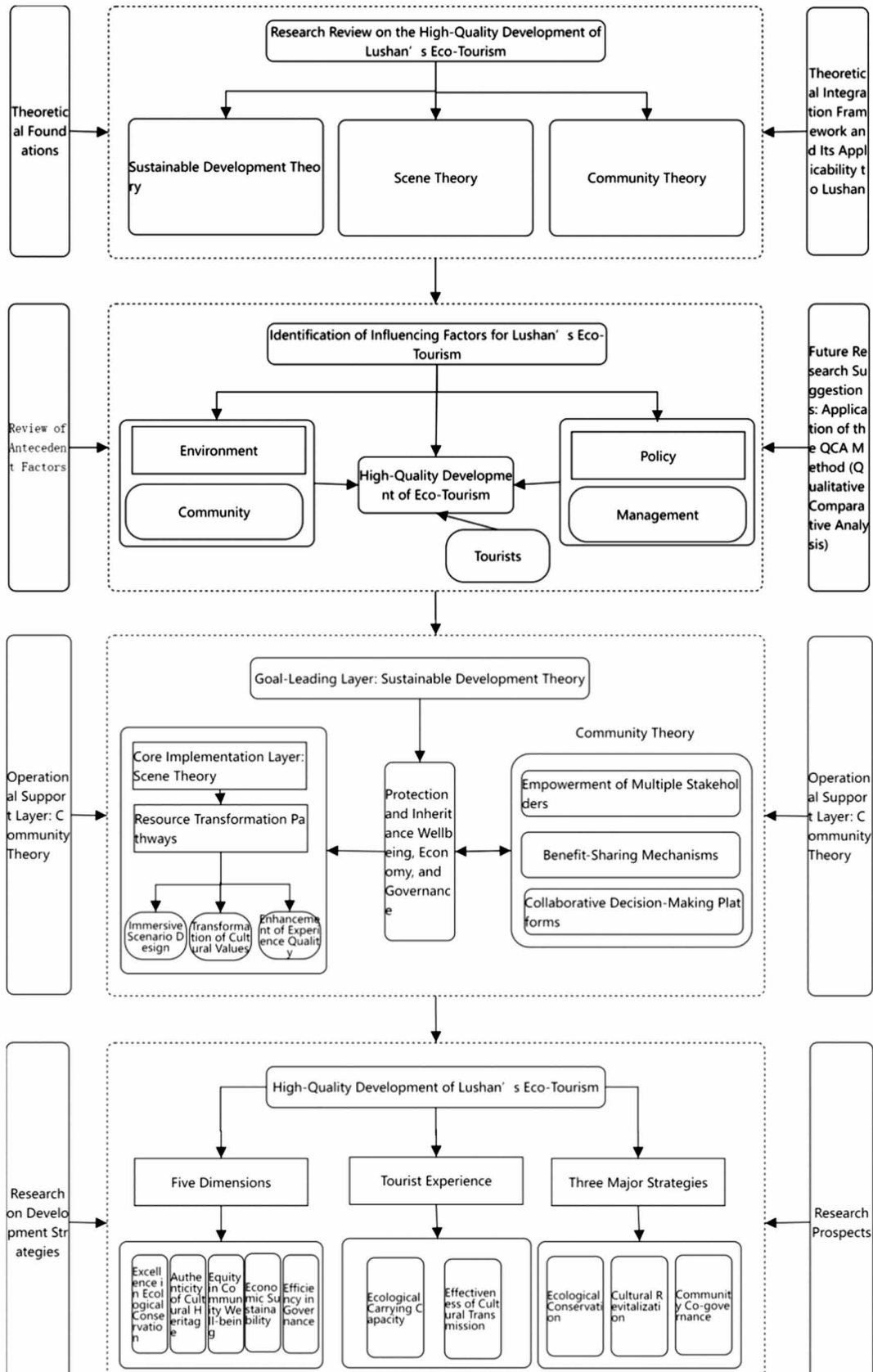
Theoretical Framework Diagram for Mount Lu's High-Quality Ecotourism Development

3.Unique Applicability to Mount Lu

The integrated framework organically combines three theories, making it suitable for addressing the complexity of ecotourism in Mount Lu, a World Heritage Site. It systematically responds to the core challenges of Mount Lu's high-quality ecotourism development. The theory of sustainable development focuses on balancing conservation and development, establishing multi-dimensional goals and ethical boundaries for the entire process. Scene theory emphasizes transformative methodologies, guiding the effective transformation of Mount Lu’s natural and cultural resources into high-quality experiential projects that are both attractive and value-transmitting, thus resolving the issue of resource conversion. Community theory is dedicated to building a governance system where all stakeholders truly participate, have a voice, and can share resources through consultation. This addresses Mount Lu’s deep-seated governance challenges and ensures community benefits. The three theories echo each other in the framework, jointly constructing a clear analytical context to dissect the key factors, main obstacles, and interactions in Mount Lu’s high-quality development.

III. Antecedents of High-Quality Ecotourism Development Paths in Domestic and International Studies: Influencing Factors

(1) Environmental Factors



The environment is a critical factor in high-quality ecotourism development. Vanhove (2022) notes that over-tourism and natural disasters impacts tourist experiences and the sustainability of ecotourism. Regarding the interaction between policy and environmental factors, Stabler et al. (2009) emphasize that major changes in the tourism industry must be reconstructed within the framework of sustainable development. Scheepens et al. (2016) use the EVR model to analyze the environment's impact on stakeholders and policies, highlighting the importance of stakeholders' joint participation in promoting sustainable ecotourism development. Additionally, Salem et al. (2022) stress that tourists' environmental awareness can enhance the attractiveness of ecotourism destinations. Olya et al. (2021) find that sustainable development practices directly affect customer satisfaction and loyalty—factors that are fundamental to driving high-quality ecotourism development. Cheng Li et al. (2024) further show that enhancing tourists' environmental responsibility can promote ecotourism sustainability.

Policy and environmental factors influence each other. Wang Tingwei and Zhang Hui (2023) propose that the coordinated development of ecological conservation and tourism can form an optimal path. Qiu Yi (2023) also points out that environmental improvement can increase local residents' support for ecotourism.

In terms of policy impacts, Deng Xianglin (2023) emphasizes that government support and environmental improvement can enhance tourism quality. Um et al. (2023) demonstrate that perceived value significantly affects consumers' impulsive purchasing behavior—a perspective that can be analogized to ecotourism, underscoring the importance of environmental factors in improving customer experience and satisfaction. Sukhov et al. (2023), using methods like fsQCA, indicate that ecotourism service quality depends on combinations of multiple conditions. Interactions among various factors, particularly environmental ones, affect ecotourism development. Policies, social norms, and stakeholder participation collectively influence ecotourism sustainability, thereby assisting policymakers in further

promoting sustainable and high-quality ecotourism development.

(2) Community Factors

Communities are core participants in ecotourism and a critical supporting force for achieving high-quality development. First, empowerment and education are the core drivers of enhanced community participation. Studies by Olya & Gavilyan (2017) and Kia (2021) indicate that communities can strengthen their capacity for tourism resource management and active engagement through education and empowerment, whereas insufficient knowledge and skills restrict the depth of their involvement. Through effective educational and empowerment measures, communities can better participate in ecotourism planning and implementation, thereby improving the quality of tourism development. Second, policy support is crucial for promoting community participation. Li Xia & Wang Fang (2024) note that policies not only provide resource support but also guarantee the legitimacy of community participation through institutional design. Research by Ngoc et al. (2021) also shows that government policy support for communities can increase community members' willingness to support and participate in tourism. Additionally, Reguera-Alvarado et al. (2017) argue that policy guidance can foster stronger collaboration between enterprises and communities, facilitating the integration of tourism and ecological conservation. Transportation infrastructure is a key component of ecotourism development and directly impacts community participation. Cheng Li et al. (2021) find that a well-developed transportation network improves tourist accessibility and creates convenient conditions for community members to engage in tourism activities. Fan Xianghua & Cheng Li (2020) further point out that upgrading transportation facilities significantly enhances community members' enthusiasm for participation. Moreover, Clark et al. (2022) emphasize that convenient transportation also promotes the effective development of tourism resources, driving the high-quality growth of ecotourism.

Community knowledge contribution also influences

Table 1: A Review of Literature on Pathways of Environmental Factors Influencing the High-Quality Ecotourism Development

Dimension	Findings	Representative Studies
Tourism Economic Development	Overtourism impacts tourist experience and sustainability	Vanhove (2022)
Policy-Environment Interaction	Industry transformation must follow sustainable development principles	Stabler et al. (2009)
Stakeholder Participation	The EVR model emphasizes the importance of co-participation	Scheepens et al. (2016)
Customer Perception	Environmental awareness enhances the attractiveness of green tourism	Salem et al. (2022)
Sustainable Development Practices	Influences satisfaction and drives ecotourism development	Olya et al. (2021)
Tourists' Environmental Responsibility	A sense of responsibility promotes ecotourism sustainability	Cheng Li et al. (2024)
Coordinated Development of Ecological Conservation and Tourism	Balancing ecological conservation with tourism development	Wang Tingwei & Zhang Hui (2023)
Resident Support and Environmental Improvement	Environmental improvement enhances resident support and development	Qiu Yi (2023)
Government Support and Environmental Improvement	Government support and environmental improvement boost rural tourism	Deng Xianglin (2023)
Consumer Experience and Perceived Value	Environmental factors affect customer experience and satisfaction	Um et al. (2023)
Public Transportation Service Quality	Multi-condition combinations improve ecotourism quality	Sukhov et al. (2023)

the development of ecotourism. Yang Jiasi (2023) argues that the community's in-depth understanding of local ecological environments and cultural resources can provide critical information for tourism development, thereby enhancing the quality of tourism activities. Orams (2002) points out that community members can ensure the high-quality ecotourism development by sharing their unique knowledge and experiences with tourism managers. One key motivation for community

participation is the improvement of their quality of life. Zhang Liangquan and Li Yanqin (2024) note that community involvement in tourism can generate economic and social benefits, improve living standards, and consequently strengthen their support for and participation in tourism. Additionally, research by Zou Rong et al. (2022) demonstrates that communities and tourists can jointly achieve value enhancement in economic and social terms through value co-creation

interactions, which not only elevates the quality of tourism activities but also brings tangible benefits to the community. In the context of rural tourism, as the primary participants, farmers' attitudes directly affect the implementation outcomes of tourism projects. Ma Zhenxiu (2022) suggests that when farmers benefit from tourism projects, their level of participation and support increases significantly, thereby promoting the

development of rural tourism and regional economic growth.

Community participation plays a role in influencing the high-quality ecotourism development. It primarily enhances the overall quality of tourism through factors such as empowerment and education, policy support, transportation improvement, knowledge contribution, and quality of life enhancement.

Table 2: A Review of Literature on Pathways of Community Factors Influencing the High-Quality Ecotourism Development

Dimension	Findings	Representative Studies
Education and Empowerment	Education empowerment enhances participation	Olya & Gavilyan (2017)
Knowledge and Skills	Knowledge deficiencies limit community participation	Kia (2021)
Policy Support	Policy support promotes community participation	Li Xia & Wang Fang (2024)
Policy Assistance	Policy support enhances cooperation and mutual support	Ngoc et al. (2021)
Cooperation and Ecological Protection	Policies facilitate enterprise-community cooperation	Reguera-Alvarado et al. (2017)
Transportation Conditions	Transportation networks improve tourist accessibility	Cheng Li et al. (2021)
Transportation Infrastructure Improvement	Improved transportation boosts participation motivation	Fan Xianghua & Cheng Li (2020)
Transportation and Sustainable Development	Convenient transportation supports sustainable development	Clark et al. (2022)
Knowledge Contribution	Resource understanding elevates tourism quality	Yang Jiasi (2023)
Cooperation and Sustainable Development	Cooperation ensures ecotourism sustainability	Orams (2002)
Quality of Life	Tourism participation improves living standards	Zhang Liangquan & Li Yanqin (2024)
Value Co-creation	Value co-creation interactions drive value growth	Zou Rong et al. (2022)
Farmers' Attitudes and Participation	Tourism benefits strengthen farmers' support	Ma Zhenxiu (2022)

(3) Policy Factors

Policy factors play a key role in promoting the high-quality ecotourism development. Existing studies have explored the impacts of policies on multiple pathways, such as capital-driven, factor-driven, and tourist-driven mechanisms. Xu Hanquan (2021) revealed the critical role of policy support in capital investment, factor allocation optimization, and the promotion of tourist behaviors. Lin Xinyun et al. (2023) pointed out that policy openness, combined with resource endowments, can activate the tourism economy and enhance regional development potential.

Meanwhile, the synergistic effect between policies and stakeholders has also been recognized in promoting the sustainable development of ecotourism. Scheepens et al. (2016) used the EVR model to explore how the alignment of policies with the environment, values, and resources drives sustainable development. Ma Jiayao et al. (2024) noted that policies, together with endogenous factors, guide tourists' low-carbon behavior and promote low-carbon ecotourism.

The role of policies extends beyond driving tourism economic development; it also demonstrates diversity and complexity. Zhang, Y., Chao, Q., & Chen, Y., (2021) emphasized the nonlinear impact of different policy models on low-carbon performance, highlighting the complex interactions of policy effects. Du Mengyin (2021) pointed out that the tourism economy is influenced by both macro-level and micro-level policies, and policy coordination is crucial. Further research has shown that the interaction between policies and conditions such as regional resource endowments and economic bases determines differences in tourism development paths across regions. Song Kaifeng (2022), through an analysis of tourism development paths, demonstrated the differentiated effects of policy impacts under different resource backgrounds. Thus, the effectiveness of policies varies with regional conditions, and policy strategies need to be tailored to regional characteristics.

The role of policies in promoting ecotourism also involves community participation and the coordination of multiple stakeholders. Cheng Li et al. (2021) noted that

policies enhance residents' support and improve policy implementation effectiveness by aligning community interests. Salman et al. (2023) further proposed the critical role of policies in managing relationships between different stakeholders.

Although the role of policies in ecotourism development has been widely recognized, there are still research gaps. Chen et al. (2020) pointed out that the specific impacts of inter-provincial policy differences require further exploration. Saidmamatov et al. (2020) argued that empirical research on policy implementation effects is insufficient. Additionally, Ngoc et al. (2023) have conducted limited case studies on sustainable tourism development, while He et al. (2024) noted that systematic analysis of policies in high-quality tourism assessment remains incomplete. These gaps indicate that future research needs to delve deeper into the actual role of policies in diverse contexts.

In conclusion, the impact of policies on the high-quality ecotourism development involves economic, social, and environmental aspects. Therefore, attention should be paid to the implementation effects of policies in different regions and contexts to more comprehensively evaluate their role in the sustainable development of ecotourism.

(4) Management Factors

Management is a critical component in achieving the sustainability of high-quality ecotourism development. Effective management strategies not only concern environmental protection but also need to balance economic benefits, social needs, and coordinate the participation of multiple stakeholders (governments, enterprises, local communities, and tourists) to ensure the long-term high-quality development of the tourism industry. Salman et al. (2023) proposed that the development of ecotourism requires collaborative participation from all levels of government, enterprises, local communities, and tourists. Orams (2002) noted that managing ecosystems requires guiding tourist behavior to reduce negative environmental impacts. Therefore, managers must adopt comprehensive measures to maximize economic and social benefits while protecting

Table 3: A Review of Literature on Pathways of Policy Factors Influencing the High-Quality Ecotourism Development

Dimension	Findings	Representative Studies
Capital Resources	Policies promote ecotourism development	Xu Hanquan (2021)
Resource Endowment	Policies and resources enhance tourism potential	Lin Xinyun et al. (2023)
Environmental-Value Resource Coordination	Policies align with sustainable development	Scheepens et al. (2016)
Low-Carbon Goals	Policies guide low-carbon tourism behaviors	Ma Jiayao et al. (2024)
Low-Carbon Performance	Complex interactions between policies and socio-economic factors	Zhang, Y., Chao, et al. (2021)
Policy Impact on Tourism	Policies jointly affect coastal tourism economy	Du Mengyin (2021)
Regional Resources	Policies need to be formulated adaptively	Song Kaifeng (2022)
Community Interests	Policies enhance residents support for tourism	Cheng Li et al. (2021)
Multi-Stakeholder Interests	Policies promote sustainable tourism management	Salman et al. (2023)
Provincial Policy Differences	Provincial policy differences require in-depth research	Chen et al. (2020)
Policy Implementation Evaluation	Empirical research on effectiveness needs exploration	Saidmamatov et al. (2020)
Sustainable Tourism Cases	Case studies remain insufficient	Ngoc (2023)
High-Quality Tourism Evaluation	High-quality tourism evaluation needs improvement	He et al. (2024)

ecological resources.

Tourist behavior and participation are also core issues in management. Afonso et al. (2018) found that enhancing tourists sense of participation and destination identity can improve the overall quality of ecotourism. Xie Chaowu et al. (2023) emphasized that managers should consider spatial characteristics and risk assessment when formulating strategies.

Additionally, identifying key influencing factors and developing targeted management strategies is another important step in improving the quality of ecotourism

services. Sukhov et al. (2023) analyzed the optimization of transportation service quality management decisions by integrating methods such as PLS-SEM, NCA, and fsQCA. Kumar et al. (2022) further noted that the fsQCA method helps identify key management factors.

However, existing research still has limitations in examining the implementation effectiveness of management strategies. Setini et al. (2021) found that the effectiveness of specific management strategies has not been fully validated, particularly as empirical studies across diverse ecological environments remain limited.

Additionally, Yang et al. (2020) noted that the coordinated management of production, living, and ecological spaces has not been adequately explored, yet this area of research is critical for advancing the sustainable development of ecotourism destinations. Li Bing and Sun Yanan (2022) further pointed out that the exploration of balancing carbon emission reduction with ecotourism remains insufficient, and managers should consider how to achieve equilibrium between carbon reduction and ecotourism development.

In conclusion, management factors are crucial for the high-quality ecotourism development. By coordinating multiple stakeholders, developing effective strategies to guide tourist behavior, and identifying and addressing multiple risks and complex factors, we can assist managers in promoting the high-quality ecotourism development. Future research should continue to explore the implementation effectiveness of management strategies—especially their application in different

ecological environments—and adopt complexity-based methods to better understand the coordinated management of production, living, and ecological spaces.

(5) Tourist Factors

Tourist behavior also constrains the high-quality ecotourism development. First, tourist loyalty is a critical antecedent for promoting the long-term development of ecotourism. Sang Hongli (2022) noted that enhancing tourist loyalty contributes to the sustained growth of ecotourism. Xu et al. (2022) pointed out that factors such as brand authenticity, brand image, and age have a complex influence on tourists brand loyalty. Zhao Qinghua (2023) further emphasized the mediating role of immersion and trust generated by short videos in boosting tourists purchase behavior. Therefore, to attract and retain tourists, Mount Lu should strengthen tourist loyalty through brand building and emotional resonance, thereby driving the sustainable development of ecotourism.

Second, tourists travel intentions also impact the

Table 4: A Review of Literature on Pathways of Management Factors Influencing the High-Quality Ecotourism Development

Dimension	Findings	Representative Studies
Multi-stakeholder coordination	Multi-party participation promotes sustainable ecotourism	Salman et al. (2023)
Tourist behavior management	Guiding tourists reduces environmental impacts	Orams (2002)
Tourist participation and loyalty	Management strategies enhance participation and pro-environmental behavior	Afonso et al. (2018)
Tourism safety management	Risk assessment informs the development of outbound tourism safety strategies	Xie Chaowu et al. (2023)
Key factors in service quality	Optimizing public transportation services strengthens management strategies	Sukhov et al. (2023)
Complexity management methods	fsQCA identifies key management factors	Kumar et al. (2022)
Management strategy validation	The effectiveness of management strategies requires further verification	Setini et al. (2021)
Spatial coordinated management	Coordinated management drives ecotourism development	Yang et al. (2020)
Carbon neutrality path exploration	Carbon reduction pathways need further exploration and balancing	Li Bing & Sun Yanan (2022)

high-quality ecotourism development. Liao et al. (2020) found that social capital and user-generated content affect travel intentions. Similarly, Woosnam et al. (2022) examined the predictive role of social norms in travelers participation in last-chance tourism and found that social norms help shape travel intentions. Jiang et al. (2022) revealed that tourists positive memories have a significant positive effect on their repurchase intentions. These studies suggest that Mount Lu can effectively enhance tourists travel intentions by cultivating positive travel memories and leveraging digital platforms.

Tourist consumption behavior is also a core factor in promoting ecotourism development. Pauluzzo and Mason (2022) explored the impact of consumption values on Generation Ys socially responsible behavior, indicating that tourists prioritize environmental protection and social responsibility. Chanda et al. (2023) similarly found that multiple factors influence consumers environmentally friendly purchase intentions. These findings suggest that Mount Lu should strengthen guidance on environmental protection and green consumption to meet the multidimensional needs of modern tourists.

Finally, improving tourist well-being also benefits the long-term development of ecotourism. Tourist well-being enhances the overall tourist experience. Wang Jia (2020) noted that the mechanisms underlying tourist well-being exhibit complex asymmetry across different life stages. Sun Jiaojiao et al. (2021) found that, against the backdrop of the pandemic, physical distance significantly affected tourists well-being. Zhu Yifan et al. (2023) further highlighted that emotional solidarity, perceived environmental benefits, and socio-cultural benefits are key factors in enhancing residents well-being. These studies indicate that by optimizing socio-cultural experiences and interactions with the ecological environment, Mount Lu can significantly improve the well-being of both tourists and local residents, thus promoting the sustainable development of ecotourism.

In conclusion, tourist behavior has a profound impact on the high-quality development of Mount Lu's ecotourism. From enhancing loyalty, shaping travel intentions, guiding consumption behavior, to improving

well-being, the multidimensional role of tourist behavior provides important theoretical support for ecotourism. Future research will integrate the fsQCA method to further explore the combined pathways of these factors, contributing to the high-quality ecotourism development.

(6) Studies on the Results of High-quality Development Paths of Ecotourism at Home and Abroad

The high-quality ecotourism development relies on multiple factors, including informatization, green technological innovation, human capital, and policy support. Zhang Meng (2023) notes that informatization and technological innovation can effectively enhance the ecological efficiency of the tourism industry, thereby reducing resource consumption and environmental pollution. Studies by Wang et al. (2021) and Feng et al. (2020) demonstrate that green technological innovation has enhanced both the economic and environmental performance of the tourism industry, facilitating its green transformation. Liu Jia et al. (2022) explored the application of green technologies in energy security, emphasizing the importance of sustainable resource utilization for ecotourism. Human capital plays a critical role in promoting the integrated development of the tourism industry. Chen Wenjie & Song Kaifeng (2022) as well as Rezapouraghdam et al. (2023) highlight its quality and innovative capacity, particularly in enhancing tourists' environmental awareness. Sadiq & Adil (2021) note that information-based approaches positively influence tourist behavior and environmental awareness, whereas Yu et al. (2022) stress the need for coordination between scientific research and policy. Zheng & He (2022) applied the fsQCA (fuzzy-set Qualitative Comparative Analysis) method to examine the complex causal relationships among multiple factors. Li Jing (2021) and Zhang Wei et al. (2022) further argue that industrial agglomeration and policy support are key drivers of the sustainable development of ecotourism. These studies collectively indicate that there are numerous independent variables driving the high-quality ecotourism development. By integrating existing literature with theories of sustainable development, scene theory, and community theory, this paper selects five independent variables—environment,

Table 5: A Review of Literature on Pathways of Tourist Factors Influencing the High-Quality Ecotourism Development

Tourist loyalty	Multiple pathways foster tourist loyalty	Sang Hongli (2022)
Tourist loyalty	Complex influences of multi-factors on brand loyalty	Xu et al. (2022)
Tourist loyalty	Short videos enhance tourists' purchase behavior	Zhao Qinghua (2023)
Travel intention	Social capital shapes the selection of destinations via short videos	Liao et al. (2020)
Travel intention	Social norms influence intentions for "last-chance tourism"	Woosnam et al. (2022)
Travel intention	Positive memories enhance tourists' repurchase intentions for homestays	Jiang et al. (2022)
Consumption behavior	Tourists attach importance to the social responsibility of destinations	Pauluzzo & Mason (2022) [Note: Assuming Pauluzzo is a typo]
Consumption behavior	Multi-factors are associated with purchase intentions for environmentally friendly products	Chanda et al. (2023)
Well-being	The formation mechanisms of tourists' well-being are complex	Wang Jia (2020)
Well-being	Physical distance significantly influences well-being	Sun Jiaojiao et al. (2021)
Well-being	Emotional solidarity enhances residents' well-being	Zhu Yifan et al. (2023)

community, policy, tourists, and management—and takes the high-quality development of Mount Lu ecotourism as the dependent variable to conduct the analysis.

IV. Research Review and Prospects

Ecotourism is a key means to balance economic sustainability and environmental protection. Existing studies have extensively explored the impacts of environmental, community, policy, management, and tourist factors on ecotourism, emphasizing the importance of environmental protection. Environmental factors need to be integrated with policies and stakeholders; tourists' environmental awareness and sustainable development practices have a significant impact on tourism quality.

Community participation is an inevitable path to achieving high-quality ecotourism development, and tourism quality can be improved through education and policy. Policies are widely recognized for their multiple effects on capital, factor endowments, and behavioral drivers, yet their complexity and regional differences remain pronounced. The guidance of tourist behaviors—from loyalty and travel intention to consumption behavior—constitutes an important foundation for promoting high-quality ecotourism development.

Despite existing research exploring ecotourism sustainability and high-quality development paths from multiple perspectives, several gaps remain. First, there is a lack of comprehensive analysis on the

Table 6: A Review of Literature on Research Results of High-Quality Development Paths of Ecotourism

Representative Studies	Views	Independent Variables	Dependent Variables	Positive/Negative Impact
Zhang Meng (2023)	Informationization improves the ecological efficiency of tourism	Technological innovation	Ecological efficiency	+
Feng et al. (2020)	Green synthesis enhances the flame retardancy of polylactic acid	Technological innovation	Sustainable development	+
Wang et al. (2021)	The relationship between green technology and economic performance is complex	Technological innovation	Economic benefits	+
Liu Jia et al. (2022)	Technology and human capital have significant promotional effects	Human capital	Tourist satisfaction	+
Chen Wenjie & Song Kaifeng (2022)	Human resources drive the integration of culture and tourism	Tourist participation	Integration of culture and technology	+
Rezapouraghdam, H. et al. (2023)	Tourists environmental behaviors are related to their characteristics	Tourist participation	Tourist satisfaction	+
Sadiq & Adil (2021)	Tourists value the quality of internet information	Policy and management	Sustainable development	+
Yu et al. (2022)	The synergy between scientific research and policy is important	Policy and management	Sustainable development	+
Zhang Wei et al. (2022)	Promoting the green development of sports, culture, and tourism	Regional economy and industrial structure	Sustainable development	+
Li Jing (2021)	The relationship between merger models and ecotourism development is complex	Regional economy and industrial structure	Economic benefits	+
Zheng & He (2022)	Industrial agglomeration is important for driving technological innovation	Regional economy and industrial structure	Economic benefits	+

synergistic effects of multiple factors. Existing studies often examine the independent roles of environmental, policy, and community factors separately, failing to deeply uncover their complex interactive effects. In particular, the relative importance of factors and how their combinations affect ecotourism quality under different contexts have not been clearly analyzed. Second, empirical research on the effectiveness of policy implementation is insufficient. Policy studies focus primarily on theoretical levels, lacking detailed empirical analysis of the impacts of specific implementation processes and regional differences. Therefore, how the complexity and nonlinear characteristics of policy effects manifest in practice remains an open question. Moreover,

practical exploration of management strategies in diverse ecological environments is insufficient, and the specific management strategies and their implementation effects tailored to different ecological conditions have not been widely verified. Finally, research on community participation motivation and mechanisms is inadequate: existing studies have not deeply examined the specific motivational and behavioral mechanisms through which communities promote tourism development via empowerment, resource sharing, and other means.

Traditional quantitative methods struggle to distinguish equifinality, causal asymmetry, and synergistic constraint effects when analyzing complex causal chains in ecotourism. Fuzzy-set qualitative comparative analysis

(fsQCA), however, offers a new perspective. Unlike traditional single-case qualitative in-depth descriptions or large-sample quantitative modeling, fsQCA dissects issues through combinations of multiple factors. This approach not only fully preserves the uniqueness of each specific case but also clarifies how various conditions collectively drive the transformative development of Mount Lu's ecotourism through systematic comparisons across cases. Future research trends can be summarized in the following aspects: First, applying fsQCA to explore how multi-factor combinations (e.g., environment, policy, community, management, and tourists) influence the high-quality development path of Mount Lu's ecotourism. Second, investigating the implementation effects of policies in different regions using methods such as case analysis and empirical studies. Third, examining the regional applicability and efficiency optimization of management strategies under varying ecological environments to provide valuable references for the top-level design of Mount Lu's high-quality ecotourism development. Fourth, conducting in-depth research on how to promote active and long-term community member participation in Mount Lu's ecotourism, thereby enhancing both the quality of Mount Lu's ecotourism and community residents' living standards. Additionally, research will focus on the specific mechanisms through which factors like education, transportation, and shared interests influence community participation.

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