



**A STUDY OF THE INFLUENCE OF RURAL TOURISM ON
FARMERS' INCOME IN WESTERN HUNAN**

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**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION
GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY
2023**



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This Independent Study has been approved as a Partial Fulfillment of the
Requirements for the Degree of Master of Business Administration

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Title: A Study of the Influence of Rural Tourism on Farmers' Income
in Western Hunan

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Degree: Master of Business Administration

Major: International Business Management

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..... 9 / 7 / 2024

ABSTRACT

The advancement of rural tourism represents a pivotal strategy for addressing the financial challenges faced by rural communities. Investigations into the influence of rural tourism on farmers' income hold significant potential for enhancing the financial well-being of these communities. The purpose of this paper includes the following four areas: 1) to explore the relationship between industrial chain development and farmers' income; 2) to explore the relationship between infrastructure construction and farmers' income; 3) to explore the relationship between utilization of cultural resources and farmers' income; 4) to explore the relationship between ecological protection and farmers' income.

This study took rural farmers' tourism income in western Hunan as the research subject and adopted the method of quantitative analysis. Through a questionnaire survey, 180 valid questionnaires were collected from customers, and the following conclusions were drawn: 1) There is a positive correlation between industrial chain development and farmers' income; 2) There is a positive correlation between infrastructure construction and farmers' income; 3) There is a positive correlation between utilization of cultural resources and farmers' income; and 4) There is a positive correlation between ecological protection and farmers' income. The rural tourism in western Hunan can be effectively addressed by implementing measures to optimise and expand the industrial chain, improve existing infrastructure, explore local cultural resources and create a conducive ecological environment. The implementation of these strategies can effectively enhance the income of local farmers..

Keywords: rural tourism, farmers' income, western rural Human province

ACKNOWLEDGEMENT

Time flies, in a blink of an eye, three years of postgraduate study career is coming to an end. Looking back on the past, on my way to study and grow up, there are too many good teachers and friends, they accompanied me, encouraged me, helped me, and went through the most unforgettable youth with me.

Firstly, I would like to begin by expressing my gratitude to my supervisor. Throughout the thesis writing process, my supervisor provided invaluable guidance and support, from the initial topic selection to the framework of the thesis, theoretical support, work arrangement, and beyond. His suggestions and guidance were instrumental in laying a solid foundation for me to successfully complete the thesis writing. In the process of working with my supervisor, I have been greatly influenced by his profound knowledge, dedicated spirit, and rigorous and serious attitude. At the same time, I would also like to thank the many teachers of the college for their attentive teaching, which has enabled me to learn and grow.

Secondly, I would like to thank my classmates, in the time with you, you gave me a lot of help, but also taught me a lot of the truth of life, their help has become my life on the road to add valuable guidance.

Finally, I would like to thank my parents who have always accompanied me. Without their help and support in work and life, I would not have successfully completed the nearly three years of study. It is your care and understanding that allows me to devote myself to my studies and successfully complete my studies.

Declaration

I, Song Reyu, hereby certify that the work embodied in this independent study entitled “A Study of the Influence of Rural Tourism on Farmers' Income in Western Hunan” is result of original research and has not been submitted for a higher degree to any other university or institution.

(Song Reyu)
June 20, 2024



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Chapter1 Introduction

1.1 Background of the Study

Rural tourism is a development model that integrates agriculture and tourism, and refers to the provision of tourism products and services in rural areas through the development of tourism activities and the utilization of local natural, humanistic and other resources, thereby promoting the economic development of rural areas and the increase of farmers' incomes (Jing, 2023). In China, rural tourism has become one of the important means to promote the transformation and upgrading of rural economic structure.

Xiangxi region is a geographical name of Hunan Province in China, which is an area dominated by mountains. Due to the limitation of geographical conditions, the economic situation of farmers in western Hunan is relatively difficult, and they mainly rely on agricultural production to make a living. However, with the advancement of urbanization, the traditional agricultural economic model is facing many problems and the income level of farmers is relatively low.

The rise of rural tourism has brought new opportunities and hopes to farmers in western Hunan. Rural tourism development can create new economic growth points by utilizing local natural resources and special culture, as well as provide jobs and improve the income situation of farmers. Therefore, the impact of rural tourism on farmers' income in western Hunan has received increasing attention from researchers(Wu, Mehmood Usman, 2023).

First of all, in terms of economy, the development of rural tourism can create more employment opportunities and provide abundant jobs, especially for those rural laborers. The development of rural tourism requires various forms of labor, including tour guides, hotel service workers, and farmhouse owners. By participating in the work of rural tourism, farmers can earn extra income and improve the economic situation of their families.

Secondly, the development of rural tourism can also promote the development of related industries and further increase farmers' income. Rural tourism needs to rely on local natural and human resources in rural areas, so agricultural products, handicrafts and local specialties in rural areas can become new products for rural tourism. By developing rural industries and increasing the added-value of agricultural products, farmers can earn higher returns.

Third, rural tourism can also promote the cultural inheritance and protection of farmers in western Hunan. Xiangxi region has rich ethnic cultures and traditional folklore, through the development of rural tourism, traditional culture can be integrated into tourism activities to protect and pass on the local cultural heritage(ManhCuong,

2023). This not only attracts more tourists, but also improves the farmers' sense of identification with their own traditional culture and further enhances their pride and self-confidence.

To summarize, the impact of rural tourism on farmers' income in western Hunan is multifaceted, which can not only improve the economic situation of farmers by providing employment opportunities and increasing sources of income, but also promote the development of related industries, increase the added value of agricultural products, and further increase the income of farmers. In addition, rural tourism can also promote the inheritance and protection of rural culture in western Hunan. Therefore, it is of great significance to study the impact of rural tourism on farmers' income in western Hunan, in order to promote the development of rural economy and improve farmers' income level in western Hunan.

1.2 Questions of the Study

Hunan, as a major agricultural province in China, has rich rural tourism resources and deep cultural heritage. In recent years, the Hunan provincial government has also strongly supported the development of rural tourism, with a view to boosting the growth of the rural economy and raising the income level of farmers through tourism. However, the impact of rural tourism on farmers' income is not single, it involves many aspects such as economy, society, culture and environment. Therefore, it is important to explore the impact of rural tourism on farmers' tourism income to promote rural development (Douglas & Douglas, 2006). Based on this, this paper proposes the following four questions for research:

1. Is there a relationship between industrial chain development and farmers' income?
2. Is there a relationship between infrastructure construction and farmers' income?
3. Is there a relationship between the use of cultural resources and farmers' income?
4. Is there a relationship between ecological protection and farmers' income?

1.3 Objectives of the Study

In response to the four questions raised in this study, the following targeted research objectives were proposed:

1. To explore the relationship between industrial chain development and farmers' income;
2. To explore the relationship between infrastructure construction and farmers' income;
3. To explore the relationship between utilization of cultural resources and farmers' income;
4. To explore the relationship between ecological protection and farmers' income.

1.4 Scope of the Study

This study analysed the impact of rural tourism development on farmers' income in Hunan Province. The subjects of the study were the villagers in the villages of agro-tourism development in Hunan Province. The study analysed the various factors affecting farmers' income in the context of rural tourism. The study collated more than 30 relevant literature sources and provides targeted strategies for the further development of tourism in the region.

1.5 Significance of the Study

1.5.1 Theoretical Significance

Currently, with the process of urbanization, the economic development of agricultural areas faces many difficulties, and the production and living conditions of farmers have declined. In response to this problem, the approach of developing rural tourism and other related areas is a relatively common approach. This paper provides an in-depth study of the impact of rural tourism on farmers' income, providing certain theoretical support, helping to promote the development of rural tourism and advancing the sustained growth of the economy in rural areas, and providing new ideas and practical experience for research in related fields.

1.5.2 Practical Significance

With the state's emphasis on the rural economy, the increase of farmers' income has become an important goal promoted by the state and local governments. In response to this goal, the development of rural tourism is a promising direction. Through empirical analysis, this paper derives the positive impact and mechanism of rural

tourism on farmers' income, and provides feasible solutions and measures for local governments to promote the healthy development of the rural tourism industry, realize the increase of farmers' income and the sustained growth of the economy in rural areas through policy support and infrastructure improvement. Therefore, the research in this paper is of practical significance for promoting sustainable social and economic development and improving farmers' production and living conditions.

1.6 Limitations of the Study

In terms of limitations, this study may have the following two limitations:

(1) The selected study area is relatively narrow. The study area of this paper is the western rural area of Hunan Province, which is a typical rural tourism development area in reality, but it does not represent the development of rural tourism in the whole country. Therefore, the conclusions and analyses drawn in this paper are only applicable to the study area and are not universal.

(2) Limitations of the sample selection. The samples used in this paper are mainly all kinds of agricultural workers in rural areas of Hunan, without considering the income of other related people, such as odd jobs gained as a result of participation in rural tourism, service industry workers and neighboring merchants. Therefore, the conclusions obtained in this paper may have some bias.

Chapter 2 Literature Review

2.1 Introduction

This chapter mainly summarizes the research of scholars on the relevant concepts and specific variables involved in this study, which lays the theoretical research foundation for the study. At the same time, it analyzes the background of "rural tourism in western Hunan", which lays the foundation for the actual research of this study.

2.2 Literature Review

2.2.1 Rural Tourism

Rural tourism aims to make use of the local unique natural scenery, historical sites, folk customs, ecological environment, economic and social conditions, living customs, ecological values, ecological civilization, social atmosphere, ecological economy, ecological protection, ecological restoration, ecological green, ecological sustainability, ecological health, ecological friendliness, ecological safety, Ecological livable, ecological green conservation and other characteristics to meet the needs of different people (Briggeman, 2007).

The term "rural tourism" is defined as a strategy that facilitates residents' engagement with their local communities by providing them with distinctive insights into the area's conditions, history, culture, traditions, religion, beliefs, and customs. These local conditions can not only bring more income to local residents, but also promote local development, so as to realize the dual development of economy, society and ecology (Huang, 2021). If rural tourism is only regarded as an activity limited to "farmhouse fun", it does not fully take into account the cultural, social, economic and other factors behind it, so it can only be regarded as a simple activity, but not as a comprehensive activity.

In recent years, rural tourism has become a popular form of leisure and holiday life, it can not only let people enjoy the local unique natural scenery, folk culture, but also promote the development of agriculture, forestry, animal husbandry and fishing sideline, so that they can better enjoy the current busy and full life. Many people from the city want to get a relaxed, pleasant, rest, satisfy the soul of the feeling, and rural tourism just meet their needs for rest vacation, explore the nature, enjoy the beautiful scenery, enjoy the current rest vacation (Hu, 2017).

Wu (2021) believes that rural tourism plays a positive role in the development of rural economy. Developing rural tourism can broaden farmers' income sources and improve the economic vitality of rural areas. By carrying out rural tourism projects such as agricultural experience, rural leisure and farmhouse entertainment, more tourists can

be attracted to spend money in rural areas and drive the development of local economy. At the same time, rural tourism can also drive the development of related industries, such as catering, accommodation, transportation, etc., and further promote the diversified development of the rural economy.

Sun (2020) proposed that the development of rural tourism should pay attention to the protection of ecological environment. In the process of developing rural tourism resources, we should pay attention to the protection of local natural environment and cultural heritage to avoid over-exploitation and destruction. At the same time, we should strengthen environmental awareness education, improve the environmental awareness of tourists and local residents, and realize the sustainable development of rural tourism. The government and enterprises should take corresponding environmental protection measures, strengthen environmental monitoring and protection, and ensure that the development of rural tourism activities will not cause adverse effects on the local environment.

Zhang (2020) believes that the development of rural tourism needs to strengthen community participation. Local communities are important stakeholders in the development of rural tourism, and their participation and cooperation are essential for the sustainable development of rural tourism. Therefore, local communities should be encouraged to participate in the development and management of rural tourism to increase their participation and benefit level. By strengthening community participation, local residents' sense of identity and belonging to rural tourism development can be enhanced, and their enthusiasm and enthusiasm for participation can be enhanced. At the same time, it can also promote the communication and interaction between community residents and tourists, and enhance the inheritance and development of local culture.

Lin et al (2020) pointed out that government support is one of the key factors to promote the development of rural tourism. The government can promote the development of rural tourism by formulating relevant policies, providing financial support and strengthening supervision. For example, the government can introduce rural tourism support policies, provide loans, tax incentives and other policy measures to encourage enterprises and individuals to invest in rural tourism projects. At the same time, the government can also guide social capital to enter the field of rural tourism and promote the market-oriented development of rural tourism. In addition, the government should also strengthen the supervision and management of rural tourism to ensure the safety and standardization of tourism activities.

There are several factors that affect rural tourism. Zhang (2010) argues that the development of industrial chains has increased rural tourism income, and that farmers' income can be enhanced through this development. Yang et al. (2021) suggest that infrastructure construction can promote rural tourism development, which in turn enhances farmers' income. Siti (2015) indicates that the use of cultural resources has a

positive impact on rural tourism development and helps to increase farmers' income. Wen et al. (2011) believe that ecological protection can effectively promote rural tourism development and construction, which also has an important impact on increasing farmers' income. According to scholars, the main factors that affect rural tourism and farmers' income are as follows:

(1) Industrial Chain Development

Zhang (2010) believes that the development of the industrial chain has a significant impact on farmers' tourism income. In the tourism industry chain, farmers can get a stable source of income by providing tourism services and operating tourism business. With the improvement and upgrading of the industrial chain, farmers' tourism income will also increase accordingly.

Yang (2018) pointed out that the increase of farmers' tourism income will help promote the development of the industrial chain. With the increase of farmers' tourism income, they have more resources and capabilities to participate in the tourism industry chain, providing more abundant and higher quality products and services, thus promoting the development of the industry chain.

Chen (2019) believes that the relationship between industrial chain development and farmers' tourism income is regulated by many factors. The government's policy orientation, the change of market demand, the quality and ability of farmers and other factors will affect the relationship between them. Therefore, in practice, it is necessary to consider various factors comprehensively and formulate scientific and reasonable policies and measures.

Wang (2019) believes that there are some differences between domestic and foreign researches on the relationship between industrial chain development and farmers' tourism income. Some studies believe that the development of industrial chain has a positive impact on farmers' tourism income, while others believe that the impact is not significant. Therefore, it is necessary to further study the problems in this field and clarify the relationship between the two.

Zhang et al (2021) proposed that future research should pay attention to the dynamic relationship between the development of industrial chain and farmers' tourism income. With the continuous development of economy and society, the industrial chain and farmers' tourism income will change. Therefore, it is necessary to continue to pay attention to the development of this field and deeply study the interactive relationship and influence mechanism between the two.

(2) Infrastructure Construction

There is a mutually promoting relationship between rural infrastructure and rural tourism. On the one hand, the improvement of rural infrastructure can improve the quality and attractiveness of rural tourism; On the other hand, the development of rural tourism can promote the improvement of rural infrastructure. Therefore, rural infrastructure should be closely combined with the development of rural tourism to achieve positive interaction between the two.

Yang et al (2021) believes that rural infrastructure has an important impact on the development of rural tourism. The level of infrastructure construction in rural areas is directly related to the attraction of rural tourism and tourist experience. The improvement of roads, electricity, communication and other infrastructure can enhance the travel experience of tourists and improve the quality of tourism services. Therefore, the government and enterprises should increase investment in rural infrastructure and optimize the development environment of rural tourism by improving infrastructure conditions such as transportation, communication and energy.

Huang (2019) proposed that the development of rural tourism contributes to the improvement of rural infrastructure. With the rise of rural tourism, the increase in the number of tourists will drive the development of local economy, which in turn will promote the improvement of infrastructure. For example, in order to meet the demand of tourists, the local area may need to build more roads and provide a more stable electricity supply.

Xu (2020) believes that the relationship between rural infrastructure and rural tourism is affected by a variety of factors. In addition to the quality and level of infrastructure itself, policy support, financial input, community participation and other factors also have an important impact on the relationship between the two. Therefore, in the process of promoting the development of rural infrastructure and rural tourism, it is necessary to consider various factors comprehensively and formulate scientific and reasonable policies and measures.

Shu (2019) believes that the improvement of rural infrastructure can reduce the operating cost of rural tourism. Good transport, energy and communication facilities can reduce the operating costs of tourism activities and improve the efficiency and quality of tourism services. Therefore, strengthening rural infrastructure construction is an important way to improve the competitiveness of rural tourism.

Guo et al (2011) believes that the interaction between rural infrastructure and rural tourism has regional differences. The development level of rural infrastructure and rural tourism may be different in different regions. Therefore, when formulating relevant policies and measures, regional differences should be taken into account to promote the development of rural infrastructure and rural tourism according to local conditions.

Guan (2013) believes that the interaction between rural infrastructure and rural tourism is affected by policy regulation. The government's policy regulation can guide and support the development of rural infrastructure and rural tourism. Therefore, policy makers should fully consider the interaction between rural infrastructure and rural tourism, and formulate scientific and reasonable policy measures.

As technology advances and market needs change, the relationship between the two may change. Therefore, it is necessary to continue to pay attention to and study the development of this field, so as to provide scientific basis for policy formulation and practice.

(3) Utilization of Cultural Resources

Siti (2015) put forward that the utilization of cultural resources has a positive impact on farmers' tourism income. Through the excavation and utilization of local cultural resources, attractive and characteristic tourism products can be developed to attract more tourists and increase farmers' tourism income.

Sun (2020) believes that the increase in farmers' tourism income will help promote the protection and inheritance of cultural resources. By participating in tourism activities, farmers are more aware of the importance of cultural resources and have a stronger motivation to protect and inherit these resources. At the same time, they can also gain economic benefits by providing related cultural products and services.

Shita (2021) believes that the relationship between the utilization of cultural resources and farmers' tourism income is regulated by market demand. If the market demand for cultural tourism products and services increases, farmers will be more motivated to develop and utilize local cultural resources, thus increasing tourism income.

ManhCuong (2023) pointed out that domestic and foreign studies have different views on the relationship between the utilization of cultural resources and farmers' tourism income. Some studies believe that the use of cultural resources has a significant impact on farmers' tourism income, while others believe that the impact is not obvious. Therefore, it is necessary to further study the problems in this field and clarify the relationship between the two.

Lin et al (2020) believes that future research should pay attention to the dynamic relationship between the utilization of cultural resources and farmers' tourism income. With the change of tourism market and the upgrade of consumer demand, the utilization of cultural resources and farmers' tourism income will change. Therefore, it is necessary to continue to pay attention to the development of this field and deeply study the interactive relationship and influence mechanism between the two.

(4) Ecological Protection

Zheng (2010) proposes that in the rural areas around the eco-tourism scenic spots, farmers can gain significant economic benefits by participating in tourism development. However, excessive tourism development will put pressure on the local ecological environment and affect the ecological balance. Therefore, the balance between ecological protection and farmers' tourism income should be sought to ensure sustainable development.

Wu (2009) believes that in rural tourism, a good ecological environment is an important factor to attract tourists. Through reasonable planning and management, it can not only protect the local ecological environment, but also increase the farmers' tourism income. The government and relevant departments should strengthen the training and guidance of farmers, improve their environmental awareness and tourism service level.

Tang (2021) proposed that local community residents play an important role in tourism development. They are not only guardians of the ecological environment, but also important providers of tourism services. An effective benefit distribution mechanism can ensure that local farmers can obtain long-term and stable income from tourism development, and enhance their enthusiasm to protect the ecological environment.

Wen et al (2011) points out that tourism is a great boost to the local economy, but it also puts pressure on the local environment. In the development of tourism, ecological carrying capacity should be fully considered to avoid overexploitation. Governments, enterprises and local farmers should participate in tourism planning and decision-making to ensure a virtuous cycle between ecological protection and farmers' tourism income.

Weng et al (2021) believes that farmers' tourism income is closely related to their cognition of ecological environment. Improving farmers' environmental awareness and ecological literacy can promote the coordinated development of ecological protection and farmers' tourism income. The government and relevant organizations should strengthen environmental education for farmers and increase their awareness and participation in environmental protection through training and publicity activities.

2.2.2 Farmers' Income

On the issue of farmers' income, the research and analysis of experts and scholars at home and abroad are also extremely rich, some are based on the global analysis, some are based on a foreign country analysis, and some take developing countries as

examples to conduct research and analysis (Jing, 2023). These experts and scholars have formed a very rich research results. This provides an excellent condition for in-depth understanding of the development and development process of the primary industry in various countries in the world, and also provides a great reference for further research on farmers' income. Moreover, it lays a foundation for the study of China and even the western rural areas of Hunan Province, and also has a high reference value. Therefore, the following three aspects of the current situation of farmers' income, the study of influencing factors of farmers' income, and the suggestions for farmers' income increase are sorted out and drawn. The academic literature on farmers' income has concentrated on the following areas:

(1) Research on the current situation of farmers' income

According to the study of D. G. Johnson (2002), the decline of farmers' income is mainly due to the surplus labor force in rural areas, and the productivity of industry and agriculture has not reached the ability to ensure comparative income. Farmers can only harvest the dividends of regional economic growth through market factors or other sources. Gregory Veeck and Clifton W. Pannell (2004) analyzed hundreds of farmers' samples and found that farmers' income sources in different regions are very different. The main income of farmers near the edge of the city comes from wage income, while the income of farmers in the far away city and the transportation is not convenient is mainly from farming income. Nelsonloy.S (2016) found that in western developed countries, the rapid progress of some rural industries can also change rural living standards. According to the survey conducted by El-Mekkaoui (2016), it can be seen from the empirical level that the continuous improvement of agricultural production efficiency and the gradual departure of the surplus rural population from the land have an important impact on the consumption level and consumption structure of farmers. Rick S. Llewellyn and Brendan Brown (2020) use existing tools to study advanced economies and find that agricultural innovation is the focus, and they point out some reasons that affect agricultural development in developing countries. They are considered to be relatively different from developed countries in terms of policies, capabilities, resources, positions and priorities.

(2) Research on the influencing factors of farmers' income

Meng (1995) found that industrial development in rural areas also affected farmers' income, and noted that in rural areas of China in 1978, education level was an important factor, which had great significance for improving labor productivity and farmers' growth. Mathijs and Noev (2004) found that the issue of planting efficiency also plays an important role in increasing agricultural income, and that the level of mechanized power and auxiliary inputs from farming animals also increase farm income. Balint and Wobst (2006) found that capital and labor played an important role in promoting agricultural production to increase income. For example, the policy adjustment of agricultural prices, government transfer payments, tax cuts, financial support for

agriculture and so on. The practice of developed countries shows that these different countries use appropriate policies based on the different characteristics of their agriculture and achieve corresponding concrete results, and local farmers have also made progress in increasing their income. IddoKan, AyalKimhi and ZviLerma (2006) also found that the education level of farmers increased, and the growth rate of farmers' non-farm income also accelerated. For example, the negative impact of primary and secondary education makes the income elasticity of farmers -0.35, while higher education has a large number of positive effects, and the income elasticity of farmers is 0.97, indicating that education has a positive impact and farmers' income can be changed through education. SitiBadariah, SaifulNathan and M. ohdRosli (2015) believe that agricultural infrastructure has a great impact on farmers' income growth. First, it can increase employment in the construction of agricultural infrastructure and increase the overall income of rural residents. Second, strengthen water conservancy, farmland irrigation and other major infrastructure casting, to provide rural residents with a good environment for agricultural production, and enhance their enthusiasm for production. JeanPaul Chavas, Celine Nauges (2020) argue that agricultural innovation and innovative technologies are a key factor in increasing farmers' well-being, affecting agricultural productivity and the level of economic development. Aynalem et al. (2020) believe that innovation in agricultural science and technology can improve farmers' income, and the adoption of advanced agricultural technology plays an important role in supporting farmers' income growth, and the impact is more obvious. An article published by Russia & CIS Statistics Weekly (2021), examining the current situation of agricultural development, found in Georgia that the area of cultivated land and the quality of cultivated land have a positive impact on agricultural production, and this research result is basically the same as before.

(3) Research on suggestions for increasing farmers' income

JohnGiles (2002) analyzed the role of policy in the process of labor transfer to non-agriculture and pointed out that the government should remove institutional barriers in the process of rural surplus labor transfer. BrianC.Briggeman (2007) found through a large number of studies on farmers' income that there was a positive correlation between the amount of government agricultural subsidies and farmers' income. The more subsidies the government gave, the higher farmers' income would be correspondingly. On average, non-farm income increases the value of output by about \$45,000 per farmer group. Adams Abdulai; Jumpah Emmanuel Tetteh; Caesar Livingstone Divine (2021) argues that agricultural technology is essential to improve the productivity, earnings, and health of small farmers. Therefore, in order to improve the efficiency of agricultural production, it is necessary to strengthen the research and revitalization of agricultural technology. CAI Fengfei (2015) said in his research that it is necessary to increase investment in rural cultural development, actively support private and enterprise education and training institutions, set up technical training schools, and actively train new talents to improve farmers' education level. It is necessary not only to have labor technology, but also to popularize agricultural science and technology

knowledge to farmers, train new types of farmers, and promote the popularization of agricultural science and technology in order to develop agriculture through science and technology. Sun Tieyu (2020) believes that agricultural support policies are closely related to farmers' income transfer. On the basis of strengthening various favorable policies for agriculture, a new agricultural subsidy system should be built to maintain the continuous stability of poverty alleviation policies and implement incentive measures. We will make innovations in policy-based financial services to support agriculture, guide financial capital to invest in agricultural services, and stabilize agricultural insurance guarantees. Cheng Yifei and Cao Zhengwei (2020) believe that it is very important to improve the cultural quality and scientific and technological level of farmers, and it is necessary to master new technologies that adapt to the development of modern society, so that advanced technologies can be used in agricultural planting activities.

2.3 Western Rural Hunan Province

The western countryside of Hunan Province is located in the western part of Hunan Province, China. It is an area with rich natural resources and cultural landscape. There are magnificent natural scenery, unique folk culture and rich agricultural resources, which provide unique conditions for the development of rural tourism.

In recent years, the tourism industry in the western countryside of Hunan has developed rapidly. The local government has actively promoted the development of rural tourism, strengthened the construction of infrastructure, and improved the level of tourism services, attracting more and more tourists to travel. At the same time, local farmers also actively participate in the development of tourism, by providing tourism products and services such as farmhouse music, homestays, and agricultural products, increasing sources of income and improving living standards.

The development of rural tourism not only drives the development of local economy, but also promotes the increase of farmers' income. By participating in the development of tourism, farmers can obtain more employment opportunities and sources of income, and improve their living conditions. At the same time, the development of rural tourism has also promoted the transformation and upgrading of agriculture and promoted the sustainable development of agriculture.

In the western rural areas of Hunan Province, rural tourism has become one of the important pillars of local economic development. In the future, with the continuous progress and application of technology, rural tourism will be more intelligent and convenient to provide tourists with better services and experiences. At the same time, local governments and farmers also need to continue to strengthen tourism management and service levels, promote the sustainable development of rural tourism, and make greater contributions to local economic development and farmers' income.

In a word, the development of rural tourism in western Hunan has broad prospects and great potential. Measures such as strengthening infrastructure construction, improving service levels, and promoting agricultural transformation and upgrading can further promote the development of local economy and increase farmers' income.

2.4 Conceptual Framework

The conceptual framework of this study is shown in the following figure:

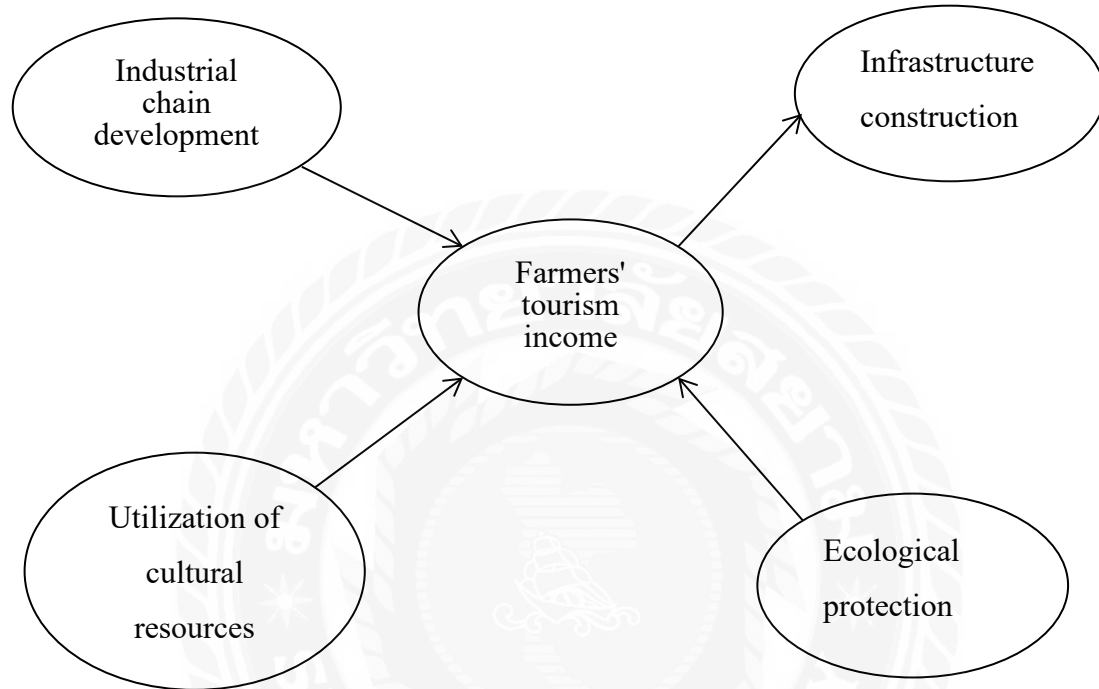


Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Introduction

The research method is the quantitative analysis. This chapter begins with an introduction to the study design and then discusses the population and sample size used in the study. It then outlines the data collection process and explains how the data were analyzed. In addition, this chapter also analyzes the reliability and validity of the scale used in the research to ensure the accuracy and consistency of the measurement. Finally, a reliability analysis was performed on the scale to assess its stability for data collection.

3.2 Research Design

In this study, a quantitative analysis method was employed. To ensure the accurate collection of data on farmers' tourism income, a questionnaire on the subject was prepared based on previous experience. The Likert five-point method was used to collect the data. At the same time, SPSS was used to verify the reliability and validity of the questionnaire, and the results were summarized in detail, which laid the foundation for the formulation of the question and the implementation strategy. The main scales involved in this study are as follows:

3.2.1 Rural Tourism Scale

Wei & Shi (2018) proposed that industrial chain development provides more employment opportunities and income sources for farmers, while Chen (2015) argued that infrastructure construction improves local accessibility and provides necessary conditions for tourism development. Huang, Shi & Wang (2012) proposed that the utilization of cultural resources not only enriches the content of tourism products, but also provides a platform for local farmers to display local culture. Wu (2011) believes that there is a close relationship between ecological protection and farmers' tourism income. A good ecological environment is the basis for sustainable tourism development, and farmers, as direct beneficiaries of ecological environment, can enhance their awareness of ecological protection by increasing their tourism income.

There are many factors affecting farmers' tourism income, among which the above four factors are the most important. Therefore, the rural tourism scale is shown in Table 3.1.

Table 3.1 Rural Tourism Scale

Industrial chain development	How can rural industry chain development improve farmers' participation in tourism?
	How can the development of rural industry chain provide more tourism employment opportunities for farmers?
	How can the development of rural industry chain improve the income structure of farmers in tourism?
	How can rural industry chain development enhance farmers' ability to cope with tourism market risks?
Infrastructure construction	How can the improvement of infrastructure construction improve the tourist experience?
	How does investment in infrastructure affect farmers' participation in tourism?
	How does infrastructure development affect farmers' income levels in tourism?
	How does the lack of infrastructure construction restrict the increase of farmers' tourism income?
Utilization of cultural resources	How to effectively use rural cultural resources to improve farmers' income?
	How much does the utilization of cultural resources contribute to farmers' non-agricultural income?
	How to protect farmers' rights and interests in the process of developing rural cultural resources?
	How does the use of cultural resources affect farmers' tourism income?
Ecological protection	How do ecological protection policies affect farmers' livelihood activities?
	How do ecological conservation measures affect farmers' agricultural output?
	How does the development of ecotourism affect farmers' tourism income?
	What is the impact of ecological protection on farmers' off-farm employment opportunities?

3.2.2 Farmer Tourism Income Scale

Zhao (2022) argues that income earned by farmers from rural tourism activities has become one of their important sources of income. These incomes mainly come from selling tourism products, providing catering and accommodation services, and participating in tourism activities. The study also found that the level of farmers' tourism income is closely related to local tourism resources, market conditions, policy support and other factors. Therefore, in order to increase farmers' tourism income, it is necessary to strengthen local tourism resources development, market promotion and policy support. At the same time, it is also necessary to pay attention to the distribution of farmers' interests in tourism development, protect their legitimate rights and interests, and promote the sustainable development of rural tourism. Therefore, the farmer tourism income scale is shown in Table 3.2.

Table 3.2 Farmer Tourism Income Scale

Farmer tourism income	Are you involved in rural tourism activities?
	What is the main purpose of your participation in rural tourism?
	How do you think rural tourism affects your personal economic income?
	How do you think the development of rural tourism affects the local economy?

3.3 Hypothesis

H1: There is a positive correlation between industrial chain development and farmers' income;

H2: There is a positive correlation between infrastructure construction and farmers' income;

H3: There is a positive correlation between utilization of cultural resources and farmers' income;

H4: There is a positive correlation between ecological protection and farmers' income.

3.4 Population and Sample Size

The population of this study was comprised of all the villagers involved in rural tourism in the western region of Hunnan.

The sample for this study was 181. The valid questionnaires have consistency and completeness in answering the questions and can represent the characteristics of the research sample. Through the data collection methods, time schedule, number of questionnaires, etc., this study obtained a sufficient research data base and analysis.

3.5 Data Collection

The study employed a questionnaire as the primary data collection instrument. The questionnaire was distributed over a two-month period, from March to May 2023. The data were primarily obtained from respondents completing the questionnaire on the factors influencing the enhancement of farmers' income by rural village tourism in Hunan.

3.6 Data Analysis

Questionnaire validity is an important aspect of research methods, because it ensures that the measurement methods used in the study accurately represent the structure under study. In order to ensure the validity of the content, the questionnaire is designed to accurately measure the specific interest dimension by using the established and verified items, using relevant literature and other scholars' research results. In this study, SPSS is used for analysis.

3.6.1 Reliability Analysis of the Questionnaire

According to Kehlenbach's α coefficient, if the reliability of the questionnaire exceeds 0.7, it is considered to have high and good reliability. In order to evaluate the reliability and internal consistency of the problem project, the reliability analysis method is used for testing. Specifically, this study uses Kehlenbach's α coefficient (A) to test the internal consistency of the scale, and the results show that the reliability of the scale exceeds 0.70, which shows that it has a high reliability. In this study, Kehlenbach's α coefficient test was carried out, and it was found that the results of all questionnaires were higher than 0.7, indicating that the reliability of the questionnaires was high.

Table 3.3 Questionnaire Reliability Analysis

	Cronbach's Alpha	Number of terms
Industrial chain development	0.736	4
Infrastructure development	0.723	4
Utilization of cultural resources	0.784	4
Ecological protection	0.834	4

3.6.2 Validity Analysis of the Questionnaire

When KMO value exceeds 0.7, it is necessary to further study the validity of the questionnaire.

Table 3.4 Questionnaire Validity Test

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	Bartlett's Test of Sphericity		
		Approx. Chi-Square	Df	Sig.
Industrial chain development	0.836	238.378	6	.000
Infrastructure development	0.872	295.581	6	.000
Utilization of cultural resources	0.835	284.512	6	.000
Ecological protection	0.851	238.243	6	.000

According to the results in Table 3.4, the KMO value of all factors in this questionnaire exceeds 0.8, and the significance level of Bartlett sphericity test is 0.000, which shows that the questionnaire meets the standard.



Chapter 4 Findings

4.1 Introduction

In the research process, the questionnaire survey was mainly used in conjunction with the research design and data collection. The purpose of this chapter is to analyze and summarize the collected data and to study the data related to the tourism income of rural farmers in the western part of Hunan.

4.2 Demographics of Respondents

The demographics of the respondents are shown in Table 4.1 below.

Table 4.1 Statistics on the Demographics of Respondents

Survey Items	Category	Number of people	Percentage (%)
Gender	Female	73	38.8
	Male	108	59.7
Age	Under 30 Years Old	56	29.8
	30-40 Years Old	84	46.4
	40-50 Years Old	30	16.0
	50 Years Old or Above	11	7.4
Hamlet	Deshram Village (dialect)	75	40.0
	Nanping Village	38	20.2
	Luowu Village	50	26.6
	Yangjiajie Village	25	13.2

the characteristics of the respondents can be referred to in Table 4.1. In terms of age, the distribution of the respondents is relatively balanced, covering mainly rural farmers in the western part of Hunan.

4.3 Relationship between Industrial Chain Development and Farmer Tourism Income

In this study, correlation analysis was used to study the correlation between industry chain development and farmers' tourism income. As shown in Table 4.2, the significance test reveals that there is a positive correlation between the two, with a correlation coefficient of 0.735. Therefore, this study shows that there is a significant positive correlation between industrial chain development and farmer tourism income.

Table 4.2 Correlation Analysis Results of Industrial Chain Development and Farmer Tourism Income

Dimension	Industrial chain development	Farmer tourism income
Industrial chain development	1	
Farmer tourism income	.735**	1

Then the regression analysis was conducted with industry chain development as the independent variable and farmer tourism income as the dependent variable. As shown in Table 4.3, the results show that the R² of the model is 0.523, which means that the research variable explains 52.3% of the variation in satisfaction. The F-test reveals that industry chain development has a certain effect on farmer tourism income. In addition, the regression analysis also shows that B=0.785, P<0.05, which indicates that industry chain development has a significant positive effect on farmer tourism income.

Table 4.3 Regression Analysis Results of Industrial Chain Development and Farmer Tourism Income

	Non-standardized coefficient		Standardized coefficient	t	p	R ²	AdjustingR ²	F
	B	Standard Error	Beta					
(Constant)	.686	.046	-	3.755	.000	.523	.574	248.956
Farmer tourism income	.785	.035	.845	14.473	.000			

To summarize, industrial chain development is positively correlated with farmer' tourism income. By improving the industrial chain and enhancing the skill level and comprehensive quality of farmers, it can promote employment and income growth for farmers and the development and prosperity of the rural economy.

4.4 Relationship between Infrastructure Development and Farmer Tourism Income

In this study, correlation analysis is used to study the correlation between infrastructure development and farmers' income from tourism. As shown in Table 4.4, the significance test revealed a positive correlation between the two with a correlation coefficient of 0.783. Therefore, this study shows that there is a significant positive correlation between infrastructure development and farmers' income from tourism.

Table 4.4 Correlation Analysis Results of Infrastructure Development and Farmer Tourism Income

Dimension	Infrastructure development	Farmer tourism income
Infrastructure development	1	
Farmer tourism income	.783**	1

Then, the regression analysis was conducted with infrastructure development as the independent variable and farmer tourism income as the dependent variable. As shown in Table 4.5, the results show that the R² of the model is 0.598, which means that the research variable explains 59.8% of the variation in satisfaction. The F-test

revealed that infrastructure development has an impact on farmer tourism income. In addition, the regression analysis also shows that $B=0.755$, $p<0.05$, which indicates that infrastructure development has a significant positive impact on farmer income from tourism.

Table 4.5 Regression Analysis Results of Infrastructure Development and Farmer Tourism Income

	Non-standardized coefficient		Standardized coefficient	t	p	R ²	AdjustingR ²	F
	B	Standard Error	Beta					
(Constant)	.676	.035	-	4.436	.000	.598	.564	242.864
Farmer tourism income	.755	.023	.721	13.734	.000			

4.5 Relationship between Utilization of Cultural Resources and Farmer Tourism Income

In this study, correlation analysis was used to study the correlation between the utilization of cultural resources and farmer tourism income. As shown in Table 4.6, the significance test reveals that there is a positive correlation between the two, with a correlation coefficient of 0.744. Therefore, this study shows that there is a significant positive correlation between the utilization of cultural resources and farmer tourism income.

Table 4.6 Correlation Analysis Results of Utilization of Cultural Resources and Farmer Tourism Income

Dimension	Utilization of cultural resources	Farmer tourism income
Utilization of cultural resources	1	
Farmer tourism income	.744**	1

In addition, regression analysis was conducted with cultural resources utilization as the independent variable and farmer tourism income as the dependent variable. As shown in Table 4.7, the results show that the R² of the model is 0.533, which means that the research variables can explain 53.3% of the variation in satisfaction. The F-test revealed that the utilization of cultural resources has an impact on farmer tourism income. In addition, the regression analysis also shows that $B=0.772$, $p<0.05$, which indicates that there is a significant positive effect of cultural resources utilization on farmer tourism income.

Table 4.7 Regression Analysis Results of Utilization of Cultural Resources and Farmer Tourism Income

	Non-standardized coefficient		Standardized coefficient	t	p	R ²	AdjustingR ₂	F
	B	Standard Error	Beta					
(Constant)	.642	.031	-	4.852	.000	.533	.532	258.972
Farmer tourism income	.772	.086	.845	12.346	.000			

4.6 Relationship between Ecological Protection and Farmer Tourism Income

In this study, correlation analysis was used to study the correlation between ecological conservation and farmers' income from tourism. As shown in Table 4.8, the significance test reveals that there is a positive correlation between the two, with a correlation coefficient of 0.719. Therefore, this study shows that there is a significant positive correlation between ecological conservation and farmer tourism income.

Table 4.8 Correlation Analysis Results of Ecological Protection and Farmer Tourism Income

Dimension	Ecological protection	Farmer tourism income
Ecological protection	1	
Farmer tourism income	.719**	1

In addition, regression analysis was conducted with ecological protection as the independent variable and farmers' tourism income as the dependent variable. As shown in Table 4.9, the results show that the R² of the model is 0.584, which means that the research variables can explain 58.4% of the variation in satisfaction. The F-test revealed that ecological conservation has an impact on farmers' tourism income. In addition, the regression analysis also shows that B=0.709, p<0.05, which indicates that ecological conservation has a significant positive effect on farmer tourism income.

Table 4.9 Regression Analysis Results of Ecological Protection and Farmer Tourism Income

	Non-standardized coefficient		Standardized coefficient	t	p	R ²	AdjustingR ₂	F
	B	Standard Error	Beta					
(Constant)	.613	.076	-	3.145	.000	.584	.578	216.357
Farmer tourism income	.709	.023	.734	11.744	.000			

Chapter 5 Conclusion and Recommendation

5.1 Introduction

This chapter presents a summary of the findings of the study, a derivation of the corresponding results, and an assessment of whether these results supported the research objectives. At the same time, it proposes appropriate strategies to ensure a steady increase in the level of farmers' income.

5.2 Conclusion

5.2.1 There is a Positive Correlation Between Industrial Chain Development and Farmers' Income

According to the results of this study, industry chain development has a positive impact on increasing farmers' tourism income. By optimizing and extending the industrial chain, increasing the employment opportunities of farmers, improving the quality of products and services, and promoting cooperation and solidarity among farmers, the income level and quality of life of farmers can be further improved.

Firstly, optimizing and extending the industrial chain can create more employment opportunities and provide farmers with more work options. The upper reaches of the industrial chain may include agricultural tourism and agrotourism, while the middle reaches may include tour guides, accommodation and catering services, and the lower reaches may include the sale of tourism commodities. All these links can provide job opportunities for farmers, thus increasing their income.

Secondly, through the development of the industrial chain, farmers can better understand market demand and provide tourism products and services that better meet the needs of tourists. This will not only improve tourists' satisfaction and increase the likelihood of repeat business, but also bring more income to farmers. For example, farmers can participate in the sales of tourism commodities by providing specialty agricultural products and handicrafts, and increase their income by meeting the needs of tourists.

In addition, the development of the industrial chain can also promote cooperation and solidarity among farmers. By forming organizations such as cooperatives or associations, farmers can work together to develop and promote tourism products and improve market competitiveness. This cooperative model can help farmers better organize themselves and safeguard their own interests, as well as promote exchanges and cooperation among farmers and improve overall service quality.

Finally, the government and society should provide farmers with more support and platforms to encourage the development of the industry chain. For example, the government can introduce relevant policies to encourage farmers to participate in the tourism industry, provide relevant training and guidance, and help farmers improve their skills and service level. At the same time, the community can also support the development of farmers' tourism industry through various ways, such as investment and cooperation, to jointly promote the development of the industry chain, so as to increase farmers' tourism income.

To summarize, increasing farmers' tourism income by promoting the development of the industry chain needs to start from many aspects. The government and society should provide more support and platforms for farmers, and at the same time, farmers themselves should actively participate in the tourism industry and improve their skills and service level. Only in this way can the increase in farmers' tourism income and the improvement of their quality of life be truly realized.

5.2.2 There is a Positive Correlation Between Infrastructure Construction and Farmers' Income

According to the results of this study, infrastructure and facility development can increase farmers' income from tourism. Promoting infrastructure development is one of the important ways to increase farmers' tourism income. The improvement of infrastructure can enhance the attractiveness of tourist destinations and improve the satisfaction of tourists, thus increasing farmers' tourism income.

Firstly, strengthen the construction of transportation infrastructure. Good transportation conditions can make it easier for tourists to reach tourist destinations and also improve the travel efficiency of local farmers. For example, building and maintaining roads in tourist attractions, setting up more public transportation routes, and providing convenient parking services can facilitate the travel of tourists and increase their stay time and willingness to spend money.

Secondly, the construction of supporting facilities for tourism should be strengthened. This includes the construction of facilities for accommodation, catering and entertainment. Providing high-quality accommodation and catering services can give tourists a better experience in the local area and increase their satisfaction and return rate. Meanwhile, the construction of various types of recreational facilities can also enrich tourists' tourism activities and provide them with more consumption choices.

In addition, it is essential to strengthen the information infrastructure. This includes the development of tourism information and consultation centers, tourism websites and APPs. By providing comprehensive, accurate and timely tourism information, it can help tourists better plan their itineraries and improve their tourism experience. At the same time, the use of modern information technology can also improve the efficiency of tourism management and services and provide more business

opportunities for farmers.

Finally, the construction of environmental protection and ecological protection facilities should be strengthened. A good ecological environment is the foundation for the sustainable development of tourism. By building facilities for garbage disposal, sewage treatment and so on, the local ecological environment can be protected and the satisfaction of tourists can be improved. At the same time, strengthening publicity and education on ecological protection and raising farmers' awareness of environmental protection are also important measures to promote the sustainable development of tourism.

To summarize, the tourism income of farmers can be increased by strengthening infrastructure construction. The government and society should increase investment, provide farmers with more support and platforms, and encourage them to participate in the tourism industry to promote its development. At the same time, farmers themselves should actively improve their own service level and increase the satisfaction and repeat rate of tourists. Only in this way can we truly realize the increase in farmers' tourism income and the improvement of their quality of life.

5.2.3 There is a Positive Correlation Between Utilization of Cultural Resources and Farmers' Income

According to the results of this study, cultural resource utilization can increase farmers' tourism income. Cultural resources are the soul of tourism, with unique charm and attraction. Through rational utilization of cultural resources, the brand image and market competitiveness of tourism destinations can be enhanced, thus increasing farmers' tourism income.

First, dig deep into the local cultural resources. Each region has its own unique cultural traditions and characteristics, and farmers should deeply understand and explore these resources and integrate them into tourism products and services. For example, handicrafts, cultural experience programs, and folk activities with local characteristics can be developed to attract tourists' participation and consumption.

Second, strengthen the protection and inheritance of cultural resources. While utilizing cultural resources, it is also necessary to focus on the protection and inheritance of these valuable cultural heritages. Farmers should actively participate in cultural protection work, such as repairing monuments and passing on folk art, to ensure the sustainable use of cultural resources. This will not only increase farmers' income, but also favor the inheritance and development of local culture.

Third, innovate the way of utilizing cultural resources. In addition to traditional sightseeing tours, more forms of tourism products and services can be developed, such as cultural experience tours and rural theme tours. By innovating the way of utilizing

cultural resources, the needs of different tourists can be met and the competitiveness of the tourism market can be improved. For example, folk activities and handicraft production courses can be organized to allow tourists to deeply experience local cultural characteristics.

Finally, training and education in the utilization of cultural resources should be strengthened. Farmers may lack relevant knowledge and skills in the utilization of cultural resources, so training and education need to be strengthened. The government and social organizations can provide relevant training courses and materials to help farmers understand the value of cultural resources, excavation methods and market potential. At the same time, exchanges and learning among farmers can be encouraged to share successful experiences and innovative ideas.

In summary, by promoting the utilization of cultural resources, farmers' tourism income can be increased. The government and society should provide farmers with more support and platforms to encourage them to participate in the tourism industry and promote its development. At the same time, farmers themselves should actively improve their own service level and increase the satisfaction and repeat rate of tourists. Only in this way can we truly realize the increase in farmers' tourism income and the improvement of their quality of life.

5.2.4 There is a Positive Correlation Between Ecological Protection and Farmers' Income

According to the results of this study, ecological conservation can increase farmers' income from tourism. A good ecological environment is the basis for sustainable development of tourism and an important factor in attracting tourists. By strengthening ecological protection, the quality and attractiveness of tourist destinations can be improved, thus increasing farmers' tourism income.

Firstly, strengthen the awareness of ecological protection. Farmers should realize the importance of ecological protection, understand the relationship between ecology and tourism development, and actively participate in ecological protection. The government and social organizations can provide relevant training and publicity to enhance farmers' awareness of ecological protection and sense of responsibility.

Secondly, formulate scientific ecological protection planning. The government should formulate a scientific ecological conservation plan to clarify the objectives, tasks and measures of conservation. In the planning, the actual situation of the local ecological environment should be fully considered and practical protection measures should be taken. At the same time, farmers should be encouraged to participate in the formulation and implementation of the plan, and their opinions and suggestions should be fully listened to.

Thirdly, ecological monitoring and management should be strengthened. The

government should establish a sound ecological monitoring and management system to monitor and evaluate the ecological environment of the tourist area in real time. It should take timely measures to rectify and manage any environmental problems. At the same time, it should strengthen the management and guidance of tourists, regulate the behavior of tourists, and reduce the damage to the ecological environment.

Fourthly, encourage farmers to participate in ecological conservation programs. The government and social organizations can encourage farmers to participate in ecological protection projects, such as tree planting, wetland protection, wildlife protection and so on. By participating in the projects, farmers can obtain certain economic benefits, and at the same time, they can also increase their awareness and sense of responsibility for ecological protection.

Finally, ecological resources are utilized to develop tourism products. Farmers can utilize local ecological resources to develop tourism products with special characteristics, such as ecotourism, adventure tourism, and agro-entertainment. Through the rational use of ecological resources, it can not only meet the needs of tourists, but also promote the development of local economy and farmers' income.

To summarize, by promoting ecological protection, the tourism income of farmers can be increased. The government and society should provide more support and platforms for farmers and encourage them to participate in the tourism industry and promote its development. At the same time, farmers themselves should actively improve their own service level and increase the satisfaction and repeat rate of tourists. Only in this way can we truly realize the increase in farmers' tourism income and the improvement of their quality of life.

5.3 Recommendation

Expanding the study area: In order to have a more comprehensive understanding of the development of rural tourism, future studies should include more areas in the study, including rural areas in different provinces and at different levels of economic development. This will help to draw more generalized conclusions.

(1) Increase sample diversity: In addition to agricultural laborers, future studies should also consider the income of other related people, such as the income from odd jobs earned through participation in rural tourism, the income of service industry workers and neighboring merchants. This will help to gain a more comprehensive understanding of the contribution of rural tourism to the local economy.

(2) Focus on the sustainable development of rural tourism: In promoting the development of rural tourism, attention should be paid to its sustainability, including environmental protection, cultural heritage and community participation. Future research can address these issues in depth and provide support for the sustainable

development of rural tourism.



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Appendix

Hello, dear friend! This survey aims to analyze the impact of the development of rural tourism in western Hunan Province on your income situation, the questionnaire takes the form of anonymous random survey, the questionnaire information will be kept strictly confidential, the results will only be used for academic research, and will not bring unnecessary trouble to your life, so please fill out the form with confidence, thank you very much for your support and participation!

Part I: Basic information

1 Your gender:

- Male
 female

2 Your age:

- below 30 years old
 30-40 years old
 40-50 years old
 50 years old or above

3 Your Village:

- Deshram village (dialect)
 Nanping Village
 Luowu Village
 Yangjiajie Village

Part II: Please tick the option you think is most appropriate for the Farmer Tourism Income Survey.

Questionnaire Survey on Farmers' Tourism Income in Western Hunan

Factors	Title item	Degree of agreement				
		1	2	3	4	5
Industrial chain development	How can rural industry chain development improve farmers' participation in tourism?					
	How can the development of rural industry chain provide more tourism employment opportunities for farmers?					

	How can the development of rural industry chain improve the income structure of farmers in tourism?					
	How can rural industry chain development enhance farmers' ability to cope with tourism market risks?					
Infrastruc- ture construc- tion	How can the improvement of infrastructure construction improve the tourist experience?					
	How does investment in infrastructure affect farmers' participation in tourism?					
	How does infrastructure development affect farmers' income levels in tourism?					
	How does the lack of infrastructure construction restrict the increase of farmers' tourism income?					
Utilizati- on of cultural resource s	How to effectively use rural cultural resources to improve farmers' income?					
	How much does the utilization of cultural resources contribute to farmers' non-agricultural income?					
	How to protect farmers' rights and interests in the process of developing rural cultural resources?					
	How does the use of cultural resources affect farmers' tourism income?					
Ecologi- cal protecti- on	How do ecological protection policies affect farmers' livelihood activities?					
	How do ecological conservation measures affect farmers' agricultural output?					

	How does the development of ecotourism affect farmers' tourism income?					
	What is the impact of ecological protection on farmers' off-farm employment opportunities?					
Farmer tourism income	Are you involved in rural tourism activities?					
	What is the main purpose of your participation in rural tourism?					
	How do you think rural tourism affects your personal economic income?					
	How do you think the development of rural tourism affects the local economy?					

