#### ABSTRACT

#### PhD thesis by Gang Li

## theme: "Research on Rural Tourism based on tourism perception theory"

## Supervisor: Doctor of Management, Associate Professor, Орозонова Азык Абдыкасымовна /Azyk Orozonova Relevance of the thesis topic.

With people's yearning for nature and traditional culture, rural tourism, as a new form of tourism, is rapidly rising worldwide and has become an important driving force for promoting local economic growth and cultural inheritance. The development of rural tourism not only provides tourists with unique cultural experiences, promotes economic interaction between rural and urban areas, but also offers more employment opportunities and income sources for local residents. Thus, it promotes the coordinated development of regional economies and gradually becomes a key force in regional economic development, emphasizing the balanced relationship between cultural protection, economic promotion and social harmony, and is profoundly changing the structure of the world economy. Reasonable tourism development needs to be combined with environmental protection, which is in line with the current global emphasis on sustainable tourism. Effective environmental management and sustainable tourism practices provide new impetus for enhancing tourism appeal, promoting economic

growth and environmental sustainability.

International scholars such as Pizam and Neuwann have extensively explored multiple key areas of rural tourism, providing a rich perspective for understanding the complexity and diversity of rural tourism. They focus on the construction and improvement of rural tourism infrastructure, such as transportation, accommodation, and information services, believing that these are key factors in enhancing tourist satisfaction and the competitiveness of tourist destinations. Additionally, they emphasize the importance of environmental protection, cultural inheritance, and social responsibility in the development of rural tourism, and propose various sustainable development strategies and models, such as ecotourism and community participation tourism, aiming to achieve long-term sustainable development of the tourism industry. Chinese scholars such as Ye Jingzhong and Chen Nuo have also achieved fruitful results in rural tourism research, conducting in-depth discussions from aspects such as policy support, resource development, and socio-economic impacts. They analyze the promoting role of national policies in the development of rural tourism, such as the rural revitalization strategy and tourism poverty alleviation policies, pointing out that policy support provides a favorable development environment and resource guarantee for rural tourism. This includes the positive effects on farmers' income, rural employment, regional economic development, as well as the profound influence on rural social structure and cultural inheritance. These studies provide a rich perspective and theoretical framework for comprehensively understanding the development of rural tourism under the perception of tourism, and also offer important guidance and reference for the practical development of rural tourism.

This article mainly analyzes the resource utilization, socio-economic impact, sustainable development potential and challenges faced by rural tourism in Henan Province, China. Henan Province boasts rich natural landscapes and profound historical and cultural heritage, providing a vast space for the development of rural tourism. However, the region still faces numerous challenges in infrastructure construction, service quality improvement and market competitiveness. Through in-depth mathematical analysis and field comparative studies, this article determines the importance of various factors influencing the development level of rural tourism in tourism perception, including local cultural characteristics, product service quality, environmental governance, etc. On this basis, this article provides useful suggestions for promoting regional cooperation and the sustainable development of rural tourism, such as strengthening infrastructure construction, improving service quality, protecting and inheriting local culture, etc. This research not only has significant academic significance, but also provides practical and feasible suggestions for deepening the cooperation and development of rural tourism in this region,

which makes it an important contribution to understanding and realizing the strategic opportunities of rural tourism in tourism perception.

# Relation of the thesis topic to major scientific programs, major research works conducted by scientific institutions.

The subject of this article is closely related to the realization of the national rural revitalization strategy project, aiming to deeply analyze the specific impact of this strategy on the development of rural tourism in Henan Province, China, and to assess the potential of tourism perception in promoting local economic, social and cultural development. Although this work is not directly related to the recent research projects of specific academic institutions or national projects such as the "14th Five-Year Plan" for the integrated development of culture and tourism, its content, direction and goals are consistent with the work of these leading research institutions, providing a foundation for understanding the key aspects of rural tourism in regional economic development. Moreover, in January 2023, the Henan Provincial Government emphasized that the development of rural tourism has significant impacts on business, employment and society. This clearly indicates the Henan Provincial Government's high regard and strategic attitude towards the development of rural tourism.

#### **Study Subject**

The object of this paper is rural tourism in Henan Province, China. The research focuses on the sustainable development of rural tourism in Henan Province, and deeply discusses the resource layout, development status, social and economic impact and challenges of rural tourism in the region. Through field research and data analysis of different rural tourism destinations in Henan Province, this paper aims to reveal the role of tourism perception in rural tourism development and propose strategies and suggestions to promote the sustainable development of rural tourism in this region.

#### **Research Methods**

1. Literature review method: Review and analyze academic articles, government reports, and industry information to understand the background and current situation of rural tourism development.

2. Fieldwork method: Select representative rural tourism destinations in Henan Province for on-site research. Through in-depth interviews and questionnaires, a large amount of first-hand data on the development of rural tourism, the perception of residents and tourists was collected, providing an empirical basis for the research.

3. Combination of qualitative and quantitative research: Mainly use multiple Logistic regression models and structural equation models for analysis. With the help of statistical software such as SPSS, AMOS, and GIS, the collected data is analyzed to determine the factors influencing rural tourism development and study its development path.

4. Structural Equation Model (SEM): Construct a structural equation

model to analyze the relationships between different variables through measurement models and structural models, revealing the multidimensional influencing factors and their importance for the sustainable development of rural tourism.

#### **Objective of the stud**

Through an in-depth analysis of the current development status, influencing factors and sustainable development potential of rural tourism in Henan Province, this study aims to put forward practical and feasible suggestions for improving the infrastructure conditions of rural tourism in Henan Province, enhancing service quality, strengthening market competitiveness and increasing the potential for regional cooperation in this field. The research also focuses on exploring how to better utilize and protect rural tourism resources, promote the sustainable development of the local economy, and at the same time protect and inherit local culture, achieving the coordinated development of economic, social and environmental benefits.

# The stated goal necessitates the solution of the following tasks:

(1) Analyze the resource layout and historical development status of rural tourism in Henan Province using the tourism perception theory.

(2) Through on-site investigation and literature review, identify the problems and bottlenecks faced by rural tourism in Henan Province during

its development process, as well as the opportunities and approaches to solve these issues.

(3) Evaluate the sustainable development of rural tourism in Henan Province by using the multivariate Logistic regression model and structural equation model methods, process the data from questionnaires and in-depth interviews at the development level, and determine the contribution degree and mechanism of each influencing factor to the sustainable development of rural tourism.

(4) Considering the regional characteristics and specific development situation of Henan Province, formulate targeted suggestions and practical methods to promote the long-term sustainable development of rural tourism in Henan Province.

(5) Conduct a survey on the tourism perception of different rural tourism destinations in Henan Province, and collect the perception data of residents and tourists.

(6) Use mathematical methods to process the questionnaire data to determine the interrelationships and influence degrees of various factors on the attractiveness of rural tourism, residents' satisfaction, and tourists' loyalty.

# Scientific novelty of the obtained results consists in the following:

1. A sustainable development model for rural tourism based on tourism

perception theory has been constructed: It provides a new theoretical framework and analytical tool for understanding and evaluating the sustainable development of rural tourism, and expands the application scope of tourism perception theory in the field of rural tourism.

2. A thorough analysis of the current situation and challenges of rural tourism in Henan Province has been conducted: It reveals the problems and bottlenecks in infrastructure construction, service quality improvement, product innovation, and market competitiveness of rural tourism in Henan Province, providing precise positioning and basis for subsequent improvement measures.

3. Empirical analysis was conducted using the multivariate Logistic regression model and structural equation model: The key factors influencing the development level of rural tourism in tourism perception and their importance ranking were determined, revealing the causal relationships and action paths among the factors, providing a scientific quantitative basis for formulating targeted development strategies.

4. Innovative paths to promote the sustainable development of rural tourism in Henan Province have been proposed: A series of practical suggestions and methods have been formulated, aiming to promote the deep integration of rural tourism in Henan Province with local industries, culture, and ecology, achieving coordinated development of economic, social, and environmental benefits, providing new ideas and practical guidance for the sustainable development of regional rural tourism.

5. Extensive questionnaire surveys were conducted among residents and tourists of different rural tourism destinations in Henan Province: A large amount of primary data was collected, covering multiple aspects such as tourism perception, satisfaction, and loyalty, providing a rich empirical basis for the research and making the research results more representative and accurate.

6. Mathematical methods were used to process the questionnaire data: Through factor analysis, reliability and validity tests, and other methods, the relationships and influence degrees of various factors on the attractiveness of rural tourism in Henan Province, residents' satisfaction, and tourists' loyalty were determined, revealing the important role of tourism perception in the development of rural tourism, providing a scientific basis for optimizing tourism products and services.

### Practical significance of the results obtained

1. Through in-depth analysis of the current situation, potential and challenges of rural tourism in Henan Province, this paper puts forward a series of feasible development strategies and suggestions, such as strengthening infrastructure construction, improving service quality, protecting and inheriting local culture and so on. This provides an important reference for Henan provincial government and related tourism enterprises and communities when making rural tourism development plans and implementing specific projects, which is helpful to promote the healthy and sustainable development of rural tourism in Henan Province and realize the unity of economic benefits, social benefits and ecological benefits.

2. Rural tourism is one of the important ways to realize rural revitalization. The research results of this paper can help Henan Province to better tap and use rural resources, promote the optimization and upgrading of rural industrial structure, increase farmers' income, improve rural living environment, and improve the living standards of rural residents, so as to provide strong support for the smooth promotion of rural revitalization strategy in Henan Province, promote the integrated development of urban and rural areas, and narrow the gap between urban and rural areas.

Provide reference for the development of rural tourism in other regions:
Although this paper takes Henan Province as an example, its research methods, theoretical framework and conclusions also have certain reference significance for the development of rural tourism in other regions.
This paper combines the theory of tourism perception with the actual situation of rural tourism, verifies the applicability of the theory through empirical research, and puts forward new theoretical insights and practical methods on this basis. It enriches the theoretical system of tourism discipline, promotes the development of theory and practice of tourism discipline, and promotes the development of tourism discipline.

5. The development of rural tourism cannot be separated from the support and cooperation of transportation, accommodation, catering, culture, entertainment and other related industries. The research results of this paper can provide new opportunities and power for the development of these related industries, guide them to develop in coordination with rural tourism, realize the linkage and upgrading of industries, form a complete rural tourism industry chain, improve the economic competitiveness and attractiveness of the whole region, and inject new vitality into the sustainable development of regional economy.

6. This paper emphasizes the importance of environmental governance and cultural resource protection in the development of rural tourism, and proposes suggestions and measures to strengthen the ecological environment protection of rural tourism areas in Henan Province, maintain ecological balance, promote the inheritance and promotion of local culture, protect cultural heritage, and realize the benign interaction between rural tourism development and ecological protection and cultural inheritance.

### **Economic significance of the results obtained**

1. Promoting local economic growth: As an emerging industry, rural tourism can effectively drive the development of local related industries, such as agriculture, handicraft industry, catering industry and accommodation industry, extend the industrial chain, increase the added value and create more economic benefits for the local area. At the same time, rural tourism can also promote the investment in local infrastructure construction, such as transportation, communication, water and electricity, further improve the local investment environment, attract more foreign investment, and promote the comprehensive development of local economy.

2. Promoting regional economic integration: This paper focuses on the development of rural tourism under tourism perception, which plays a key role in promoting regional economic integration in combination with the actual situation of Henan Province. Rural tourism can also promote the coordinated development of industries in a region, such as complementary and linkage with the tourism industry and cultural industry in surrounding areas, so as to jointly build regional tourism brands and enhance the overall competitiveness of regional economy.

3. Help the implementation of rural revitalization strategy: The development of rural tourism can effectively promote the optimization and upgrading of rural industrial structure, increase rural employment opportunities, improve the living standards of rural residents, and narrow the gap between urban and rural areas. Rural tourism can also promote the improvement of rural infrastructure and the level of public services, such as improving rural transportation, health, education and other conditions, improve the quality of life of rural residents, and provide strong support for the smooth promotion of rural revitalization strategy.

4. Provide a basis for the government and enterprises to formulate policies and strategies: By analyzing the advantages and disadvantages of rural tourism in Henan Province in terms of resource utilization, social and economic impact, sustainable development and other aspects, this paper puts forward specific and practical suggestions to improve rural tourism development.

# The main provisions of the dissertation, put forward for defense

(1) The analysis of the current situation of rural tourism development shows that China's rural tourism market has a large scale, advanced technology and infrastructure, and the tourism reception capacity ranks first in the world. By 2023, China's rural tourism sales have reached \$2.5 trillion, far surpassing those of other countries. In contrast, rural tourism is in the early stages of development in African countries, but the market size is \$5 billion. In Henan Province, although the size of the rural tourism market is small, it is growing rapidly, and the rural tourism industry is developing rapidly due to government support and efficient tourism management services. Rural tourism sales in Henan province will reach \$20 billion by 2023, up 20% from the previous year. The government is actively promoting rural economic development. Although there are still problems with infrastructure and technical support systems, however, the national government is actively taking measures to stimulate the sector.

(2) The analysis of the status quo and influencing factors of rural tourism development shows that it is of great significance to improve the regulatory framework, tourism product and service scheme, reliability and delivery quality of rural tourism. For example, the healthy development of rural tourism can be effectively guaranteed by improving laws and regulations, strengthening market supervision, and improving the quality of tourism services. The legal and regulatory framework for rural tourism governance in Henan Province needs significant improvement, but the potential for development is still great. From 2018 to 2023, China's rural tourism market shows a rapid growth, from 50 million US dollars to 2 trillion US dollars, an increase of four times. Henan Province has a favorable geographical location, it is located in the central and eastern part of China, convenient transportation, rich tourism resources, a major supplier of agricultural products and cultural products, as well as other countries as consumers.

(3) Using the evaluation index system of rural tourism perception, the rural tourism data in Henan Province processed by the structural equation modeling method show that the development level of rural tourism is closely related to the economic scale (correlation coefficient 0.75), the level of tourists' consumption (correlation coefficient 0.7) and the richness of cultural activities (correlation coefficient 0.78). The calculation is carried out by a standardized method (normalized so that the value of each attribute is in the range of [0,1]). The structural equation model evaluation (making the value of each attribute within the range of [0,1]) shows that the development of rural tourism in China has significant advantages: the economic scale of a country or region is large. This stability means that the indicator of rural tourism development level will have a high value. When the structural equation model is used to estimate, the market in China is significantly larger than that in other countries, and its correlation coefficient is 0.75, which makes this indicator get a higher correlation coefficient in the estimation. This shows that a larger market indicates a stronger development potential of rural tourism in China, with strong cultural activity richness (correlation coefficient is 0.78) and strong government support (correlation coefficient is 0.7).

(4) This paper conducts a questionnaire survey on 1016 stakeholders engaged in rural tourism and rural tourism to map and identify the interaction between rural tourism and local industries;

(5) Through the processing of the questionnaire data, the relationship and the degree of influence of various factors on the performance of rural tourism in Henan Province of China are determined. (See Table 2.11 of the paper). The results show that rural tourism in Henan Province plays a key role in China's tourism industry. It not only expands the tourism market boundary of Henan Province and ensures smooth interaction between the rural tourism market in Henan Province of China and overseas consumers, but also further optimizes the industrial structure. Elements of local cultural characteristics are now recognized as key indicators of success in international rural tourism. In China, the rapid growth of rural tourism in Henan Province is largely due to the impact of the regulatory framework. At the same time, Henan province's significant competitive advantage in seeking differentiated development has become an important differentiator. However, the economic situation has a significant fluctuating impact on the performance of rural tourism in Henan Province and its actual results.

#### **Personal contribution of the applicant**

The author independently analyzed the state of development and factors of rural tourism in Henan Province, and put forward practical suggestions.

Approbation of the results of the dissertation.

The main provisions and conclusions of the dissertation are presented at the scientific-practical conference "Approbation of scientific results of research of foreign PhD doctoral students of KNU named after J. Balasagyn", held on August 23, 2023 in Bishkek.

Completeness of reflection of the results of the dissertation in publications.

The most significant results of the study are reflected in three articles, in journals indexed in the international database of scientific data Scopus. [1]Yinbo F ,Mengmeng M ,Gang L .Impact of digital finance on the asset allocation of small- and medium-sized enterprises in China: Mediating role of financing constraints[J].Journal of Innovation & Knowledge,2023,8(3): [2]Gang Li Azyk Orozonova. Rural tourism perception factors: A case study in the Zhengzhou region. Tourism and Hospitality Research 2024, Vol. 0(0) 1 – 14

[3] Jiaming Zhang, Bebeibei Li , Nuriza Musaeva , Shanshan Zhang, Gang Li .The Role of China in the Implementation of Infrastructure Projects in Kyrgyzstan and Their Impact on the Sustainable Development of Transport and Logistics Systems. International License. UC on Creative Commons 4.0 .Vol.5 , Issue 2, 2024 (CC BY-NC 4.0)

### In addition, academic research achievements include:

1. In December 2023, as the academic leader, "Applied Economics" was recognized as a key discipline in Henan Province.

2. In November 2024, the project "Empirical Research on the Coupling of New Urbanization and Rural Revitalization in Henan Province" (a provincial-level soft science project) was approved and initiated under my leadership.

4. "Exploring the Path of Integrated Development of New Urbanization and Rural Revitalization" was published in the Journal of Wuxi Institute of Technology in January 2022. 5. "Non-standard Audit Opinions, Commercial Credit Financing and Enterprise Investment Efficiency" was published in Accounting Friends in May 2022.

#### Structure and scope of the thesis.

The structure of the PhD thesis is represented by an introduction, three chapters, conclusion and a list of used sources. The full volume of the work is 129 P. The work contains 12 figures, 11 tables, 155 sources.

#### Аннотация

**Тема диссертации:** «Исследование сельского туризма на основе теории восприятия туризма»

Автор: Ли Ганг

Научный руководитель: к.э.н., доцент Орозонова Азык Абдыкасымовна

#### Актуальность темы диссертации

С ростом интереса к природе и традиционной культуре сельский туризм как новая форма туризма активно развивается по всему миру. Он становится важным двигателем локального экономического роста и культурного наследия. Развитие сельского туризма предоставляет уникальный культурный опыт, способствует экономическому взаимодействию между городскими и сельскими районами, создаёт рабочие места и новые источники дохода для местного населения. Всё это обеспечивает сбалансированное развитие экономики, сохранение культуры и гармонию в обществе, меняя структуру мировой экономики.

Сельский туризм требует разумного подхода к развитию с учётом защиты окружающей среды, что соответствует глобальной концепции устойчивого туризма. Международные учёные, такие как Пизам и Нойванн, изучали ключевые аспекты сельского туризма, включая инфраструктуру, культурное наследие и социальную ответственность, а также предлагали стратегии устойчивого развития. Китайские исследователи, например Е Цзинчжун и Чэнь Но, проводили глубокий анализ влияния национальных стратегий на развитие сельского туризма, подчеркивая роль государственной поддержки.

Данная работа анализирует использование ресурсов, социально-экономическое воздействие, потенциал устойчивого развития и вызовы сельского туризма в провинции Хэнань, Китай. Провинция обладает богатым природным и культурным наследием, что открывает широкие возможности для развития туризма. Однако существуют проблемы, такие как инфраструктурные ограничения и улучшение качества услуг, которые требуют решения. Связь темы диссертации с научными программами и исследованиями

Работа связана с реализацией стратегии возрождения сельских территорий Китая, направленной на оценку влияния этой стратегии на развитие сельского туризма в провинции Хэнань. Хотя диссертация не связана с конкретными проектами, её цели и задачи соответствуют национальным исследованиям, включая план «14-й пятилетки» по интеграции культуры и туризма.

#### Объект исследования

Сельский туризм в провинции Хэнань, Китай. Исследование фокусируется на устойчивом развитии сельского туризма, включая использование ресурсов, социально-экономическое воздействие, текущее состояние и вызовы.

#### Методы исследования

- 1. Анализ литературы: изучение научных статей, отчётов и данных об отрасли.
- 2. Полевые исследования: опросы, интервью и сбор данных в туристических зонах.
- 3. Качественные и количественные методы: логистическая регрессия и модели структурных уравнений с использованием программного обеспечения (SPSS, AMOS, GIS).
- 4. Модели структурных уравнений: анализ взаимосвязей между

переменными.

#### Цель исследования

На основе анализа текущего состояния, факторов влияния и потенциала устойчивого развития сельского туризма в провинции Хэнань предложить практические рекомендации по улучшению инфраструктуры, повышению качества услуг и конкурентоспособности, а также защите и развитию местной культуры.

#### Научная новизна

- Разработана модель устойчивого развития сельского туризма на основе теории восприятия туризма.
- Проведен анализ текущих проблем и узких мест в развитии сельского туризма в Хэнани.
- Использованы количественные методы для оценки ключевых факторов развития туризма.
- Предложены инновационные пути устойчивого развития сельского туризма.

#### Практическая значимость

Результаты исследования помогут в разработке эффективных стратегий для провинциальных властей, туроператоров и местных сообществ. Работа предоставляет рекомендации для улучшения инфраструктуры, качества услуг и сохранения культурного наследия.

#### Экономическая значимость

- Рост местной экономики: стимулирование смежных отраслей, таких как сельское хозяйство и ремёсла.
- 2. Региональная интеграция: содействие координации между различными отраслями.
- 3. Поддержка стратегии возрождения села: оптимизация структуры сельского хозяйства и повышение уровня жизни.

#### Основные положения, выносимые на защиту

- Текущее состояние сельского туризма показывает быстрое развитие отрасли в провинции Хэнань.
- 2. Определены ключевые факторы успешного развития, включая законодательное регулирование и культурные ресурсы.
- 3. Выявлена высокая значимость восприятия туризма для устойчивого развития отрасли.

#### Личный вклад автора

Автор самостоятельно провел анализ состояния сельского туризма в Хэнани и предложил практические рекомендации.

#### Апробация результатов

Основные положения работы были представлены на научнопрактической конференции в Бишкеке 23 августа 2023 года.

#### Публикации

Результаты работы опубликованы в трех статьях,

индексированных Scopus, а также в ряде других научных изданий.

### Структура работы

Диссертация состоит из введения, трех глав, заключения и списка использованных источников. Общий объем работы составляет 129 страниц, включая 12 рисунков, 11 таблиц и 155 источников литературы.